Drug Donations in Tanzania

Stakeholders' Perception and Knowledge

INAUGURALDISSERTATION

zur

Erlangung der Würde einer Doktorin der Philosophie

vorgelegt der

Philosophisch-Naturwissenschaftlichen Fakultät der

Universität Basel

von

Gabriela Gehler Mariacher

aus Walenstadt und Rorschacherberg (SG)

Basel, Januar 2008

Genehmigt von der Philosophisch-Naturwissenschaftlichen Fakultät auf Antrag von

Herrn Prof. Dr. Marcel Tanner, Herrn PD Dr. Kurt Hersberger, Herrn Prof. Dr. Rudolf Bruppacher, Frau Dr. Karin Wiedenmayer, Herrn Dr. Deo Mtasiwa

Basel, den 16. Januar 2008

Prof. Dr. Hans-Peter Hauri
Dekan

Dedicated to the memory

of my father Toni Gehler-Moor
of my grandmother Elena Moor-Loustalot
of Sonja Marjasch and Franco Balduzzi

Tingatinga Arts Cooperative Society, Dar es Salaam Mr. Malikita 2008

Table of Contents

Acknowledgements

My deepest thanks are addressed to my first supervisor PD Dr. Kurt Hersberger (Institute for Clinical Pharmacy, University of Basel). His suggestions, critical observations and commitment helped me to develop my ideas. I benefited from his talent in accompanying the research projects of his students with patience and trust so that they can find their own way, but are assisted and encouraged at the right moment.

Special thanks are extended to my thesis supervisor Prof. Marcel Tanner (Director of the Swiss Tropical Institute STI). His inspiring comments, his generosity and his enthusiasm motivated me during the entire research process. I was able to profit much from his wide scientific knowledge, and he made it possible for me to carry out this research in Tanzania, which I experienced as a wonderful country. I was able to learn a lot about the pharmaceutical sector there and about the daily struggle within a resource-restricted environment, but also met so many people facing the problems in this area with activism and courage.

I gratefully acknowledge the administrative and logistical support from my supervisor in Tanzania, Dr. Deo Mtasiwa (Chief Medical Officer, MOH Dar es Salaam). I appreciate more than I can express our rewarding discussions about my research results. He always had time for my concerns despite his workload. Many thanks!

Dr. Karin Wiedenmayer, expert on my thesis committee (project leader and senior public health and clinical pharmacist at the Swiss Tropical Institute) has enriched this thesis with her suggestions and inputs based on her longstanding experience with the pharmaceutical sector in Tanzania. I am very grateful for her time spent for discussion and for her positive and practical support.

Many thanks are expressed to my co-referee Prof. Rudolf Bruppacher (Institute for Clinical Pharmacy, University of Basel). He stimulated me to begin this research project, was committed to this work throughout and contributed many good ideas.

My most sincere thanks are expressed to all stakeholders and informants in Tanzania and in Switzerland for their excellent cooperation. Their contribution and confidence enabled the development of this thesis. This collaboration and the many hours spent together made this work a unique experience for me.

I am grateful to the former manager of the Dar es Salaam Urban Health Project (DUHP) Mr. Pierre Pichette for giving me initial aid and support collecting data and for moderating the workshop with his humorous approach. The evenings with him and his wife in his hospitable home are another precious memory. In the DUHP and CSSC, many people lightened up my stay with their friendliness and their daily support: Helen, Fred, Vesso, Khadija, Emma, Hafisi and Anne, Michelle, Christel Albert and Sr. Elisabeth. Asanteni sana!

Thanks go to Dr. Zuhura Majapa (Research Coordinator) for the translation of the questionnaire into Swahili and for her assistance in preparing and actively supporting the workshop. We indeed became friends.

I appreciate the support of Joseph Muhume (Chief Pharmacist, MOH, Dar es Salaam), Ollympia Kowero (Acting Registrar, TFDA, Dar es Salaam) and Marsha Yambi (pharmacist, Christian Social Services Commission CSSC, Dar es Salaam). They were always there to answer my questions and opened many doors that were essential for my work.
Special thanks go to Dr. Robin Gray from WHO Geneva for his committed participation in the workshop and for ongoing interest in this project. He was a great mediator and has given me some important advice.
I was able to accompany the work of my old friend, Hans Peter Bollinger (former pharmacist at the St. Francis Pharmacy in Ifakara), for two weeks in Ifakara and Dar es Salaam, which was extremely helpful. He additionally assisted in analysing the data. Thank you!
Iddi Haogwa was my driver during my fieldwork, and through his local knowledge and skills he made me feel secure and safe. I enjoyed his personal views about his country and his political insights sparked many interesting discussions.

Thanks are extended to Jennifer Jenkins, Dan Anderegg and Dr. Anne Blonstein for reviewing the manuscripts. Anne became a great teacher and reliable resource in difficult moments. I am grateful for all the discussion about the use of language in this work and for her accurate inputs. She was able to convey to me the joy of writing in another language.
A special thanks goes to Petra Streit for her translation of the German questionnaire into French. Nora Mariacher and Jan Sofka assisted me in data checking. Great thanks to them for their concentration and optimism during this process.

At the Swiss Tropical Institute in Basel, I received much scientific and personal input from some very professional and great people. I am particularly grateful to Christine Walliser, Magrit Slaoui, Eva Petersik, Doris Magdalinski and Eliane Ghilardi for administrative support, to Prof. Don de Savigny, Prof. Mitchell Weiss, Prof. Brigitte Obrist, Dr. Nick Lorenz, PD Dr. Christian Burri, Dr. Claudia Kessler, Dr. Guy Hutton, PD Dr. Kaspar Wyss, Reinhold Werlein, Dr. Axel Hoffmann, Heidi Immler and the staff of the IT unit.
Many thanks to fellow students of the STI for their support, for fruitful discussions and for enjoyable times spent together. With some of them the exchange went beyond the professional and will hopefully continue. In particular they are: Claudia Sauerborn, Dr. Felix Roth, Dr. Esther Schelling, Dr. Charles Mayombana, Dr Clara Thierfelder, Dr. Jorge Seixas, Dr. Manuel Hetzel, Stefan Dongus, Dr. Yvonne Geissbühler, Dr. Stefanie Granado, Dr. Moncia Wymann, Boniface Bonaventura, Dr. Shr-Jie Wang, Dr. Sohini Banjeriee, Dr. Guojing Yang, Yolanda Brauchli.

I gratefully acknowledge the understanding of my colleagues, the pharmacists and the head, Ingrid Barrage of the pharmacy at the main station “Bahnhofapotheke” in Zurich. They often took over my shift, when I was absent for fieldwork in Tanzania or during the writing of the publications.

My heartfelt thanks are directed to my husband Stefan and my daughter Nora. They supported me in many ways during my doctorate, reading files, cooking dinners and motivating me to take a walk to inspire more ideas. Their patience was immense, and their interest in my work meant so much to me. I deeply thank my mother for her belief in me and for doing the right things in the right moment. It is beyond words to show my appreciation. My brothers Peter and Karl supported me in always unexpected and surprisingly new ways. Thank you!

Deep-felt gratitude goes to my teacher and friend Sonja M. She told me that self-development is not an easy endeavour, but that this path can nevertheless be revealing and joyous. Peter, Juliana, Beat and Naza gave me a home in Tanzania, allowed me to participate in their daily life and included me in their extended families. Thank you so much! My sincerest thanks go also to my close friends Claudia, who shared with me all the ups and downs of a PhD thesis, Liliane and Jeannette, and to Michel A. for their active listening again and again.

Financial Support

I received financial support from the Swiss Tropical Institute in Basel, from the World Health Organisation WHO in Geneva, from Siegfried AG in Zofingen and Mepha AG in Allschwil and from the "Reisefonds" of the University of Basel.

These financial contributions are gratefully acknowledged.

Ethical Issues

Approval of the Research Clearance, Tanzania, RC 2000/25 was given in 2000 from Tanzanian Commission for Science and Technology (Costech), Dar es Salaam. The ethical review was done by the National Institute for Medical Research (NIMR) in Tanzania in 2002.

Summary

Tanzania is a country with low access to essential drugs that receives substantial drug donations (DDs) as in-kind gifts. To promote good donation practice, to support the ongoing health sector reform in Tanzania and to find effective solutions for optimising DD processes, stakeholders' and recipients' views on the appropriateness and acceptability of DDs are of particular interest.

The aims of this research project were a) to characterise DD processes in Tanzania, b) to explore the practice and perception of Tanzanian stakeholders involved in DD processes, c) to identify similarities and discrepancies between the views of Tanzanian recipients and Swiss donors and d) to develop suggestions for optimising DD processes.

The project methodology employed a participatory stakeholder analysis, a triangulation of methods and qualitative research tools. The following stepwise strategy enabled an analysis of the entire DD system: a) literature review and document analysis for description of the context, b) a postal, self-administered, semi-quantitative questionnaire in Tanzania and in Switzerland for defining problems in DD processes, c) key informant interviews in which the interviewees could reflect on the results of the Tanzanian questionnaire survey within the context of public health issues and d) a workshop for elaborating practical solutions for the optimisation of DD processes in Tanzania. Data were collected from January 2000 to October 2002.

Tanzania has to bridge a 30% gap in drug supply. This study found that the acceptance of DDs to fill this gap was high. Stakeholders within the country understood that donated drugs were necessary because, due to poverty, drugs were either unavailable or not affordable. The prime concern of DD recipients was the discrepancy between their needs and the donors' supply. DDs did not cover recipients' priority needs and their quantity was insufficient for sustainable treatment of patients. DDs given from a surplus, as gifts from individuals or as single-source DDs were perceived as problematic. However, DDs provided within the framework of DD programmes with a known public health effect were welcomed. Tanzania benefits from many such programmes.

Tanzania has developed the instruments for an effective regulation of DD processes: national guidelines for drug donations and a national essential drug list. The existence of these tools, however, has not guaranteed their application. The failure to implement the guidelines for DDs was perceived as being the second most important problem in the Tanzanian DD process.

Knowledge of the value of DDs is prerequisite for judging the economic impact of DDs on the drug supply, but only 27% of recipients were able to estimate the value of donated drugs. Stakeholders pointed out, however, that estimating drug value is difficult when the drugs do not conform to accepted quality

standards. This finding demonstrates the need for improved data registration, collection and dissemination within Tanzania. With respect to value, for these stakeholders, DD-related transaction costs must also be taken into consideration.
Depending on the form of their involvement, recipients identified additional drawbacks associated with DDs, the focus being on structures and processes. The public sector requested more transparency in DD processes, the lack of transparency arising from weaknesses in public structures as well as a lack of information and accountability. Non-governmental organisations (NGOs) and religious facilities with better developed structures addressed problems such as shipment fees and insufficient infrastructure and training. These differences call for more collaboration between the private and public sectors and suggest that they could learn from each other, as recommended in the Tanzanian Health Sector Reform.

Communication is crucial in the eyes of stakeholders, but was not optimal, whether between donors and recipients or among recipients themselves. An important complaint was that donors did not ask what was needed in advance and supported a supply-driven donation process.

Tanzanian recipients and Swiss donors coincided in the view that the absence of sustainability and non-relevance of donated drugs for local needs were the major problems in DD processes. Knowledge about donors' needs was low among Swiss donor organisations. Only one-third of Swiss stakeholders knew the WHO guidelines for DDs. Both the Swiss and the Tanzanian stakeholders rated the quality of DDs as a problem of minor importance. However, donated drugs often did not comply with requested standards, even less so in Switzerland than in Tanzania.

Because this study reflects the situation in 2001, directly after NGOs and PVOs stopped collecting unused drugs in Switzerland, donors in the for-profit sector did not understand that unused drugs should no longer be donated and failed to recognise that these drugs can burden a recipient. In the eyes of Tanzanian stakeholders unused DDs are obsolete.

Suggestions of Tanzanian stakeholders to optimise DD processes were consistent with the core principles of the WHO guidelines for DDs: a) meeting local needs (maximum benefit for the recipients), b) participatory approach (respecting the wishes of the recipient), c) optimised DD quality (no double standard in quality) and d) effective communication between donor and recipient.

The findings of this project contribute to a comprehensive understanding of DD processes in Tanzania. They show that the performance of a health system has a major impact on the quality of DD processes. Recipients in DD processes need the support that should be provided by the Tanzanian heath sector reform plans, which include continuing education of health workers and a better defined responsibility in the pharmaceutical sector to overcome problems with the structure and management of DD processes. In

addition to improved implementation of DD guidelines by both donors and recipients, the main proposals arising from this project are the following: Donors should actively communicate with recipients and thereby promote a demand-driven DD process that respects Tanzanian regulations. Recipients on the other hand should a) translate the guidelines for DDs into Swahili, b) assure systematic collection of data, c) strengthen the collaboration between the public and the private sectors and d) establish an autonomous, centralised body for coordination of DDs.

These findings also call for further research, which might study in more depth drug donations given within the framework of programmes, explore the means for better implementation of guidelines for DDs and investigate the mechanisms of communication between donors and recipients together with how these might be improved.

Zusammenfassung

In Tansania ist der Zugang zu unentbehrlichen Medikamenten („essential drugs“) für einen grossen Teil der Bevölkerung erschwert oder nicht möglich. Für viele Geber ist die Spende von Medikamenten eine mögliche Strategie, um diese Situation zu verbessern. So erhält auch Tansania eine beträchtliche Menge an Medikamentenspenden. In diesem Zusammenhang ist es von besonderem Interesse, die Ansichten von Stakeholdern und Empfängern zur Angemessenheit und Akzeptanz von Medikamentenspenden zu kennen um a) eine gute Spendenpraxis zu fördern, b) aktuelle Massnahmen der Reformen im Gesundheitswesen nicht durch unsachgemässe Medikamentenspenden zu behindern und c) wirkungsvolle Lösungen für eine Verbesserung von Spendenprozessen zu finden.

Medikamentenspenden sind in diesem Projekt als Spenden in Form von Naturalien definiert. Geldspenden zum Kauf von Medikamenten wurden nicht untersucht. Stakeholder sind tansanische Interessensvertreter im Bereich von Medikamentenspenden. Dabei kann es sich um Empfänger und Nicht-Empfänger handeln[1].

Forschungsziele in dieser Arbeit waren: a) Spendenprozesse in Tansania zu beschreiben, b) Die Anwendung von Medikamentenspenden durch Stakeholder, sowie deren Sichtweise über Medikamentenspenden zu erforschen, c) Übereinstimmungen und Gegensätze in Verhalten und Meinungen von Stakeholdern in Tansania und in der Schweiz zu identifizieren, d) Vorschläge, wie Spendenprozesse verbessert werden können, zu erarbeiten.

Die Methodik basierte in diesem Projekt auf einer Stakeholderanalyse mit partizipativem Ansatz, sowie auf einer Methodentriangulation und der Anwendung der Instrumente der qualitativen Forschung. Dabei wurde ein schrittweises Vorgehen verfolgt, das eine umfassende Analyse des Spendensystems ermöglichte: a) die Beschreibung des Kontextes durch eine Literaturrecherche und durch Dokumentenanalyse, b) die Erfassung der Probleme von Spendenprozessen in Tansania und in der Schweiz mittels einer semiquantitativen, schriftlichen Befragung, c) die Diskussion der Resultate aus der Befragung mittels Key Informant Interviews in Tansania, d) die Erarbeitung von praktischen Lösungen zur Verbesserung von Spendenprozessen in Tansania in einem Workshop. Die Daten wurden von Januar 2000 bis Oktober 2002 gesammelt.

Für die Gewährleistung der Medikamentenversorgung fehlen in Tansania 30% der benötigten Medikamente. Um diese Versorgungslücke zu überbrücken, war die Bereitschaft der Stakeholder gross, Medikamentenspenden zu akzeptieren. Dass Medikamente fehlen und dass sie für die Bewohner in

[1] Wenn es sich um Schweizer Stakeholder handelte, wird dies explizit erwähnt.

Tansania sehr oft unerschwinglich sind, ist im Kontext der Armut zu betrachten. Für die Empfänger war die Diskrepanz zwischen ihren Bedürfnissen an Medikamenten und dem, was effektiv gespendet wurde, ein äusserst wichtiges Thema. Spenden haben den wirklichen Bedarf nicht gedeckt und die Menge der Spenden war nicht geeignet für eine Langzeittherapie und die nachhaltige Versorgung der Patienten. Medikamente, die aus einem Überschuss bei Spenderorganisationen stammen, geschenkte Medikamente von Einzelpersonen und einmalige Gaben von Spenden durch Organisationen und Firmen wurden als problematisch betrachtet. Hingegen wurden Medikamente geschätzt, die im Rahmen eines Programms mit einem klar definierten Ziel gespendet werden. Tansania ist in einige Programme dieser Art involviert.

In Tansania wurden die wichtigsten Instrumente für eine effektive Regulierung von Spendenprozessen erlassen, unter anderem Richtlinien für Medikamentenspenden und eine Liste der unentbehrlichen Medikamente. Das Vorhandensein dieser Verordnungen garantiert aber noch nicht deren Anwendung. Das Versäumnis, die Richtlinien für Medikamentenspenden zu implementieren, wurde als zweitwichtigstes Problem in tansanischen Spendenprozessen angesehen.

Kenntnisse über den Wert von Medikamentenspenden sind Grundlage, um ihre ökonomische Auswirkung auf die Medikamentenversorgung zu beurteilen. Nur 27% der Empfänger konnte jedoch den Wert der Medikamentenspenden, ausgedrückt in lokaler Währung, abschätzen. Stakeholders wiesen darauf hin, dass es einerseits schwierig sei, Medikamente von schlechter Qualität zu bewerten. Dieses Resultat zeigt andererseits auf, dass die Datenerhebung in Tansania verbessert werden muss. Um den effektiven Wert der Spenden angeben zu können, sind ebenfalls Transaktionskosten, wie Transportkosten oder Zolltaxen zu berücksichtigen. Weitere Probleme in Spendenprozessen wurden in den einzelnen Sektoren unterschiedlich gewichtet. Der öffentliche Sektor verlangte nach mehr Transparenz. ungenügende Transparenz basierte in den Augen der Stakeholders auf Fehlen von wichtigen Informationen und auf fehlender Verantwortlichkeit. Nichtregierungsorganisationen (NGOs) und religiöse Organisationen wünschten sich bessere Strukturen. Dabei wurde speziell auf eine mangelhafte Infrastruktur (wie z.B. Probleme mit der Lagerung von Medikamenten, mit unsachgemäss verwalteten Kühlketten), auf zu hohe Zollkosten und auf eine mangelnde Ausbildung und Weiterbildung des Personals hingewiesen. Die Verschiedenartigkeit der Probleme in den einzelnen Sektoren könnte ein Anreiz sein, vermehrt voneinander zu lernen. Eine verbesserte Zusammenarbeit und eine klare Aufgabenverteilung zwischen dem öffentlichen und dem privaten Sektor ist auch ein wichtiges Thema in der in Tanzania laufenden Reform des Gesundheitswesens, der „Health Sector Reform“.

Kommunikation ist ein entscheidender Faktor in Spendenprozessen; diese wurde aber weder zwischen Spendern und Empfängern, noch unter den Empfängern selbst als optimal bewertet. Es wurde insbesondere beanstandet, dass Spender nicht im voraus fragen, was im Empfängerland gebraucht wird. Dadurch fördern sie einen Spendenprozess, der primär durch das Angebot gesteuert wird.

Auch die Spender in der Schweiz waren übereinstimmend mit den Empfängern in Tansania der Ansicht, dass fehlende Nachhaltigkeit in Spendenprozessen und eine fehlende Relevanz der gespendeten Medikamente für die lokalen Bedürfnisse die wichtigsten Probleme in Spendenprozessen sind. In Schweizer Organisationen war das Wissen um die Bedürfnisse der Empfänger klein. Wie in Tansania kannte nur ein Drittel der Schweizer Spender die WHO Richtlinien für Medikamentenspenden. Tansanische und Schweizer Stakeholders gaben der Qualität von gespendeten Medikamenten einen geringeren Stellenwert als den oben genannten Problemen in Spendenprozessen. Dennoch entsprachen die gespendeten Medikamente oft nicht den Qualitätsanforderungen und den nationalen Richtlinien. Dies war in der Schweiz noch weniger der Fall als in Tansania.

Dieses Projekt beschreibt die Situation in 2001, gerade nachdem in der Schweiz das gezielte Sammeln von unbenutzten Medikamenten durch NGOs aufgrund der Empfehlungen der WHO aufgegeben wurde. Die Befragung der Stakeholder zeigte, dass Spender vom gewinnorientierten Sektor, wie Offizinapotheken und Pharmafirmen, nicht verstanden hatten, weshalb man diese Art von Spenden nicht mehr weitergeben sollte, und sie konnten nicht begreifen, dass diese Medikamente dem Empfänger eher schaden als nutzen. In den Augen der tansanischen Empfänger sind Spenden von unbenutzten Medikamenten obsolet.

Empfehlungen der tansanischen Stakeholder, wie man Spendenprozesse verbessern könnte, stimmten mit den Grundprinzipien der WHO Richtlinien für Medikamentenspenden überein: a) die Hilfe muss den lokalen Bedürfnissen angepasst sein und sich an den im Empfängerland bekannten Medikamenten orientieren, b) die Qualitätsstandards müssen dieselben sein, welche auch in Spenderländern gelten, und es darf keine Kompromisse geben, c) der Einsatz von Medikamenten muss die Gesundheitspolitik der Empfängerländer berücksichtigen und d) zwischen Spendern und Empfängern soll es einen ausreichenden Informationsaustausch geben.

Die Ergebnisse dieses Forschungsprojektes leisten einen Beitrag zu einem umfassenden Verständnis von Spendenprozessen in Tansania. Die Leistungsfähigkeit des Gesundheitssystems eines Landes hat dabei einen wesentlichen Einfluss auf die Qualität des Spendenprozesses. Empfänger brauchen eine Unterstützung, wie sie in der „Health Sector Reform“ in Tansania gefordert wird: Gut ausgebildetes und informiertes Personal und klar definierte Verantwortlichkeiten im pharmazeutischen Sektor können wesentlich zur Verbesserung struktureller Probleme und der Probleme mit dem Management von Spenden beitragen. Eine verbesserte Implementierung der Richtlinien für Medikamentenspenden sollte in Tansania und in der Schweiz erfolgen. Spendern wurde empfohlen, aktiv mit Empfängern zu kommunizieren. Dabei sollte auf ein Spendenprozess geachtet werden, der von der Nachfrage geleitet wird und die Gesetze und Regulierungen Tansanias respektiert. In Tansania sollten a) die nationalen

Richtlinien für Medikamentenspenden in die Landessprache Suaheli übersetzt werden, b) eine systematische Datenerhebung eingerichtet werden, die es dem Empfänger ermöglicht den Medikamentenbedarf festzulegen, c) eine Zusammenarbeit des öffentlichen und des privaten Sektors gestärkt werden und d) eine zentralisierte Koordinationsstelle für Medikamentenspenden geschaffen werden.

Die Resultate aus diesem Projekt zeigen den Bedarf nach einer weitergehenden Forschung, welche auf Teilaspekte im Spendenbereich ausgerichtet werden sollte: a) Spendenprogramme sollten vertieft analysiert werden, um Problemen, wie sie in dieser Thesis beschrieben werden, besser begegnen zu können, b) Möglichkeiten, wie Richtlinien für Medikamentenspenden besser implementiert werden können, sollten erforscht werden, c) Kommunikationsabläufe zwischen Spendern und Empfängern sollten untersucht und Strategien für eine verbesserte Kommunikation entwickelt werden, die vermehrt neue Technologien nutzen.

List of tables

List of figures

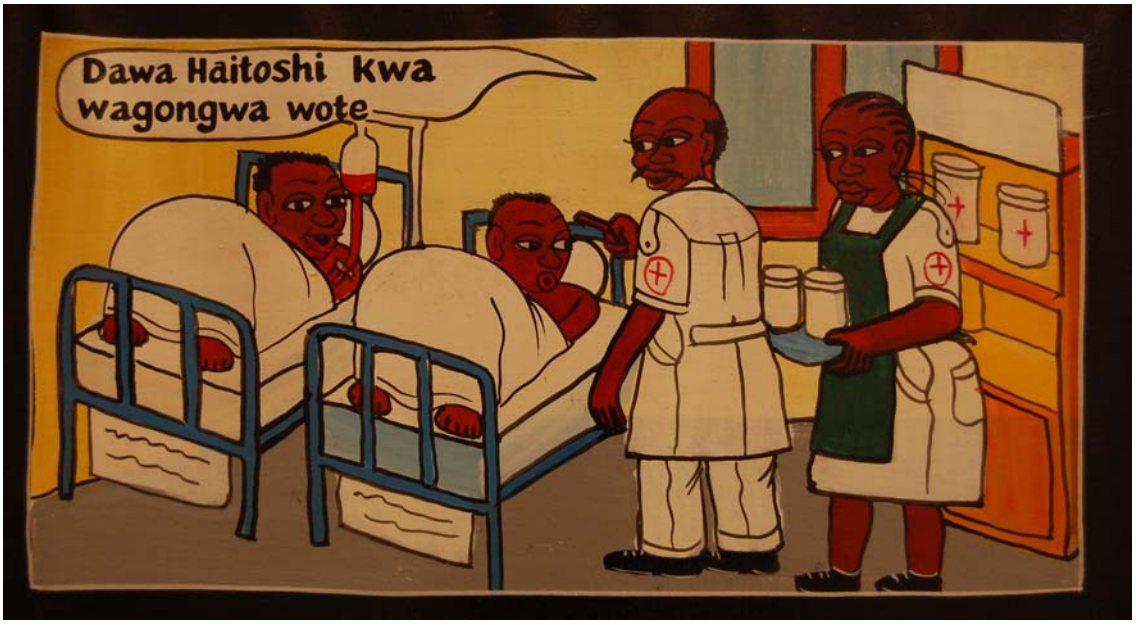
List of abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CMC	Christian Medical Commission
COSTECH	Tanzania Commission for Science and Technology
CSSC	Christian Social Services Commission
DC	Development cooperation
Danida	Danish International Development Agency
DD (s)	Drug donation(s)
DSM	Dar es Salaam
DUHP	Dar es Salaam Urban Health Project
ECHO	European's Commission Humanitarian Aid Office
EDL	Essential Drug List
GDD	Guidelines for drug donations
GDP	Good Donation Practice
GPPP (s)	Global public/private partnership (s)
HAI	Health Action International
HEKS	Hilfswerk der Evangelischen Kirchen Schweiz
HIV	Human Immunodeficiency Virus
HSR	Health Sector Reform
IDA	International Development Association
IFMPA	International Federation of Pharmaceutical Manufacturers & Associations
KI (s)	Key informants
MDG (s)	Millennium Development Goal (s)
MOH	Ministry of Health
MSD	Medical Store Department
MSH	Management Sciences for Health
MSF	Médecins sans Frontières
NEDLIT	National Essential Drug List for Tanzania
NGO	Non-governmental Organisation
NIMR	National Institute for Medical Research
OECD	Organisation for Economic Co-operation and Development
PHC	Primary Health Care
PfP	Private for-profit
PPP	Public Private Partnership
PSF	Pharmaciens sans Frontières

PVO	Private Voluntary Organisation
Q	Question or Quest.
QS	Questionnaire Survey
R & D	Research and Development
RDF	Revolving Drug Fund
SDC	Swiss Agency for Development and Cooperation
SEAM	The Strategies for Enhancing Access to Medicines Program
SECO	State Secretariat for Economic Affairs
STI	Swiss Tropical Institute
SOPs	Standard operating procedures
SWAp	Sector-Wide Approach
TB	Tuberculosis
TEHIP	Tanzania Essential Health Interventions Project
TFDA	Tanzanian Food and Drug Authority
TRIPS	Trade Related Intellectual Property Rights
UNICEF	United Nations International Children's Fund
WHO	World Health Organisation
WHO-GDDs	WHO Guidelines for Drug donations

PART 1

INTRODUCTION



Dawa haitoshi kwa wagonjwa wote

There are not enough drugs for all patients

Die Medizin reicht nicht für alle Patienten aus

1 Introduction

This research project presents an analysis of the views, knowledge and practices of stakeholders (recipients and non recipients) of in kind drug donations (DDs) at the country and local level. It includes the elaboration of suggestions for optimised DD processes and the detection of discrepancies between Tanzanian recipients' and Swiss donors' views and practices. A stimulus for this project was the publication of the revised interagency guidelines for drug donations, which were issued in 1996 and revised in 1999 through the World Health Organisation (WHO) in cooperation with major international humanitarian relief agencies [WHO, 1999]. These guidelines intended to serve as an evidence-based tool to be adapted for good donation practice (GDP), as an aid to decision making, as a reference for national or institutional guidelines and to empower recipients. The positive impact of these guidelines on the quality of DDs and DD processes is well documented [Reich MR, 1999; WHO, 2000c; Autier P *et al.*, 2002]. Often, however, DDs still failed to take account of recipients' needs, of existing capacities and resources of the recipients' country. They also did not meet national and international quality standards and mismanagement often wasted human and economic resources [Reich MR, 1999; Saunders P, 1999; Guilloux A and M Suerie, 2000; Snell B, 2001]. To avoid these failures, DDs have to comply not only with globally valid standards but also with requirements at the local level, and they must respect the particular needs and interests they intend to serve [WHO, 2000c; Junghanss T, 2001; Weiss MG *et al.*, 2001]. This study was targeted, to identify the characteristics of DD processes at the country level and to support stakeholders to optimise DDs, bearing in mind an improvement of outcomes at the patient level.

1.1 Drug supply gap

In the last 30 years, access to essential drugs[1] doubled worldwide from an estimated 2 billion people worldwide to 4 billions. This gain is a success story for the essential drug concept, which was introduced in 1975 by the WHO assembly. WHO defined essential drugs as those drugs that satisfy the health care needs of the majority of the population and should therefore be available at all times in adequate amounts and in appropriate dosages [Quick JD *et al.*, 2003]. In 1977, the first WHO Model List of Essential drugs was launched, containing 208 individual drugs which could provide safe, effective treatment for the majority of communicable and non-communicable diseases. This list is revised every two years. In 1978, the WHO/UNICEF Conference on Primary Health Care at Alma-Ata included access to essential drugs as one of the eight elements of primary health care [WHO, 1978]. In 1979, the WHO Action Programme on Essential Drugs was established. The essential drug concept evolved to one of the most cost effective actions of present public health care efforts. The concept is flexible and adaptable to many different situations. But, access to drugs is not only about adequate resources and has to be seen in a wider context.

[1] Although the recent WHO terminology uses "medicine" instead of "drugs", "pharmaceuticals" or other names, we continue using the term "drug", because of the term "drug donation" that is still mainly used.

From the consumers' perspective access to essential drugs means therefore accessibility (location of the service), availability (type and quantity of the drug needed available), affordability (price of drugs adapted to patient's ability to pay) and acceptability of drugs (attitude, social and cultural background of patients) [FIP Conference, 2002]. Major achievements of this concept are the development of a national drug policy in over hundred countries, ethical criteria for medical drug promotion, objective information on rational drug use, improvement of medical training, the establishment of WHO Programme for International Drug Monitoring, and publicly available price information [Quick JD *et al.*, 2002; Quick JD, 2003].

Today, effective drugs exist for treatment or alleviation of nearly every major illness and they offer a simple and cost-effective solution to man health problem [Pecoul B *et al.*, 1999]. Despite gains of the essential drug concept, still one third of the world population in low-income countries and half of the sub-Saharan Africa and South-East Asian population lack regular access [Quick JD, 2003]. This lack of access to drugs is a direct contradiction to the fundamental principle of health as a human right [Hogerzeil HV, 2006].

Major reasons for low access are poverty and resource constraints of individuals and health systems and millions are trapped in a vicious cycle of disease and poverty [WHO, 2004c]. Each year 20 percentages of deaths are caused by infectious diseases, with the overwhelming majority of these occurring in resource-poor regions and about half of these deaths in the developing world are due to tuberculosis (TB), malaria, and HIV/AIDS. Poor households are caught between high disease burden, inadequate public funding for health and high drug prices. They pay 50-90% of needed drugs out-of-pocket [Quick JD *et al.*, 2002].

Barriers concerning access to essential drugs are very complex and relate either to existing drugs as well as to the development of affordable new drugs. Some barriers are based on global inequities, arising often from multiple market failures[Reich MR, 2000]. Other barriers differ from country to country and tackle health systems with inadequate national commitment, human resource inadequacies including pharmacists, basic health infrastructure deficiencies, weak political will (lack of accountability and good governance), persistent lack of donor assistance and coordination [Ruxin J *et al.*, 2005; UN Millennium Development Project, 2005]. Barriers tackle each stage of medicines' life cycle [Anderson S *et al.*, 2004] and comprise unfair financing, high medicine prices, lack of availability due to fluctuating production or prohibitive cost, potential consequences of recent trade agreements, poor-quality and counterfeit drugs, unreliable delivery systems, irrational use, inefficient combination of private and public supply systems [Pecoul B *et al.*, 1999; WHO, 2000b; Quick JD *et al.*, 2002].

The complexity of the problems require **multiple strategies to negotiate access problems**. According to WHO, four critical components are to be considered for a sustainable access to essential drugs [Reich MR, 2000; WHO, 2000a; Anderson S *et al.*, 2004; WHO, 2004]:

1. ***Rational selection and use of drugs:*** national essential drug list, standard treatment guidelines, independent reliable drug information.
2. ***Sustainable financing:*** equitable financing mechanisms, social and private insurances, reduction of out-of-pocket spending, targeted external funding with grants, loans, in-kind donations with the aim to strengthen local capacity and maintaining effective supply, support of non-governmental organisations (NGOs).
3. ***Reliable systems*****:** efficient mix of public and private supply services, good pharmacy practice with improved warehousing and distribution systems and better control of corruption, quality assurance through regulatory control.
4. ***Affordable prices:*** pooled procurement, using the international market through drug tendering, price control, generic policies, encouraging local production, differential pricing, Trade Related Intellectual Property Rights (TRIPS) safeguards.

The majority of WHO essential drugs are off-patented and subject to generic competition. In this case, conflicts are minor and strategies to expand access to those drugs are better tested. But, the incidence of HIV/AIDS and chemical resistance against drugs for TB and Malaria demand innovative ideas and access to newer drugs. In addition, some life-saving treatments are not available in developing countries because drugs for tropical diseases are not profitable enough for drug companies and there is little research being carried out. Yet, not all problems are exclusively caused by pharmaceutical companies. Thus, a global commitment is needed in research and development (R& D) through public subsidies, private public partnerships, protection of product patents and fixed financial incentives.

Access to medicine is a highly political issue and subject to intense lobbying by all principal stakeholders. Awareness rising was boosted through rigorous campaigns of NGOs such as Oxfam, Health Action International (HAI) and Médecins sans Frontières (MSF), because all theses strategies need resolving conflicts of interests between private and public actors [Anderson S *et al.*, 2004]. In recent years, first progresses were made and access to essential drugs, especially those for treating HIV, has expanded in the developing world. Access to new drugs is thus included in the Millennium Development Goal 8 [UN Millenium Development Goals]. Philanthropy and foundations, public private partnerships and not-for-profit initiatives are as important initiatives at stake.

Summarised, the global drug supply gap affects especially poor and vulnerable people. Major reasons are a) unfair financing, b) substandard and counterfeit drugs, c) irrational drug use, d) unreliable supply systems and e) little R&D for new drugs for neglected diseases. Promising developments emerged

through global initiatives. In development cooperation (DC), in-kind DDs have been proposed for supporting underfunded, weak drug supply systems over the short or middle term, but only if targeted at specific diseases and if they do not hinder efforts to develop a sustainable financing mechanism of drug supply [WHO, 1998; Reich MR, 2000; WHO, 2004].

1.2 In-kind drug donations

In-kind DDs are defined as manufactured drugs imported free into the recipients' country. They can be classified in two categories. The first category covers **DDs in emergency situations** such as disasters and wars [Berckmans P *et al.*, 1997; Hogerzeil HV *et al.*, 1997; Kale Oladele O, 1999; Autier P *et al.*, 2002]. For acute emergencies, waiting for specific requests from recipients is not feasible. WHO has thus developed the Emergency Health Kit, a standardised set of drugs and basic equipment for a population of 10,000 for a period of three months. Its contents are based upon a consensus among major international suppliers [WHO, 1998; WHO, 2006a].

The second category, **DDs in development cooperation (DC)** represents the majority (80%) of all DDs. [WHO, 2000c]. DD processes are very complex. The DD supply chain involves a wide range of actors from different health systems (governments, companies, private voluntary organisations (PVOs) and NGOs, religious organisations). Often these players act as autonomous groups with different bases of information, different constituencies, different goals and without common procedures and standards [Reich MR, 1999]. Different DD strategies are known in DC [WHO, 1999]. Drugs can be given directly to the basic healthcare system of the recipient country and made available through private humanitarian institutions (religious, non-governmental, governments and private voluntary organisations), or they can be donated by private companies and individuals as so-called corporate DDs. On the other hand, they can be single-source DDs or DDs as part of public/private partnerships (PPPs) with a clearly defined public health goal [Dull HB and SE Meredith, 1998; Kale Oladele O, 1999; Ombaka E, 1999; Wehrwein P, 1999; Buse K and G Walt, 2000a; Buse K and G Walt, 2000b; Guilloux A and M Suerie, 2000; Shretta R *et al.*, 2000; Shretta R *et al.*, 2001; Peters DH and T Phillips, 2004].

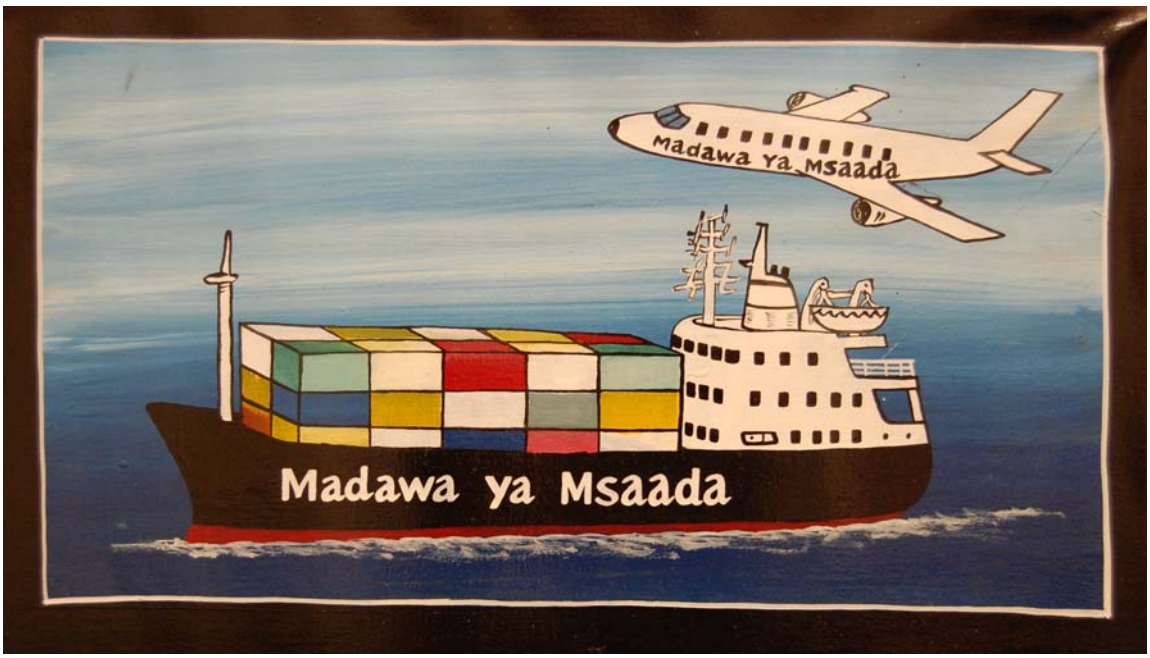
Peer-reviewed literature about in-kind DDs is scarce and research has mostly been carried out in post-emergency situations after disasters and wars. Letters, news reports and a number of research articles have reported that DDs do not comply with common standards and burden the recipients' health care system. In summary, major problems still remain: a) DDs are not relevant for recipients' need and arrive in wrong quantities, b) the quality standard does not comply with standards in the recipient country. c) donors ignore regulations of the recipients country and local administrative procedures and d) DDs have a high declared value, which result in high taxes and storage overheads [Hogerzeil HV *et al.*, 1997].

The need for **guidelines**, which could be applied to both categories (DDs in emergency situations and DDs in development cooperation) was evident. In 1988, the Christian Medical Commission (CMC) published its first "Guidelines for Drug Donations" in order to improve donations to missionary hospitals and in 1994, the WHO office in Zagreb compiled detailed guidelines for humanitarian assistance in former Yugoslavia [Medicus Mundi, 1989; Hogerzeil HV *et al.*, 1997]. In 1996, the World Health Organisation (WHO) issued Interagency Guidelines for Drug Donations in cooperation with major international agencies active in humanitarian relief. The pharmaceutical companies represented by IFMPA were involved in the development of the guidelines for DDs. They expressed a critical view. International Federation of Pharmaceutical Manufacturers & Associations' (IFMPA) major concerns are the restrictions on national essential drug lists, on remaining shelf-life to one year and on special language labelling and packaging requirements. These guidelines, revised in 1999, are intended to serve as an evidence-based tool to be adapted for good donation practice (GDP), as an aid to decision making, as a reference for national or institutional guidelines and to empower recipients [WHO, 1999]. The core principles of these guidelines are: a) maximum recipient benefit, b) respect of the recipients' wishes, c) no double standard in quality and d) effective communication between donor and recipient. These principles are operationalised in 12 guidelines, whose positive impact on the quality of DDs and DD processes is well documented [Reich MR, 1999; WHO, 2000c; Autier P *et al.*, 2002].

In summary, appropriate actions are still needed to cover existing drug supply gaps. Comprehensive research on the impact of in-kind DDs in development cooperation at the country and local level was scarce. Further knowledge should support the elaboration of suggestions for optimising DD processes and empower both, donors and recipients, to apply and adhere to a good donation practice.

PART 2

GOAL AND OBJECTVES



Madawa ya Msaada

Drug Donations

Medikamentenspenden

2 Goal and objectives

The goal of this project was to optimise in-kind drug donation processes

To approach this goal, by opportunity Switzerland as a donor country and Tanzania as a typical recipient country was chosen. Tanzania is one of the poorest countries in the world, with a low rated access to essential drugs. Tanzania receives substantial in-kind drug donations (DDs) from abroad. The choice of Tanzania and Switzerland was supported through the project's framework of the Urban Health Project in Dar es Salaam and the Swiss Tropical Institute in Basel.

Within this setting we developed the following objectives:

General objective 1

To characterise in-kind drug donation processes in Tanzania

Specific objectives

1. To collect information on the situation of DD processes in Tanzania
2. To explore the level of application of tools and guidelines (National and World Health Organisation's (WHO) Guidelines for Drug Donations) as an aid to decision making and taking action in the DD processes
3. To collect stakeholders' and recipients' views on problematic areas and gaps in DD processes including all strategies of donating drugs in Tanzania
4. To clarify different interests in donation processes

General objective 2

To explore practice and perception of Tanzanian and Swiss stakeholders in drug donation processes

Specific objectives

5. To characterise the DD system in Switzerland
6. To identify similarities and discrepancies in DD processes of Tanzanian recipients and Swiss donors

General objective 3

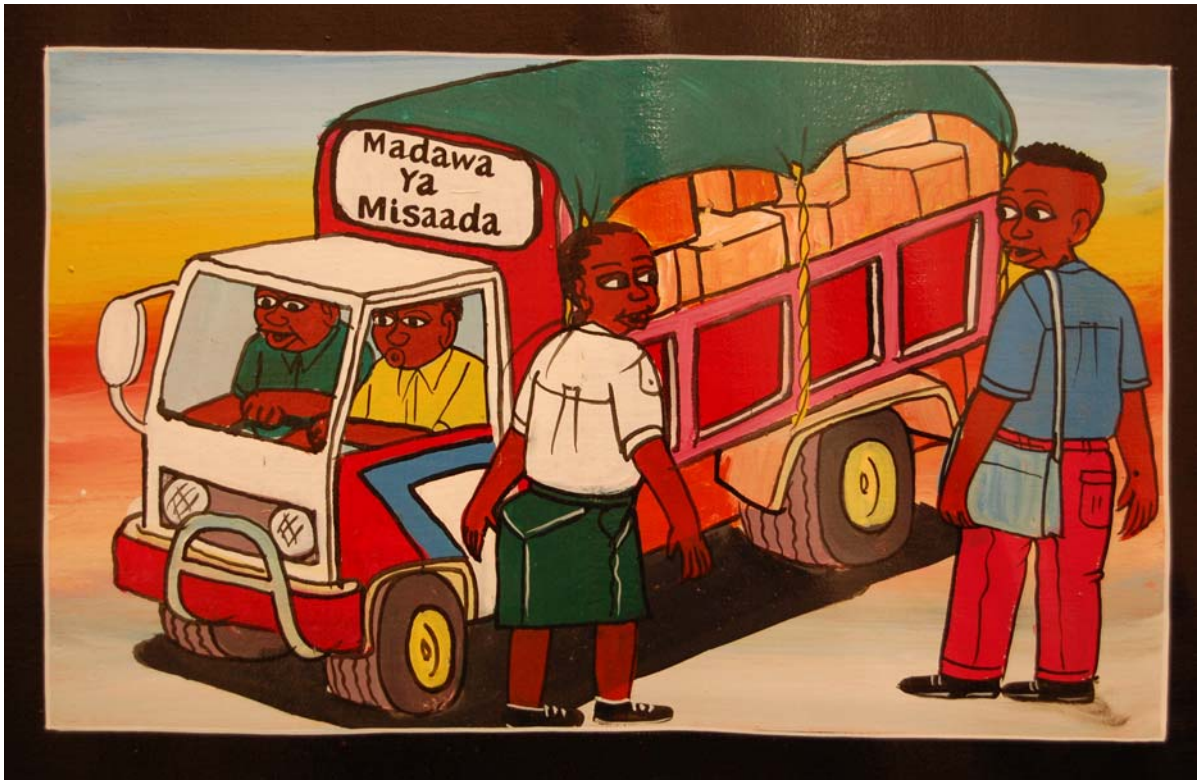
To develop suggestions for optimised drug donation processes

Specific objectives

7. To identify possible interventions for the improvement of DD processes in Tanzania
8. To elaborate practical solutions for optimised drug DD

PART 3

METHODS



Madawa ya Misaada

Drug Donations

Medikamentenspenden

3 Methods

This research project is based on a stakeholder analysis. This approach enables the researcher to generate knowledge about stakeholders in the field of policy and project management and to understand their practices and views within a complex system (Figure 1). Varvasovszky defined stakeholders "as actors who have an interest in the issue under consideration, who are affected by the issue, or who, because of their position, have or could have an active or passive influence on the decision making and implementation process" [Varvasovszky Z and R Brugha, 2000].

In-kind drug donations (DDs) are a political issue. The appropriateness of DDs has an impact on the drug supply system of a recipient country. The DD process takes place in two environments, and therefore understanding the environmental context is necessary for any discussion of the interaction among stakeholders (see Chapter 4). The analysis of the different levels of the DD system (Figure 1) used various qualitative methods, and the entire study was based on a triangulation of these [Denzin NK, 1977; Varvasovszky Z and R Brugha, 2000; Flick U, 2004]. This approach is recommended when a focussing on a limited numbers of aspects is to be avoided and was guided by the aim to gather perspectives of stakeholders involved in DD processes in order to develop strategies for the optimisation of the DD system. Triangulation is the use of different methods to study a single problem from different perspectives. According to Flick, triangulation is recommended as a means to produce a more complete picture of the investigated problem [Flick U, 2004].

A stakeholder analysis is a participatory approach per se. In this study, stakeholders were involved at every level of the project from the formulation of the research question to the dissemination of the results. The aim was to follow the principles of the Guidelines for Research in Partnership with Developing Countries [KFPE, 1998].

Data collection was carried out between February 2000 and October 2002 and comprised 6 phases:
Phase 1: Exploratory study in Tanzania
Phase 2: Literature review
Phase 3: Elaboration of the study framework
Phase 4: Description of DD systems and processes – questionnaire surveys in Tanzania and Switzerland
Phase 5: Data verification and clarification – key informant interviews
Phase 6: Suggestions for the optimisation of DD processes – a workshop

Phase 1: Exploratory study in Tanzania

The aims of the exploratory study were

- to promote participatory collaboration; to build a network; to establish contact with those involved in DDs at all levels in Tanzania; and to learn about individual views concerning DDs at the local and national level.
- to determine and establish the study's framework; to pinpoint the study's criteria and to obtain basic information to analyse the situation.

Data collection and analysis

An unstructured key informant interview was applied guided by several questions: a) Are you involved in drug donations? What are your experiences and your perception of drug donations?, b) What, in your opinion, are the basic problems in the drug supply system for Tanzania?

The interviewed stakeholders were therefore able to relate whatever aspects of their personal view to the problem of concern. Whenever possible, interviewed people were visited more then once. Confidentiality was promised to the interviewed person. Data collection was based on snowball sampling. This sampling was initiated through contacts in the Dar es Salaam Urban Health Project (DUHP) and the pharmacist at the St. Francis Pharmacy in Ifakara. In February 2000, 45 key persons in Dar es Salaam and Ifakara and from each sector of the health services were interviewed. Data were structured according to themes and used for the development of a later questionnaire.

Phase 2: Literature review and document analysis

Information required for the investigation was:

- All information about DDs and factors affecting DDs at the global and local level.
- All information about the factors of the Tanzanian and Swiss health and drug supply system that affected DDs.
- Information about development cooperations in Tanzania and in Switzerland.
- Information about methods used in this research project.

Aside from direct information through participative collaboration in Tanzania and in Switzerland, which granted access to grey literature, further sources to access information were required. For a systematic literature review, Medline and Web searches were conducted covering the period from 2000 to 2007. Keywords were associated with drug (and medicine) donations (including developing countries, development cooperation, drug industry, drug storage, relief work and aid, drug donation programme, corporate donation, Private Public Partnership (PPP), World Health Organisation). These keywords were adapted to the keywords of Medline search on DDs in publications and afterwards extended [Berckmans P *et al.*, 1997; Reich MR *et al.*, 1999]. In addition the term “drug donations” was combined with

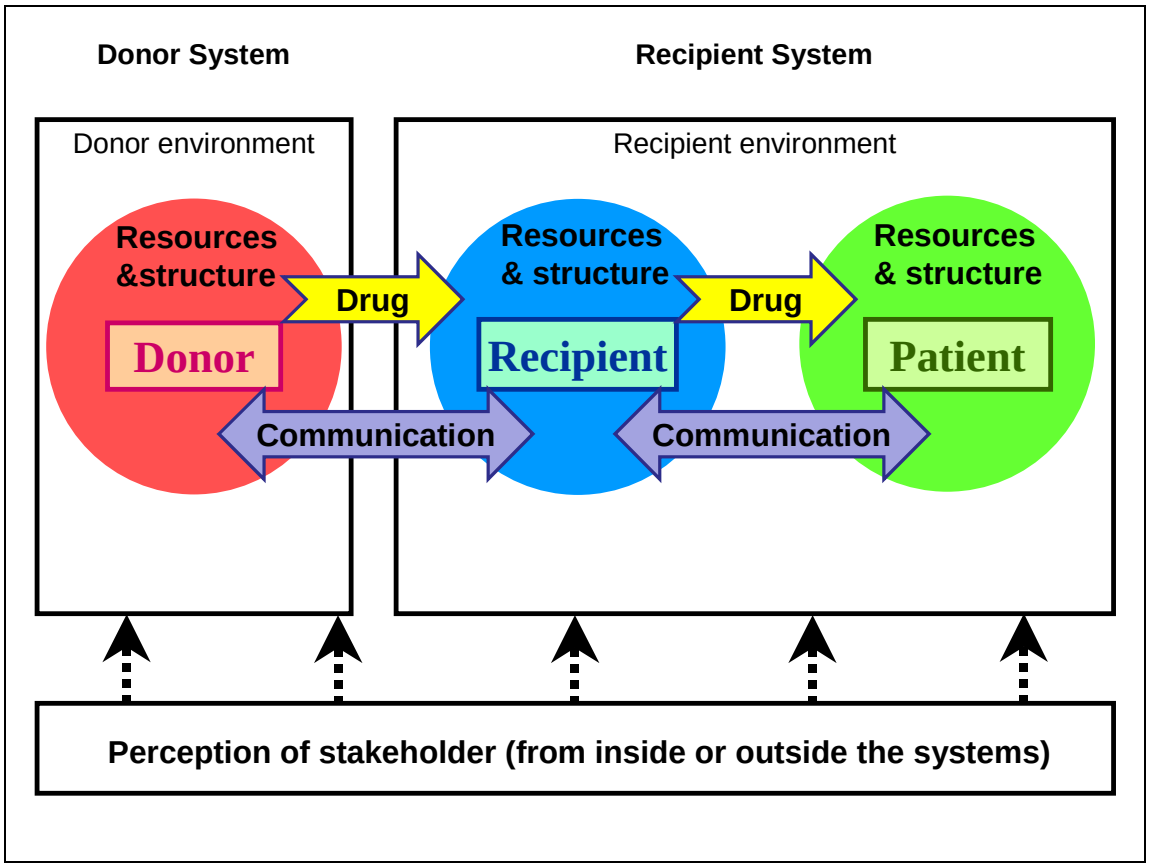
keywords from the framework of this investigation (Table 1 and 2). The bibliographies of the DD publications were additionally followed up.

Documents were retrieved from the Ministry of Health, Medical Store Department, Christian Social Services Commission and NGOs in Tanzania. Other sources included the WHO library in Geneva and university libraries in Switzerland. Relevant articles, reports, documents, etc were entered in Endnote®.

Phase 3: Elaboration of the study framework

Within the participatory stakeholder analysis, we elaborated a study framework (Tables 1 and 2, Figure 1). The purpose of this study framework was to enable a systematic data collection and to structure the complex information for subsequent data analysis.

Figure 1: Drug Donation System (DD-System)



The DD system comprises a donor system and a recipient system, both of which provide specific environments and resources (Figure 1): The DD processes run within this system and involve a flow of drugs from donors to recipients and communication between donors and recipients. This system and the processes are viewed from different perspectives by stakeholders within and outside the system. These views represent the "perception" of the system, which includes appraisement of outcomes. Various

stakeholders can be involved in the donor and recipient systems: governmental organisations, NGOs and PVOs, religious organisations, private companies, pharmacies, health facilities and patients Based on this systems approach, a first step was to compile a set of determinants (Tables 1 and 2). Indicators were elaborated by using a deductive process, enabling the formulation of quantitative and open questions to characterise both the DD system and the DD processes. The characteristics and their associated indicators were based on experiences from the exploratory study in Tanzania and on other available information [Reich MR, ed., 1999] including WHO publications [MSH, 1997; WHO, 1999; WHO, 2000; WHO, 2000].

Phase 4: Description of DD systems and processes – questionnaire surveys in Tanzania and Switzerland

Baseline data on the views, practices and knowledge of stakeholders about the DD system at the local level were gathered in parallel in Tanzania and in Switzerland. For this purpose, a self-administered, semi-quantitative questionnaire was developed using the study framework (Annex 1). The questionnaire was grouped in six sections: a) information about respondents (involved in DD processes or not, perception about usefulness of DDs), b) information about the donors' or recipients' organisation, c) quality of DDs in donors' or recipients' organisation, d) information about the DD process, e) comments, f) personal data about respondents (under strict confidence). The questionnaire contained a set of open questions to gather perceptions and opinions (16 in Tanzania/14 in Switzerland), 39/34 quantitative questions for basic information followed by 12/13 open questions to elaborate on the quantitative questions. The questionnaire was tested in a pilot study to check form and content. Only minor changes were necessary. After this pilot study, the English questionnaire was translated into Swahili and retranslated in English for validation; the German questionnaire was translated into French and then retranslated. Questions for donors and recipients were essentially the same, but took into account their position in regard to DDs.

Data collection

In Tanzania, questionnaires in English and Swahili were sent out in June 2001 by post with cover letters and prepaid envelopes for the return of completed questionnaires. Two months later, a reminder was sent out to non-respondents. Data gathering was completed in December 2001. In May 2001, questionnaires in German and French were sent out in Switzerland following the same procedure. Italian-speaking stakeholders received both the French and the German questionnaires, due to finances not being available to develop a questionnaire in Italian. Data gathering was completed by the end of August 2001.

Stakeholders were determined as people from organisations in each sector involved in healthcare (public, religious, private-non-profit and private-for-profit) in 2000, which could be involved in DD processes in

Tanzania and in Switzerland. In both countries, address lists as complete and updated as possible were collected for all groups of recipients and donors, from each level of decision-making and for the entire country. Depending on their lengths, all addresses were used from some lists, from others, only a randomised sample.

In Tanzania, non-respondents to the questionnaire were assessed. From the non-responding sample, 50 individuals were selected (randomised and stratified by sectors) and followed-up by telephone call. However, financial and time constraints and a lack of personnel prevented follow-up of non-respondents in Switzerland.

Data analysis

The questionnaire was designed and processed with the software TELE*form*® Standard Version 7.0 from Cardiff Inc. Data quality assurance was done by a double control of the entire dataset. The data were transferred to a Microsoft® Access database and analysis was performed with Microsoft® Excel. Chi-square analyses (χ^2) were performed for the Tanzanian results to assess differences between sectors using SPSS 13.0 for Windows. Qualitative data from the open-ended questions were analysed using content analysis. In this study, the deductive text analysis was based on the concepts of Mayring ([Mayring P, 1997; Flick U, 2000]. Key words used in this analysis were derived from important characteristics of the DD system as listed in Tables 1 and 2 and from most-cited terms.

Phase 5: Data verification and clarification – key informant interviews

Key informant interviews (KIs) were applied in the next phase of the project. The aim was to contextualize results of the questionnaire survey in regard to public health issues. A semi-structured key informant interview was therefore used, based on questions and results of the questionnaire survey. In June 2001, the first 230 returned questionnaires in Tanzania were analysed [Gehler Mariacher G *et al.*, 2007]. From these, key questions were developed for further investigation [Gläser J and G Laudel, 2004] (Annex 2). The focus was on five topics: a) main problems with DDs, b) proposals for the optimisation of DD processes, c) economic value of DDs, d) coverage of drug supply through DDs, e) in addition, strengths and weaknesses of DD processes and the personal opinions of the interviewed stakeholders were explored. Our aim with these questions was to cover all important aspects of the DD system (Figure 1).

Data collection

KI interviews were conducted in a) Dar es Salaam as an urban setting, b) Moshi (Kilimanjaro Region) as a rural setting with a comparatively high income and education level, c) Songea and Mbinga (Ruvuma Region) as rural settings with a comparatively low income and education level (Fig. 2). KIs were recipient and non-recipient stakeholders of DD processes who had experiences with DDs, were experts in

the social context and were able to transcend cultural positions [Brugha R and Z Varvasovszky, 2000; Varvasovszky Z and R Brugha, 2000; Gläser J and G Laudel, 2004]. KIs were recruited from QS respondents from each of the three settings. In August 2001 and in January 2002, all KIs were interviewed, who were reachable within the limited timeframe of the data collection; KIs were visited prior to the interviews, received the interview guide and were informed about the purpose of the study. Each KI was asked for consent for the interview to be recorded. All interviews were conducted face-to-face by the author at the KIs' workplace. Interviews were one hour in duration. Transcripts (in English) of the interviews were sent to the KIs for review and agreement.

Data Analysis

For the text analysis of the transcripts, the theory of content analysis used in expert interviews was applied, which allowed us to focus on specific, substantial aspects of interest in the context of the interview guide [Gläser J and G Laudel, 2004]. To analyse the frequency of themes, we used the software MAXqda® (Verbi Software, Udo Kuckartz, Berlin 2002). Each interview was entered as a single file. The files were coded and interpreted with the same scheme used for analysis in the QS (Tables 1 and 2).

Phase 6: Suggestions for the optimisation of DD processes – a workshop

In a final phase, results from previous research phases were shared with stakeholders of the project and they were asked to elaborate suggestions for optimised DD processes in Tanzania [KFPE, 1998]. In October 2002, a one-and-a-half day workshop was organised in Dar es Salaam with the support of the WHO. Stratified by sector, 26 participants from the questionnaire survey were selected randomly. Of these, 22 were able to accept the invitation. Four further persons with key functions in DD processes also participated in the workshop. In group work, for which the participants were randomly assigned to four groups, the following topics for improving DD processes, based on stakeholders' recommendations in the questionnaire survey for optimising DD processes, were discussed: a) quality of DDs, b) participatory collaboration of donors and recipients, c) defining DD needs, d) national regulations. The workshop closed with the feedback from the group work, focussing for each topic on a) three main **barriers** to the optimisation of DD processes, b) three main **strategies** for improving DD processes, c) three main **suggestions for strategy implementation**. The results of the workshop were recorded and disseminated to all participants and to the important decision-makers in DD processes.

Tables

Table 1: Characteristics of the recipients' DD system

Determinants	Indicator	Item numbers of the guidelines for DDs	
		WHO	Tanzania
Environment			
Demographics	Population		
Epidemiology	Morbidity, life expectancy, prevalence of HIV/AIDS, child mortality of under fives		
Economy	Poverty, GDD per capita		
Education	Adult literacy rate		
Geography	Paved roads		
Health sector and DDs	Sectors involved. Distribution channels for DDs, number of pharmacists and educated healthcare staff, public spending for health, control of DD importation		
National drug policy	Guidelines for DDs, laws for importation, Essential Drug List		No. 4.1 No. 4.2a-c
Resources and structures			
Organisations	Characteristics of the organisations		
	Involvement in DD processes		
Staff competence	Accountability		
	Knowledge of GDD		
Documents	List of needed drugs		No. 3
	Quality criteria for DDs		
	Treatment criteria for DDs		
	Availability of GDD		
Financial aspects	Shipment and custom fees	No. 12	
	Value of DDs		
	Payment for DDs		
	DDs in cash earmarked for buying drugs		No. 3
Process			
Selection of drugs	Expressed need by recipient	No. 1	
	DDs part of the EDL of the country or of the WHO	No. 2	No. 4.2d
Management	Origin of DDs		
	Coverage of drug supply with DDs		
	Use of DDs		
	Disposal of unwanted drugs		
Transparency	Evaluation of DD processes		
Communication	Information by donors	No. 10	No. 3
	Collaboration with partner organisations		
	Receipt of invoice documents	No. 10	
Quality of the donated drug			
Quality assurance	Certificate schemes on the quality of DDs	No. 4	No. 4.2h
	Shelf-life	No. 6	No. 4.2g
	Unused drugs	No. 5	No 4.2j
Presentation	Labelling	No. 7	No 4.2f
Perception of stakeholders			
Satisfaction of recipients	Long-term treatment, implementation of GDD, relevance of DDs, shipment and custom fees, transparency in DD processes, communication between donor and recipient, infrastructure, training of healthcare staff, quality of DDs		
Usefulness of DDs			

Table 2: Characteristics of the donors' DD system

Determinants	Indicator	Item numbers of the WHO DD Guidelines
National drug policy	Guidelines for DDs, Essential Drug List (EDL)	No. 2
Resources and structures		
Organisations	Characteristics of the organisations	
	Involvement in DD processes	
Staff competence	Accountability	
	Knowledge of GDD	
Documents	Quality criteria for DDs	
	Availability of WHO GDD	
	Organisation-owned GDD	
Financial aspects	Value of DDs	
	Payment for DDs	
	DDs in cash earmarked for buying drugs	
	Shipment and custom fees	No. 12
Processes		
Selection of drugs	Expressed need by recipient	No. 1
	DDs part of the EDL of the country or of the WHO	No. 2
Management	Procurement of DDs	
Transparency	Evaluation of DD processes	
Communication	Information of recipients	No. 10
	Collaboration with partner organisations	
	Mailing of invoice documents	No. 10
Quality of the donated drug		
Quality assurance	Certificate schemes on the quality of DDs	No. 4
	Shelf-life	No. 6
	Unused drugs	No. 5
Presentation	Labelling	No. 7
Perception of stakeholders		
Satisfaction of recipients	Long-term treatment, relevance of DDs, shipment and custom fees, transparency in DD processes, communication between donor and recipient, quality of DDs	
Usefulness of DDs		

Ethical issues

Approval of the Research Clearance, Tanzania, RC 2000/25 was given in 2000 from the Commission of Science and Technology, COSTEC Dar es Salaam. The ethical review was done by the National Institute for Medical Research (NIMR) in Tanzania in 2002.

PART 4

RESULTS

DRUG DONATIONS IN TANZANIA - STAKEHOLDERS' PERCEPTION AND KNOWLEDGE

Madawa ya Misaada ambayo yamefika – siwezi kusoma lugha zake

I can't understand the language of the description of the donated drugs we received

Ich kann von der erhaltenen Medikamentenspende die Sprache der Beschreibung nicht verstehen

4 The environment of the DD systems in Tanzania and in Switzerland

4.1 Tanzania

The United Republic of Tanzania, the union of Tanganyika and Zanzibar, is located in East Africa. In 2001, an estimated 35 Mio people lived in Tanzania with an annual growth of the population of 2.2% [UNDP, 2002]. 33% of the population live in urban area. Since 1961, the former English protectorate is a Republic, shifting in 1992 from a one-party socialistic republic to a multiparty government with a free market economy. The people of Tanzania live in a stable society with rare conflict situations, but poverty remains a major challenge. Despite ongoing reforms and improvements such as better access to safe drinking water, a higher adult literacy rate and a decreasing poverty line, development indicators are not promising. Population growth, lack of manpower, problems with good governance, marginal economic growth and the burden of diseases like malaria, tuberculosis and HIV/AIDS have the effect that Tanzania depends heavily on foreign aid for health services [SEAM, 2003]. Important indicators are summarised in Table 1 and 2 (see 3. Methods).

Healthcare system

After the independence in 1961, emphasis was on primary healthcare and health services free to all. In that period, population health improved. The oil crisis in the early 1980ies seized also healthcare and the health of the population declined. In 1994, the Health Sector Reform (HSR) was launched with the aim of improving equity, quality, accessibility and efficiency in the health sector. User fees were introduced and private sector participation was promoted. The authority of healthcare is now decentralised to district and local levels.

The healthcare system assumes a pyramidal referral pattern: the village post, dispensaries, health centres, district hospitals, regional hospitals and referral hospitals. Healthcare is delivered through both the public and the private sector, the latter being divided into for-profit and non-profit services [Wyss, K. *et al.*, 1996]. Non-for-profit organisations include private voluntary (PVOs), non-governmental (NGOs) and religious organisations. Christian missions provide 40% of all health services, and working largely in rural areas, mostly under the umbrella of the Christian Social Service Commission (CSSC) [Muhume, J., 2001].

In 1998, Tanzania adopted the concept of a sector-wide approach (SWAp), which redefined the donors' role. Donors' funds are now pooled and earmarked for priority activities (basket funding) and donors are responsible for synchronising and reviewing their aid [MOH, 1999a; MOH, 1999b; Semali, I., 2003; Hutton, G. and Tanner, M., 2004].

Drug supply

In 1991, the MOH launched the National Drug Policy, revised in 2003 [MOH, 2003]. Tanzania was one of the first countries to adopt the essential drug concept and continues to promote it. The National Essential Drug List for Tanzania (NEDLIT) and the Standard Treatment Guidelines were published in 1991 and updated in 1997. In 2001, a draft revision of the NEDLIT became available, which is still valid [MOH, 2001]. The NEDLIT stratifies drugs by facility level, adapted to the educational level of the health staff.

The WHO rates Tanzania as a country with low access to essential drugs (50-79% of the population). The Tanzanian pharmaceutical sector is significantly underfunded [Bürki, O., 2001]. Despite developments such as the introduction of cost-sharing and the significantly improved performance of the Medical Stores Department (MSD), the parastatal wholesaler for the public and non-profit sector, major structural problems still remain, such as the non-availability of qualified pharmaceutical staff, the absence of a clearly defined mandate for the staff in the pharmaceutical sector, lack of integration of the pharmaceutical sector into the healthcare system and insufficient health worker training in the essential drug concept [MOH, 1997; Wiedenmayer, K. and Mtasiwa, D., 2000; Wiedenmayer, K., 2004]. In 2001, a study identified gaps in drug availability, primarily in the public sector, and problems with quality and affordability of products and services, especially in the private retail sector, were identified. Geographical access was not perceived as a problem by the public. In Medical store department (MSD) zonal stores, drug stock-outs occurred occasionally. On the other hand, availability does not seem to be a significant problem at mission health facilities. The public cannot be assured of good drug quality for a significant proportion of drugs on the Tanzanian market [SEAM, 2003].

Drug supply for health centres and dispensaries in the public sector is based on prepacked standardised kits as part of the National Essential Drug Programme. The composition of the kits is based on the NEDLIT and national morbidity data. The MSD is responsible for purchasing and distributing the kits. In 2001, 75% of the kit costs were paid by the government and 25% by Danida. Although drugs provided by kits do not comply with the definition of in-kind DDs in this study, they are perceived by some health workers as drugs donated as gifts in-kind. This may be due to the fact that in the 1980s, kits were prepacked and fully financed from abroad, mostly by UNICEF and Danida [Hingora, A., 2001]. In private for profit pharmacies nearly every kind of drug is available, but not affordable for most of the Tanzanian inhabitants.

In-kind drug donations

Tanzania has launched instruments for an effective regulation of DD processes. The main regulations for handling DDs are the “Guidelines on donations of drugs and medical equipment to the health sector for Tanzania Mainland, 1995”, the “Guidelines for Importation of Pharmaceuticals, 2000” and the NEDLIT

[MOH, 1995; MOH, 1997b; MOH, 2000]. Differences between the earlier published Tanzanian guidelines on DDs and the WHO-GDD are:

- Donors should understand Tanzania's DD policies
- DDs have to be declared to the MOH for clearance. All importation of any pharmaceutical product requires approval by the Pharmacy Board and has to undergo a registration procedure.
- A financial contribution by the donor should be considered, since it may be more cost effective to buy drugs locally.

The Tanzanian GDD from 1995 are currently undergoing revision and the release of updated GDD is expected soon [Muhume, J., 2007].

The MOH has a regulatory overview. The chief pharmacist (Head of the pharmaceutical services section in the directorate of the curative health service) is responsible for the NEDLIT and the Donation Policy. The registrar, the director of the Tanzanian Food and Drug Authority, TFDA (before 2003 Pharmacy Board) is responsible for implementing the NEDLIT and for policies regarding the importation of drugs and is also in charge of the National Drug Quality Control Laboratory. By transferring the authority of healthcare to the district and local levels, health sector reforms have also led to a decentralised DD process.

Both the public and non-for-profit sectors of Tanzania receive DDs for basic healthcare and as part of specific DD programmes. The MSD is mandated to receive and store all in-kind DDs that are given to the government. Additionally, the MSD distributes the DDs given in the framework of programmes within the country. These DDs are cleared at the port of Dar es Salaam and other harbours together with DDs given for the private-for-profit facilities. Christian umbrella organisations have their own clearing offices. Local pharmaceutical companies did not receive DDs, but on the contrary were in-country donors of DDs.

4.2 Switzerland

Switzerland has a long tradition in humanitarian aid and for many years, Tanzania has been a priority country for the Swiss government [SDC] As a nation significantly committed to pharmaceutical research, development and production, Switzerland seemed also predestined for involvement in DDs.

Both, the public and the private sector are involved in DD processes. The latter includes the for-profit sector (e.g. pharmaceutical companies and community pharmacies) and the not-for-profit sector [religious organisations and non-profit organisations such as non-governmental organisations (NGOs) and (PVOs)].:

- In the public sector, the main actors are the government as represented by the Swiss Agency for Development and Cooperation (SDC) and the State Secretariat for Economic Affairs (SECO) [SDC; SECO]. In 2000, Switzerland committed itself to support the MDGs [MDG; SDC and Strategy 2010].

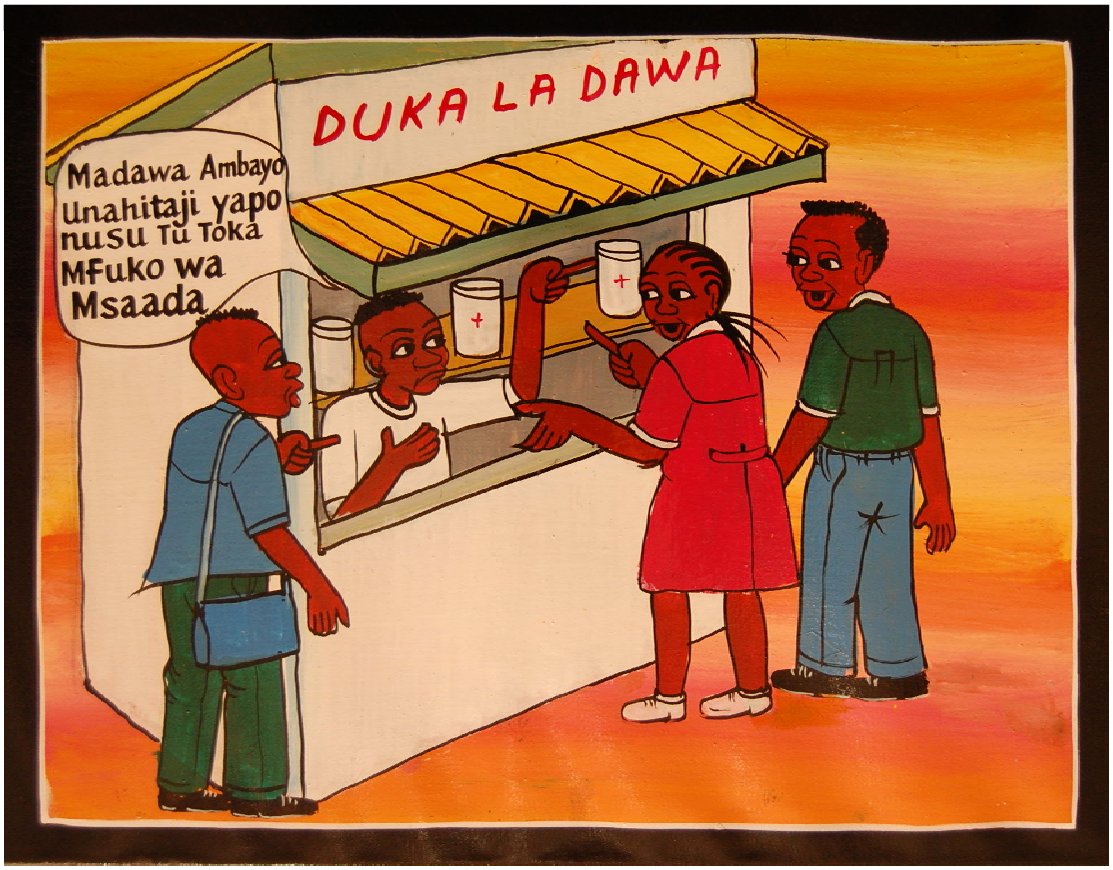
Focusing on the empowerment of the health systems in low-income countries, the preferred strategy of SDC is to eliminate causes rather than making donations and covers optimisation of access to essential drugs (MDG 8). Short-term DDs are considered in emergency assistance. But even then, local procurement of drugs is preferred [SDC Health Policy 2003-2010].

- Two groups of religious organisations have an important impact in health care in DC and DD processes. In the first case, major missionary bodies and faith-based organisations, e.g. HEKS and Caritas, supported the idea that in a partnership, the recipient should cooperate in needs assessment. The second group, they still base their development activity on missionary goals [Holenstein, R., 1998].
- NGO's importance in DC and DDs has increased, because the complexity of DC requirements challenges governmental structures and resources. But, all Swiss NGOs and PVOs that collected, sorted out and shipped unused drugs (drugs returned to pharmacies from patients and free samples given to health professionals) in a large amount halted this activity after the revision of the WHO guidelines for DDs in 1999. In the early 2000s, the organised collection of unused drugs in pharmacies came to an end [Gehler Mariacher G *et al.*, 1998; WHO, 1999; Gehler Mariacher G, 2004].
- Today, public resources in DC are limited and involvement of the private sector is needed. The challenge of this strategy lies in conflicts of interest. One major actor in DD processes, the pharmaceutical companies, are involved in many DC contexts, especially in the field of health optimisation and poverty reduction. Community pharmacies are the other important players in DD processes in the private-for-profit sector. A service of these pharmacies is the cost-free disposal of unused drugs. For community pharmacies, it was often not understandable that after 2000 NGOs no longer collected these unused drugs for reuse.

The national law on medicine and medical products, issued in 2002, has no specific article for handling DDs and there are no DD guidelines for Swiss donors [BAG, 2002]. However, this legislation prohibits the export of drugs to foreign countries if those drugs are unauthorised in the target country or if it is evident that the drugs will be used for illegal purposes. Before 2002, each canton had its own laws and there was no legislation applicable to the entire country. The export of drugs was practically unregulated. The Basel Convention, signed by the Swiss government, prohibits the export of unused drugs to any country other than OECD states [Basel Convention].

PAPER 1

IN-KIND DRUG DONATIONS FOR TANZANIA



DUKA LA DAWA: *Madawa ambayo unahitaji – yapo nusu tu toka mfuko wa msaada*

PHARMACY: *There is only half the dosage of this donated drug for this patient*

APOTHEKE: *Wir haben aus der Spendenmedizin nur eine halbe Dosis für den Patienten zur Verfügung*

5 In-Kind Drug Donations for Tanzania

Stakeholders' Views – A Questionnaire Survey

Gaby Gehler Mariacher[1]*, Deo Mtasiwa[2], Karin Wiedenmayer[1], Rudolf Bruppacher[3], Marcel Tanner[1], Kurt E Hersberger[3]

[1]Swiss Tropical Institute, PO Box, 4002 Basel, Switzerland

[2]Dar es Salaam City Council, PO Box 9084, City Hall, Dar es Salaam, Tanzania

[3]Institute for Clinical Pharmacy, University of Basel, Klingelbergstr. 50, 4056 Basel, Switzerland

---

This paper was published in
World Health & Population, March 2007

WORLD HEALTH & POPULATION

In-Kind Drug Donations for Tanzania

Stakeholders' Views – A Questionnaire Survey

Gaby Gehler Mariacher, Swiss Tropical Institute, PO Box, 4002 Basel, Switzerland

Deo Mtasiwa, Dar es Salaam City Council, PO Box 9084, City Hall, Dar es Salaam, Tanzania

Karin Wiedenmayer, Swiss Tropical Institute, PO Box, 4002 Basel, Switzerland

Rudolf Bruppacher, Institute for Clinical Pharmacy, University of Basel, Klingelbergstr. 50, 4056 Basel, Switzerland

Marcel Tanner, Swiss Tropical Institute, PO Box, 4002 Basel, Switzerland

Kurt E. Hersberger, Institute for Clinical Pharmacy, University of Basel, Klingelbergstr. 50, 4056 Basel, Switzerland

Correspondence: Swiss Tropical Institute, PO Box, 4002 Basel, Switzerland;
email: gaby.gehler@unibas.ch

Abstract

Tanzania, a country with low access to essential drugs, receives substantial drug donations (DDs) as in-kind gifts. To support the ongoing health sector reform and to promote a good donation practice, stakeholders' and recipients' views on the appropriateness and acceptability of DDs are of particular interest. The objectives were to collect information on the situation of in-kind DDs in Tanzania, to assess the characteristics of the DD system in Tanzania and to collect stakeholders' and recipients' views on problematic areas in DD processes including all strategies of drug donation. Using a qualitative approach, data were collected through validated postal questionnaires in Swahili and English, which were sent out in June 2001 countrywide to stakeholders of all sectors and levels of decision-making involved in healthcare in Tanzania. Of 1,383 mailed questionnaires, 496 were returned, of which 411 (30%) were eligible for analysis. All respondents perceived in-kind DDs as an important resource to assure drug availability in a context of poverty. Half of the respondents were recipients of in-kind DDs. On average, an estimated 27% of the recipients' drug supply was covered through DDs. The main problem for recipients of all sectors involved in healthcare was the insufficient quantity of DDs for sustainable treatment. Representatives of the public sector asked for more transparency in the DD processes. NGOs and religious facilities with better developed structures raised problems such as shipment fees, insufficient infrastructure and training. Recipients suggested that optimizing communi-

cation would have the greatest impact on improving the DD processes. In Tanzania, DDs were highly accepted by recipients and stakeholders. The primary concern of DD recipients was less the quality of drugs, although quality assurance remained an ongoing concern, than the discrepancy between the recipients' needs and the donors' supply. DDs often failed to cover priority needs. Suggestions of recipients for DD process optimization corresponded fully with the principles of the Tanzanian and the World Health Organization (WHO) guidelines for DDs, with the call for better implementation of the guidelines among donors and recipients.

Background

Drug Donations

Access to essential drugs has a high priority in the health system of all countries. Nevertheless, millions of people worldwide have either limited or no access to such drugs (Pecoul et al 1999; Hozerzeil 2003). In this situation, appropriate drug donations (DDs) can play an important role in bridging drug supply gaps (Reich 2000).

DDs can be either gifts in-kind or cash donations earmarked for drug purchase. In-kind DDs are manufactured drugs imported free into the recipients' country. In development cooperation, different strategies for donating drugs are known (WHO 1999). Drugs can be given directly to the basic healthcare system of the recipient country and made available through private humanitarian institutions (religious, non-governmental and private voluntary organizations), or they can be donated by private companies and individuals. Alternatively, they can be single-source DDs or DDs as part of public/private partnerships (PPPs) with a clearly defined public health goal (Dull et al. 1998; Oladele 1999; Wehrwein 1999; Buse et al. 2000a; Buse et al. 2000b; Shretta et al. 2000; Shretta et al. 2001). Whatever the mode of donation, DDs must comply with the needs and demands of the recipients. Often, however, DDs fail to take account of recipients' needs, existing capacities or the resources of the recipients' country; they do not meet national and international quality standards and their handling wastes human and economic resources (Berckmans et al. 1997; Reich 1999; Autier et al. 2002).

In 1996, the World Health Organization (WHO) issued Interagency Guidelines for Drug Donations (WHO-GDDs) in cooperation with major international agencies active in humanitarian relief. These guidelines, revised in 1999, are intended to serve as an evidence-based tool to be adapted for good donation practice (GDP), as an aid to decision-making, as a reference for national or institutional guidelines and to empower recipients (Table 1) (WHO 1999). The positive impact of these WHO-GDDs on the quality of DDs and DD processes is well documented (Hogerzeil et al. 1997; Oladele 1999; Reich 1999; WHO 2000; Autier et al. 2002).

Within the framework of development cooperation, DDs should be integrated into a country's drug supply system and must be planned as a sustainable support. They have to comply not only with globally valid standards but also with circumstances at the local level, and they must respect the particular needs and interests they serve (WHO 2000b; Junghanss 2001; Weiss et al. 2001).

Table 1. Interagency WHO guidelines for drug donations: principles and applications (WHO 1999)

Core principles	Practical application
• Maximum benefit to the recipient	• Selection of drugs
• Respect for the wishes and authority of the recipient	• Quality assurance and shelf life
• No double standard in drug quality	• Presentation, packing and labelling
• Effective communication between donor and recipient	• Information and management

Peer-reviewed literature on DDs is scarce, and what research there is has usually been carried out in post-emergency situations after disasters and wars (Autier et al. 1990; Berckmans et al. 1997;

Autier et al. 2002) or has focused on DDs for specific diseases (Guilloux et al. 2000) and on corporate DDs in the framework of a program (Shretta et al. 2000; Shretta et al. 2001; Peters et al. 2004). In 1999, Reich provided the first systematic analysis of DDs, examining a range of factors affecting the impact of DDs (Reich 1999). His analysis included preliminary field studies in Armenia, Haiti and Tanzania. The main outcomes of these field studies were (a) DDs were appreciated by all three countries for a variety of reasons, (b) DD processes were perceived as very complex and varied from country to country, (c) problems in organizational relationships had consequences for the recipient of DDs, and (d) WHO-GDDs were perceived as helping to improve DDs.

The Health System in Tanzania

Tanzania is one of the poorest countries in the world and is, as are many countries in the south, a recipient of substantial DDs from abroad. Indicators that are important for the Tanzanian DD system are summarized in Table 2 (MOH 2002; UNDP 2002; CIA 2005). Since 1961, the former English protectorate has been a republic, shifting in 1992 from a one-party socialistic republic to a multiparty government with a free market economy. The people of Tanzania live in a stable society with rare conflict situations, but poverty remains a major challenge. Despite ongoing reforms and improvements such as better access to safe drinking water, a higher adult literacy rate and a decreasing poverty line (SEAM 2003), development indicators are not promising: Population growth, lack of manpower, problems with good governance, marginal economic growth and the burden of diseases like malaria, tuberculosis and HIV/AIDS have the effect that Tanzania depends heavily on foreign aid for health services.

Since independence, the Government of Tanzania has recognized the importance of health and has given it high priority. In 1994, the Health Sector Reform (HSR) was launched with the aim of improving equity, quality, accessibility and efficiency in the health sector, and with a focus on the poor and most vulnerable. Private sector participation is promoted and the authority of healthcare is decentralized to district and local levels (MOH 1994, 1999a, 1999b; Semali 2003). To facilitate the reforms and to develop a common funding approach with a commitment among stakeholders and partners, a sector-wide approach (SWAp) has been adopted (MOH 1994, 1999a, 1999b; Bürki 2001; Semali 2003).

In Tanzania, healthcare is delivered through both the public and the private sectors, the latter being divided into for-profit and non-profit services. This grouping follows the classification of the Ministry of Health (MOH), but sectors are sometimes difficult to delineate (Wyss et al. 1996; Weiss 2002). The healthcare system assumes a pyramidal referral pattern: the village post, dispensaries, health centres, district hospitals, regional hospitals and referral hospitals (MOH 2002). Not-for-profit organizations include private voluntary (PVOs), non-governmental (NGOs) and religious organizations. Christian missions provide 40% of all health services, and work in largely in rural areas, mostly under the umbrella of the Christian Social Service Commission (CSSC) (Muhume 2001). Other important faith-based providers are the Muslim services such as Bakwata and Aga Khan Health Services, and the Hindu Mandal. In this study, private-for-profit facilities are all those that aim to maximize profit through health services and include pharmacies, wholesalers, manufacturers, dispensaries, health centres and hospitals.

Drug Supply in Tanzania

In 1991, the MOH launched the National Drug Policy (MOH 1993). Tanzania was one of the first countries to adopt the essential drug concept and continues to promote it. The National Essential Drug List for Tanzania (NEDLIT) and the Standard Treatment Guidelines (MOH 1997a) were published in 1991 and updated in 1997. In 2001, a draft revision of the NEDLIT became available. The NEDLIT stratifies drugs by facility level, adapted to the educational level of the health staff.

The WHO rates Tanzania as a country with low access to essential drugs (50–79% of the population). The Swiss Agency for Development and Cooperation (SDC) stated in its review of the HSR in 2001 that the Tanzanian pharmaceutical sector is significantly underfunded (Bürki 2001). Despite

Table 2. Indicators important for the Tanzanian DD system (UNDP 2002; CIA 2005)

Indicator	Year	Tanzania
Geography		
Area, in sq km		945,000
Location		Eastern Africa, bordering the Indian Ocean, between Kenya and Mozambique
Paved roads, in %		5 (of 85,000 km)
Demographic Indicators		
Population	2001	35 million (estimated)
Annual population growth rate	2001	2.2%
Adult literacy rate at age 15	2000	76%
Population living in urban area	2001	33%
Epidemiological Indicators		
Life expectancy at birth, years	1990	50
Life expectancy at birth, years	2001	44
Under-five mortality rate per 1,000 live births	2001	165
Estimated HIV/AIDS prevalence rate	2001	7.8%
Economic Indicators		
Population living below USD 1 per day	2001	20%
Poverty line of USD 2 per day	2001	60%
GDP per capita in USD	2001	520
Health Sector		
Leading diagnosis for the whole country	1998	Malaria 37% Acute respiratory infections 13% Diarrhoeal diseases 6%
Expenditure on health as % of total government expenditure	2001	12.1%
Governments expenditure on health, in millions of USD	2002	84
External resources for health as % of the government health expenditure	2001	29.5%
Total expenditure on health as % of GDP	2001	4.4%
Total number of healthcare facilities	2000	4,717
Government or PPP-owned health facilities funded by the government	2000	3,747
Hospital beds per 1,000	2000	9
Physicians for the entire country	2001	355
Nurses for the entire country	2001	5,288
Pharmacists for the entire country	2001	42

Table 2. Continued

Pharmaceutical technicians for the entire country	2001	91
Population with sustainable access to essential drugs	1999	50–79%
Government expenditure on drugs as % of total health expenditure Thereof paid (Muhume 2001) By the government Through cost-sharing Through development partners with basket funding	2000	47% 50% 20% 30%
Population with sustainable access to an improved water source Urban Rural	2000	 90% 57%

developments such as the introduction of cost sharing and the significantly improved performance of the Medical Stores Department (MSD), the parastate wholesaler for the public and non-profit sectors, major structural problems still remain, such as the non-availability of qualified pharmaceutical staff, the absence of a clearly defined mandate for the staff in the pharmaceutical sector, lack of integration of the pharmaceutical sector into the healthcare system and insufficient health worker training in the essential drug concept (MOH 1997b; Wiedenmayer et al. 2000; Wiedenmayer et al. 2004). In 2001, Strategies for Enhancing Access to Medicines (SEAM), funded by Management Sciences for Health, assessed access to essential medicines in Tanzania (SEAM 2003). They identified gaps in drug availability, primarily in the public sector, and problems with quality and affordability of products and services, especially in the private retail sector. Geographical access was not perceived as a problem by the public. In MSD zonal stores, drug stock-outs occurred occasionally. On the other hand, availability does not seem to be a significant problem at mission health facilities. SEAM data revealed that the public cannot be assured of good drug quality for a significant proportion of drugs on the Tanzanian market.

Drug supply for health centres and dispensaries in the public sector is based on prepacked standardized kits as part of the National Essential Drug Programme (EDP). The composition of the kits is based on the NEDLIT and national morbidity data. The MSD is responsible for purchasing and distributing the kits. In 2001, 75% of the kit costs were paid by the government and 25% by the Danish International Development Agency (Danida). Although drugs provided by kits do not comply with the definition of in-kind DDs in this study, some health workers perceive them as drugs donated as gifts in-kind. This may be due to the fact that in the 1980s, kits were prepacked and fully financed from abroad, mostly by UNICEF and Danida (Hingora 2001).

Drug Donations for Tanzania

Tanzania has launched instruments for an effective regulation of DD processes, including guidelines for the importation of pharmaceuticals and DDs and the NEDLIT (MOH 1995, 1997a, 2000). By transferring the authority of healthcare to the district and local levels, health sector reforms have also led to a decentralized DD process. Within the HSR, the concept of a SWAp redefined the donors' role. Donors' funds are now pooled and earmarked for priority activities (basket funding) and within the SWAp system donors are responsible for synchronizing and reviewing their aid (Hutton et al. 2004).

The MOH has a regulatory overview. The chief pharmacist, i.e., the head of the pharmaceutical services section in the directorate of the curative health service, is responsible for the NEDLIT and the Donation Policy. The registrar, the director of the Pharmacy Board (since 2003 under the Tanzanian Food and Drug Authority, TFDA) is responsible for implementing the NEDLIT and for policies regarding the importation of drugs and is also in charge of the National Drug Quality Control Laboratory. The main regulations for handling DDs are the "Guidelines on donations of

drugs and medical equipment to the health sector for Tanzania Mainland, 1995," the "Guidelines for Importation of Pharmaceuticals, 2000" and the NEDLIT. Differences between the earlier published Tanzanian guidelines on DDs and the WHO-GDDs are as follows:

- Donors should understand Tanzania's DD policies.
- DDs have to be declared to the MOH for clearance and all importation of any pharmaceutical product requires approval by the Pharmacy Board and has to undergo a registration procedure.
- A financial contribution by the donor should be considered, since it may be more cost effective to buy drugs locally.

The Tanzanian GDDs from 1995 are currently undergoing revision and the release of updated GDDs is expected soon (Muhume 2001).

Both the public and not-for-profit sectors of Tanzania receive DDs for basic healthcare and as part of specific DD programs. The MSD is mandated to receive and store all in-kind DDs that are given to the government. Additionally, the MSD distributes the DDs given in the framework of programs within the country. These DDs are cleared at the port of Dar es Salaam and other harbours together with DDs given for the private-for-profit facilities. Christian umbrella organizations have their own clearing offices. Local pharmaceutical companies do not receive DDs; on the contrary, they are in-country donors of DDs.

With this background, the objectives of this descriptive study were to collect information on the situation of in-kind DDs in Tanzania, to assess the characteristics of the DD system in Tanzania and to collect stakeholder and recipient views on problematic areas and gaps in DD processes including all strategies of donating drugs.

Methods

Approach

This paper is part of a research project in Tanzania and Switzerland analyzing the knowledge, attitudes, perceptions and practices of stakeholders with regard to in-kind DDs for development aid at the local level. The design of the entire study relied on the triangulation of data and methods (KFPE 1998; Flick 2000). It employed a participatory approach, with the involvement of individuals at every level of decision-making, and its overall goal was to identify their priorities where problems with DDs exist and to publish effective suggestions for the optimization of DD systems.

The DD system is characterized by a DD process between a donor and a recipient system (Figure 1). Various stakeholders can be involved in the donor and recipient systems: NGOs, governmental organizations, private companies, private foundations, private donors, health facilities and patients.

Figure 1. Drug donation system (DD system)

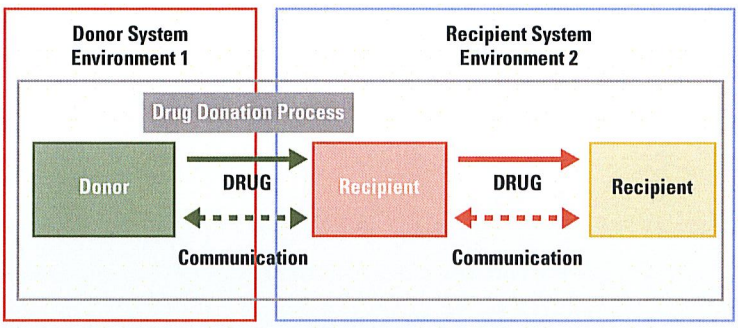


Table 3. Characteristics of the DD system

Determinants	Indicator	Guidelines for DDs		Results in Table
		WHO	Tanzania	
Environment				
Demographics	Population			No. 2
Epidemiology	Morbidity, Life expectancy, Prevalence of HIV/AIDS, Child mortality of under fives			No. 2
Economy	Poverty, GDDs per capita			No. 2
Education	Adult literacy rate			No. 2
Geography	Paved roads			No. 2
Health sector and DDs	Sectors involved, Distribution channels for DDs, Number of pharmacists and educated healthcare staff, Public spending for health, Control of importation of DDs			No. 2
National Drug Policy	Guidelines for DDs, Laws for importation, Essential drug list (EDL)		No. 4.1 No. 4.2a–c	No. 2
Resources and Structures				
Organizations	Characteristics of the organizations			No. 5/7
	Involvement in DD processes			No. 5
Staff competence	Accountability			No. 7
	Knowledge of GDDs			No. 8
Documents	List of needed drugs		No. 3	No. 8
	Quality criteria for DDs			
	Treatment criteria for DDs			No. 8
	Availability of GDDs			No. 8
Financial aspects	Shipment and custom fees	No. 12		No. 12
	Value of DDs			No. 9
	Payment for DDs			No. 9
	DDs in cash earmarked for buying drugs		No. 3	No. 5
Process				
Selection of drugs	Expressed need by recipient	No. 1		No. 10
	DDs part of the EDL of the country or of the WHO	No. 2	No. 4.2d	No. 11
Management	Origin of DDs			No. 10
	Coverage of drug supply with DDs			No. 10
	Use of DDs			No. 7
	Disposal of unwanted drugs			No. 10
Transparency	Evaluation of DD processes			No. 10

Table 3. Continued

Communication	Information by donors	No. 10	No. 3	No. 10
	Collaboration with partner organizations			No. 10
	Receipt of invoice documents	No. 10		No. 11
Quality of the Donated Drug				
Quality assurance	Certificate schemes on the quality of DDs	No. 4	No. 4.2h	No. 11
	Shelf life	No. 6	No. 4.2g	No. 11
	Unused drugs	No. 5	No 4.2j	No. 11
Presentation	Labelling	No. 7	No 4.2f	No. 11
Perception of Stakeholders				
Satisfaction of recipients	Long-term treatment, Implementation of GDDs, Relevance of DDs, Shipment and custom fees, Transparency in DD processes, Communication between donor and recipient, Infrastructure, Training of health-care staff, Quality of DDs			No. 12
Usefulness of DDs				No. 6

The focus in this paper is on the characteristics of the recipient system. To achieve a broad analysis and to structure the complex information, determinants and indicators were elaborated in a deductive process. They were based on experiences from an exploratory study, on Reich's research (Reich 1999), on WHO publications (MSH 1997; WHO 1999, 2000a, 2000b) and on results from previous publications on the impact of DDs, as summarized in Table 3. DDs should comply with the quality standards required in both the donor and the recipient country. In the WHO GDDs, the indicators for the minimal required quality of DDs are certification of a reliable source of the pharmaceutical product (e.g., WHO Certification Scheme on the Quality of Pharmaceutical Products), shelf life, presentation, packaging, labelling, absence of unused drugs (drugs from patients returned to pharmacies and free samples given to health professionals) and documentation (WHO 1999). The indicators compiled in a framework for analysis (Table 3) enabled the formulation of quantitative and open questions to assess the characteristics of the DD system. Data were collected by interviews with key persons in an exploratory study and by a questionnaire.

Exploratory Study

Data collection in Tanzania was initiated with an exploratory study in 2000 to promote participatory collaboration. The idea was to learn about personal views concerning DDs at the local level, to develop an information exchange and to elaborate the objectives of the main study and the methodological tools. Unstructured key informant interviews were used, based on a snowball sampling. In February 2000, 45 key persons (39 from Dar es Salaam, five from Ifakara and one from Dodoma) from each sector of the health services were visited and interviewed.

Each interviewee had experience with DDs. Main outcomes were that DDs are helpful in (a) temporarily bridging gaps when drugs are missing in basic healthcare or (b) for fulfilling specific public health goals. Many problems in DD processes were pointed out, such as unsatisfactory communication and a low level of transparency, different perceptions and motivations between donors and recipients, insufficient drug quantities for long-term treatments, irrelevant drugs for the diseases

prevalent in the country, inadequate logistics and infrastructure, high custom fees and shipment costs, poor drug quality, insufficient training of healthcare staff and insufficient implementation of guidelines and policies. These perceptions were integrated in the creation of the questionnaire.

Field Study – Questionnaire Survey

The questionnaire we developed (Questionnaire 2001) contained a set of 16 open questions to gather perceptions and opinions, 39 quantitative questions for basic information, followed by 12 open questions to further develop the quantitative questions. The questionnaire was validated with a pilot questionnaire to check form and content. Only minor changes were necessary after the pilot study.

In June 2001, 1,383 questionnaires in English and Swahili were sent out with cover letters and prepaid envelopes for the return of completed questionnaires. Two months later, a reminder was sent out to non-respondents. Data gathering was completed in December 2001. As an incentive, the WHO-GDDs for DDs, provided by the WHO Geneva, were given to each respondent who returned a questionnaire.

Stakeholders of all sectors involved in healthcare during the year 2000 were contacted in Tanzania. Address lists as complete and updated as possible were collected for all groups of recipients and donors of each sector (public, religious, private-non-profit and private-for-profit) and from the entire country. All the addresses were taken from some lists; from others, only a randomized sample, depending on the length of the list. Questionnaires were sent out either directly to an organization or to a diocese or district medical office with the invitation to distribute the questionnaires to health facilities of their diocese or district. To assess the non-respondents to the questionnaire, 50 individuals from the non-responding sample were selected (randomized and stratified by sectors) and followed up by telephone call.

The questionnaire was designed and processed with the software TELE*form*® Standard Version 7.0 from Cardiff Inc. Data quality assurance was done by a double control of the entire dataset. The data were transferred to a Microsoft® Access database and analysis was performed with Microsoft® Excel. Chi-square analyses (χ^2) were performed to assess differences between sectors using SPSS 13.0 for Windows. Generally, differences between the sectors were highly significant; the text specifies where this was not the case. Details of the calculation are given below the tables. Qualitative data from the open-ended questions were analyzed using content analysis. In this study, the deductive text analysis was based on the concepts of Mayring (Mayring 1997; Flick 2000). Key words used in this analysis were derived from important categories of the DD system as listed in Table 3 and from most-cited terms.

Approval of the Research Clearance, Tanzania, RC 2000/25 was given in 2000 from the Commission of Science and Technology, COSTEC, Dar es Salaam. The ethical review was done by the National Institute for Medical Research (NIMR) in Tanzania in 2002.

Results and Discussion of the Questionnaire Survey

Due to the multi-faceted nature of the study, the presentation of results is combined with comments and discussion to track the evolving analysis.

Respondent Rates

A total of 1,383 postal questionnaires were sent out countrywide (Table 4). Of these, 496 were returned and 467 were completed. To achieve a broad coverage of respondents, all sectors were approached and the addressed institutions were invited to distribute copies of the questionnaires. This resulted in questionnaires that were not filled in properly (n = 29) or were not analyzable (n = 56), mainly because of duplicates. Of the resulting eligible sample of 411 (30%) questionnaires – the so-called respondents (recipients and non-recipients together) – 47% were in Swahili. The target of one third returned questionnaires was achieved.

Table 4. Description of the questionnaire survey sample

Questionnaire	Public Sector (*n*/%)		Relig. Sector (*n*/%)		NGO (*n*/%)s		Private-for-profit (*n*/%)		Not identified (*n*)	Total (*n*/%)	
Mailed postal	442	*	531	*	169	*	85	*	*156	1383	**100%**
Returned	151	*	212	*	75	*	50	*	*8	496	**36%**
Completed	145	31%	208	45%	66	14%	48	10%	0	467	**34%**
Eligible	119	29%	181	44%	64	16%	47	11%	0	411	**30%**

*Allocation of some organizations to a sector was not possible.

Table 5. Characteristics of respondents

Question	Answer	All Respondents *N*411=100%	Public Sector *N*119=100%	Religious Sector *N*181=100%	NGOs *N*64=100%	Private-for-profit Sector *N*47=100%
1. Which category identifies your organization best?	Hospital	29.0%	37.0%	40.3%	0.0%	4.3%
	Health Centre	8.5%	14.3%	7.7%	3.1%	4.3%
	Dispensary	20.9%	15.1%	27.1%	0.0%	40.4%
	Political, organizational, technical level	25.5%	13.4%	17.7%	89.1%	0.0%
	Manufacturer	1.2%	0.8%	0.0%	0.0%	8.5%
	Wholesaler	1.5%	0.0%	1.1%	0.0%	8.5%
	Pharmacy	3.9%	0.0%	0.0%	0.0%	34.0%
	No answer	9.5%	19.3%	6.1%	7.8%	0.0%
2. Is drug supply the main activity of your organization?	Yes	40.4%	49.6%	39.2%	15.6%	55%
	No	54.0%	42.9%	55.8%	79.7%	41%
	No answer	5.6%	7.6%	5.0%	4.7%	4%
3. Is your organization involved in DDs as gifts in-kind?	Yes[a]	50.4%	61.3%	58.0%	35.9%	12.8%
	No	47.4%	36.1%	40.3%	59.4%	87.2%
	No answer	2.2%	2.5%	1.7%	4.7%	0.0%
4. Has your organization ever received earmarked money in cash for buying drugs?	Yes[b]	16.1%	13.4%	24.3%	9.4%	0.0%
	No	61.3%	52.9%	55.2%	79.7%	80.9%
	I don't know	10.9%	18.5%	12.2%	0.0%	2.1%
	No answer	11.7%	15.1%	8.3%	10.9%	17.0%

[a] Public and religious sector vs. NGOs: $\chi^2 = 95.757$, $p < 0.001$.
[b] Religious sector vs. public sector $\chi^2 = 49.309$, $p < 0.001$. / Religious sector vs. NGOs $\chi^2 = 22.213$, $p < 0.001$.

To evaluate the return rate and the sample consistency, a sample of non-respondents were contacted and their responses recorded and analyzed. Only 20 of the 50 randomly chosen non-respondents were reachable. Of these, 17 (85%) said they had not received the questionnaire. This may largely explain the non-response rate in the questionnaire survey, with geographical and logistical problems as well as incorrect address lists playing a role.

The response rate to the various questions was very uneven and often varied between sectors. Public and religious sectors had a higher response rate to questions concerning quality aspects (e.g., Q. 31 ff, Table 11), while NGOs had a higher response rate to questions requiring more technical knowledge (e.g., Q 8, 15, Tables 7, 8). A similar pattern emerged for the answer "I don't know." NGO respondents were in general more informed about the DD process (e.g., Q 4, 10, 13, 20, Tables 5, 8, 10). When data were not available or the question was an open one, the "no answer" rate was more than 20% (e.g., Q 17, 21, Tables 9, 10). Question 3 on the receipt of DDs and the questions on familiarity with GDDs for DDs (Q 12, 15, Table 8) were answered by nearly every respondent. Even though the response "no answer" tended to be frequent, the responses were consistent and logical (e.g., Q 18 compared with 19, Q 24 with 25, Tables 9, 10), except the answers to Q 20 and 20a.

Analysis of Respondents

A summary of the characteristics of the respondents for each sector is given in Table 5. Basic healthcare was offered by 66% of the public sector, 75% of the religious sector and 83% of the private-for-profit sector facilities, but 89% of the NGOs worked mainly on an organizational or technical level. Of all respondents, 40% reported that drug supply was the main activity of their organization. The other 54% specified their activities in an open question. The resulting 363 answers were classified as follows: 76% activities in health services in general (mostly curative, preventive and promotive health services and education as well as program activities), 4% technical support to the health system, 8% religious activities and 12% various other activities.

Half of the respondents (51%) were involved in DDs, mainly in the public and religious sectors, and 16% received earmarked money in cash. It is apparent that public and religious facilities that worked directly with patients were receiving more DDs than facilities working on a more administrative level, such as NGOs. The religious sector, with its well-organized network of support and providers, received the most earmarked donations in cash (25%). This complies with the recommendation of the Tanzanian GDDs to promote donations in cash (MOH 1995).

The perception of DDs for all respondents was assessed with two open questions (Table 6). Eighty percent of all respondents answered the question "In which situation do you consider DDs as useful?"; of these, 29% mentioned economic aspects as the most important. This was underlined through the second question on the reasons for supporting the drug supply system through DDs, where more than 55% gave economic aspects and support of poor people as positive reasons. Drug availability was rated lower, although drugs in health facilities were often lacking because of limited procurement funds.

This view reflects the situation of the country and mirrors the perception of Reich's interviewees, who considered DDs especially important for the poor who cannot afford cost sharing. Poverty changes perception and hinders a critical view of DDs. Another positive aspect that respondents emphasized was the important public health impact of DDs given within DD programs.

Reasons against supporting drug supply with DDs focused primarily on quality aspects (41%): They did not express a basic refusal of DDs but characterized the low quality of DDs as a notable problem. The expiry date, a major problem, is easy to assess and was perceived as an indicator of the donor's attitude.

DD System

This paper focuses on the analysis of recipients of DDs. But six respondents of the private-for-profit sector involved in DDs (two dispensaries, one hospital, one manufacturer, two private pharmacies) pointed out that they were donors in their country. They were therefore excluded, giving a new sample of recipients ($N = 201$).

Structure and Resources

Characteristics of the recipient organizations (Table 7) did not differ from those of the respondents (Table 5): 82% of the religious and 67% of the public facilities were delivering healthcare in hospitals, health centres and dispensaries, and 87% of NGOs were working more in organizational, technical or preventive services.

Although the questionnaires were sent out to the head or director of district medical offices, dioceses or health facilities, with the assumption that they would select the person responsible for DDs to answer the questionnaires, an average of 52% of recipients were in charge of DDs (74% within NGOs, 53% in the religious and 44% in the public sector). A reason for differences among the sectors might be that the questionnaires were sent to a member of the administration who often has overall responsibility for DDs but is not the person working directly with patients and drug supply. Another reason for low accountability might be that there is no person in charge of DDs. This supports the HSR recommendation that responsibilities in the pharmaceutical sector have to be clearly defined at every level of service (MOH 1997).

A list of needed drugs (Table 8) had been worked out in detail by 66% of religious organizations and 52% of the NGOs, but by only 18% of public organizations. This correlates with the result observed by SEAM that services in the religious sector have less problems with drug availability (SEAM 2003) and with the fact that NGOs had, in general, more clearly defined structures. A list of needed drugs requires an essential drug list (EDL) and information on the stock of available drugs, and it helps to specify requests. During the period of data collection, the public sector health centres and dispensaries were provided with prepacked kits, which are delivered monthly. The motivation to establish or to use a list of needed drugs was much lower in this sector and, thus, unwanted DDs could not be refused as easily. The existence of a set of special criteria for using DDs in the treatment of patients was reported by 70% of the NGOs and 30% of the public and the religious sectors. This result again confirmed that international NGOs, in particular, are involved in well-structured programs for the treatment of single diseases with DDs (Shretta et al. 2000).

On average, 45% of recipients were familiar with the Tanzanian GDDs and 30% with the WHO-GDDs. Fifty-four percent of recipients from the religious sector, 35% from the public sector and an equal percentage of NGOs were familiar with the Tanzanian GDDs. The WHO Guidelines were known equally by 39% in the religious and NGO sectors, but by only 15% in the public sector. Recipients in NGOs knew both the WHO-GDDs and the Tanzanian GDDs to a similar degree. The question on whether recipients had copies of the GDDs gives a similar picture: They were more available in the religious and public sectors, less so in the NGOs. NGOs and religious facilities had, to the same degree, more copies of WHO guidelines than the public sector. Pushing the distribution of both the Tanzanian and the WHO guidelines in the later 1990s through the CSSC had a positive effect (Kigadye 2001). On the question of whether the WHO-GDDs influence the practice of the organization, 56% of recipients gave no answer or did not know. The level of information was more advanced in the religious sector and within NGOs, presumably related to their background in an international setting. On the whole, less than 50% of the recipients had copies of printed material. For questions on the familiarity with and availability of GDDs, "no answer" and "I don't know" responses were very low and the consistency among the responses was high. This high response rate shows the importance of a good donation practice and the need for a tool like the GDDs.

Only 30% of recipients were able to estimate the monetary value of DDs as a drug supply resource for their organization (Table 9). NGOs were best able to estimate the monetary value, with 57% responding; the public sector had the lowest ability, with only 15% of positive answers.

Table 6. Perception of DDs of respondents

Question	Answer	
5. In which situation do you consider DDs as useful?	**Usefulness of DDs: From 328 (80%) respondents, a total of 521 (=100%) answers were given**	
	Economic aspects, which included better affordability in general, fighting against poverty, missing funds 29%	
	DDs for specific needs and for programs (e.g., tuberculosis, HIV/AIDS, chronic diseases, malaria)	17%
	Guarantee of the availability of drugs	14 %
	Emergency situations such as disasters, refugee camps, epidemic outbreaks	13 %
	Other features included usefulness in any situation, donations in cash preferred, supplement of the essential drug list	17%
6. There are reasons for and against supporting the drug supply system through in-kind DDs. Suggest some of them.	**Positive features of DDs: From 289 (70%) respondents, a total of 333 (=100%) answers were given**	
	Economic aspects such as better affordability of drugs and reductions in costs for purchasing drugs	37%
	Support of poor people	18%
	Availability of drugs	16%
	DDs perceived as positive in any situation	7%
	Other features included better quality of DDs than of locally manufactured drugs, supporting local needs, DDs for emergency situations	32%
	Negative features of DDs: From 289 (70%) respondents, a total 250 (=100%) answers were given	
	Short shelf life of DDs as a quality aspect	29%
	DDs often do not meet local needs	13%
	Other quality aspects such as poor labelling of DDs, counterfeit drugs	12%
	DDs not part of the NEDLIT	8%
	Other features included hampering the building of local competence, no sustainability of DDs, dependency on donors	38%

The high proportion of "no answer" and "I don't know" responses to the question on the value of DDs indicates that data are not available, that transparency is very low or that this aspect has never been analyzed. However, knowledge of the value of DDs is a prerequisite for judging the economic impact of DDs on drug supply.

On the other hand, recipients had clear ideas about the pricing policy for DDs, and more than 90% indicated whether patients had to pay for DDs. The pricing policy was applied and perceived differently in the various sectors. In 74% of religious facilities, patients had always or at least sometimes contributed financially to DDs, while only 26% paid always or at least sometimes

Table 7. Characteristics of the recipients' organizations

Question	Answer	All Recipients	Public Sector	Religious Sector	NGOs
	Single Answers	*N* 201=100%	*N* 73=100%	*N* 105=100%	*N* 23=100%
7. Could you specify the category which describes your organization?	Hospital	39.9%	30.1%	55.2%	0%
	Health Centre	11.4%	17.8%	8.6%	4.3%
	Dispensary	15.9%	19.2%	18.1% 2)	0%
	Political, technical or organizational level	22.3%	13.7% 1)	13.3% 3)	87%
	Manufacturer or wholesaler	1.5%	1.4%	1.9%	0%
	No answer	9%	17.8%	2.9%	8.7%
	1) 5 District Medical Offices, 3 MOH, 2 International Organizations (Public Sector)				
	2) 18 Mission Dispensaries, 1 Islamic Dispensary (Religious Sector)				
	3) 10 Dioceses, 4 Islamic Organizations (Religious Sector)				
8. Are you the person in charge of DDs in your organization?	Yes[a]	52.2%	43.8%	53.3%	73.9%
	No	38.8%	46.6%	37.1%	21.7%
	No answer	9.0%	9.6%	9.5%	4.4%
	Multiple answers	*N* 359=100%	*N* 156=100%	*N* 169=100%	*N* 34=100%
9: For what purposes did you receive DDs?	For primary healthcare	31.8%	32.7%	32%	26.5%
	For secondary and tertiary healthcare	15%	5.8%	24.3%	11.8%
	For natural disasters	7.2%	11.5%	4.1%	2.9%
	For refugee camps and during wars	2%	2.6%	0.6%	5.9%
	As partner of a program	18.7%	21.1%	15.3%	23.5%
	As earmarked in-kind DDs for specific diseases	10.3%	11.5%	8.9%	11.8%
	For research activities	2.5%	1.9%	1.8%	8.8%
	On request of individuals	5.8%	3.9%	7.7%	5.9%
	I don't know	2.2%	3.9%	1.2%	0%
	Other reasons	4.5%	5.1%	4.1%	2.9%
	Specification	*N* 114=100%	*N* 51=100%	*N* 54=100%	*N* 9=100%
9a: Specification of the receipt of DDs for primary healthcare in Q 19	As prepacked kits	43.0%	72.6%	16.7%	33.3%
	DDs for basic needs	49.1%	23.5%	74.1%	44.5%
	No answer	7.9%	3.9%	9.2%	22.2%

[a] Public vs. religious sector χ^2= 121.002; $p < 0.001$ / Religious sector vs. NGOs χ^2= 37.214; $p < 0.001$ / Public sector vs. NGOs χ^2= 31.534; $p < 0.001$.

Table 8: Policies of the recipients' organizations

Question	Answer	All Recipients	Public Sector	Religious Sector	NGOs
	Single Answers	*N* 201=100%	*N* 73=100%	*N* 105=100%	*N* 23=100%
10. Do you have a list of needed drugs, which you give to the donors?	Yes[a]	46.8%	17.8%	65.7%	52.2%
	No	39.8%	61.7%	24.8%	39.1%
	I don't know	6%	12.3%	2.8%	0%
	No answer	7.4%	8.2%	6.7%	8.7%
11. Has your organization special criteria for deciding to treat a patient with donated drugs?	Yes[b]	34.8%	32.9%	28.6%	69.6%
	No	50.2%	53.4%	56.2%	13.0%
	No answer	14.9%	13.7%	15.2%	17.4%
12. Are you familiar with the WHO Guidelines for DDs?	Yes[c]	30.3%	15.1%	39.1%	39.1%
	No	65.7%	83.5%	55.2%	56.5%
	No answer	4%	1.4%	5.7%	4.4%
13. Do you have a copy of the WHO Guidelines for Drug Donations?	Yes[d]	21.4%	8.2%	29.5%	26.1%
	No	70.1%	87.7%	58.1%	69.6%
	I don't know	3%	2.7%	3.8%	0%
	No answer	5.5%	1.4%	8.6%	4.3%
14. Did these Guidelines influence practices with regard to drug donations in your organization?	Yes	17.4%	9.6%	22.9%	17.4%
	No	26.9%	26.0%	28.6%	21.7%
	I don't know	39.3%	53.4%	27.6%	47.8%
	No answer	16.4%	11.0%	21.0%	13.0%
15. Are you familiar with the "Guidelines on Donations for Tanzania Mainland" of the MOH?	Yes[e]	45.3%	35.6%	54.3%	34.8%
	No	51.7%	63.0%	41.0%	65.2%
	No answer	3.0%	1.4%	4.8%	0.0%
16. Do you have a copy of the "Guidelines on Donations for Tanzania Mainland" of the MOH?	Yes[f]	33.8%	26.0%	44.8%	8.7%
	No	60.2%	71.2%	45.7%	91.3%
	I don't know	2.5%	1.4%	3.8%	0.0%
	No answer	3.5%	1.4%	5.7%	0.0%

[a] Religious sector and NGOs vs. public sector: $\chi^2 = 100.705$; $p < 0.001$.
[b] Religious and public sector vs. NGOs: $\chi^2 = 13.878$; $p < 0.001$.
[c] Religious sector and NGOs vs. public sector: $\chi^2 = 49.947$; $p < 0.001$.
[d] Religious sector and NGOs vs. public sector: $\chi^2 = 31.198$; $p < 0.001$.
[e] Public sector and NGOs vs. religious sector: $\chi^2 = 93.958$; $p < 0.001$.
[f] Religious and public sector vs. NGOs: $\chi^2 = 50.798$; $p < 0.001$.

in NGOs and in the public sector. Furthermore, 56% of recipients in the religious sector perceived payment for DDs as justifiable, but only 23% of the public and 30% of the NGOs agreed. Possible reasons are that religious organizations have had a much longer tradition with DDs and may know the educational aspect of even a very low financial contribution. For example, under the umbrella of the CSSC, religious health facilities have established new financing schemes such as a Revolving Drug Fund (RDF) (Kuper and Njau 1998). The public and NGO sectors have a long tradition with cost-free health services and therefore have a different view about pricing policy and the implementation of financing schemes, although cost sharing was established as an element of the HSR.

Processes

The highest proportion of DDs were of European origin (an average of 42%), followed by 15% from North America and 12% from Africa (Table 10). Reich estimated that 60–90% of DDs, a much higher proportion, were coming from Europe, based on the assumption that religious health facilities had a strong relationship with their mother houses. In this study, the religious sector stated that 47% of the DDs received were from Europe. An average of 23% of DDs were received from Tanzanian donors (34% in the public sector, 18% in religious facilities and 13% in NGOs). This discrepancy could be explained by recipients' difficulties in assigning the origins of drugs contained in the kits. They are partly produced in-country and not perceived as DDs of foreign origin.

Table 9. Economic aspects of the recipient's organizations

Question	Answer	All Recipients	Public Sector	Religious Sector	NGOs
	Single Answers	N 201=100%	N 73=100%	N 105=100%	N 23=100%
17. What is the value of the DDs received in 2000?	Value known[a]	27.9%	15.1%	30.5%	56.5%
	I don't know	44.3%	63%	38.1%	13%
	No answer	27.8%	21.9%	31.4%	30.5%
18. Do patients have to pay for donated drugs?	Always	15.4%	6.8%	23.8%	4.3%
	Sometimes[b]	35.8%	19.2%	50.5%	21.7%
	Never	37.3%	63.0%	14.3%	60.9%
	I don't know	3.5%	2.7%	3.8%	4.3%
	No answer	8.0%	8.2%	7.6%	8.7%
19. Do you think is it justifiable to sell donated drugs?	Yes[c]	41.3%	23.3%	56.2%	30.4%
	No	53.2%	71.2%	38.1%	65.2%
	No answer	5.5%	5.5%	5.7%	4.3%

[a] Public vs. religious sector: $\chi^2 = 81.549$; $p < 0.001$ / Religious sector vs. NGOs: $\chi^2 = 45.012$; $p < 0.001$ / Public sector vs. NGOs $\chi^2 = 9.530$; $p = 0.002$.
[b] (Answers always and sometimes) Public sector and NGOs vs. religious sector: ($\chi^2 = 193.148$; $p < 0.001$.
[c] Public sector and NGOs vs. religious sector: $\chi^2 = 129.263$; $p < 0.001$.

The main purpose for using DDs (32%) in every sector was primary healthcare (PHC) (Table 7). Differences in the use of DDs were recorded for secondary and tertiary healthcare, where religious sector involvement was 24% and public sector involvement only 6%. The public sector and NGOs were more involved as partners in programs and in the treatment of specific diseases. Seventy-five

Table 10. DD process

Question	Answer	All Recipients	Public Sector	Religious Sector	NGOs
20. Origin of DDs in 2000?	**Multiple Answers**	*N* 267=100%	*N* 102=100%	*N* 136=100%	*N* 29=100%
	Asia	6.3%	13.7%	2.2%	0%
	Africa	11.6%	10.8%	10.2%	20.7%
	Europe	41.6%	35.3%	47.1%	37.9%
	North America	14.6%	14.7%	14%	17.2%
	Other Regions	6.4%	4.9%	6.6%	10.4%
	I don't know	7.5%	11.8%	5.9%	0%
	No DDs in 2000	12%	8.8%	14%	13.8%
20a. Did you receive DDs from Tanzanian donors in 2000?	**Single Answers**	*N* 201=100%	*N* 73=100%	*N* 105=100%	*N* 23=100%
	Yes[a]	23.4%	34.2%	18.1%	13%
	No	61.2%	38.4%	73.3%	78.3%
	I don't know	8%	17.8%	2.9%	0%
	No answer	7.4%	9.6%	5.7%	8.7%
21. What percentage of your drug supply was covered in 2000 by DDs?	0–10%[b]	44.3%	34.2%	53.3%	34.8%
	11–50%	14.4%	11%	17.1%	13%
	51–90%	6.5%	6.9%	3.8%	17.4%
	90–100%[c]	9.4%	16.4%	2.9%	17.4%
	No answer	25.4%	31.5%	22.9%	17.4%
	The following row presents the average coverage of the drug supply through DDs. "No answers" are neglected, because it is assumed that the non-respondents for this question have a similar average coverage.				
	Average of coverage	26.9%	37.1%	17.1%	41.6%
22. What percentage of drugs received did your organization have to dispose of?	0–10%	47.8%	41.1%	53.3%	43.5%
	11–50%	6.0%	6.8%	4.8%	8.7%
	51–90%	3.0%	1.4%	4.8%	0.0%
	91–100%	0.5%	0.0%	1.0%	0.0%
	No answer	42.8%	50.7%	36.2%	47.8%
23. Has your organization ever carried out an evaluation of your donation processes?	Yes[d]	22.9%	16.4%	23.8%	39.1%
	No	52.2%	50.7%	53.3%	52.2%
	I don't know	16.9%	24.7%	15.2%	0.0%
	No answer	8.0%	8.2%	7.6%	8.7%

Table 10. Continued

24. Did you receive in 2000 donations that you specifically asked for?	Exclusively[e]	16.9%	13.7%	19.0%	17.4%
	Partly[e]	28.4%	16.4%	35.2%	34.8%
	No	35.3%	39.7%	31.4%	39.1%
	I don't know	8.0%	12.3%	5.7%	4.3%
	No answer	11.4%	17.8%	8.6%	4.3%
25. Did you receive in 2000 donations that you had not asked for?	Exclusively[f]	3.5%	2.7%	3.8%	4.3%
	Partly[f]	34.8%	37.0%	38.1%	13.0%
	No	44.3%	31.5%	47.6%	69.6%
	I don't know	8.5%	17.8%	3.8%	0.0%
	No answer	9.0%	11.0%	6.7%	13.0%
26. Does your organization cooperate with partner organizations?	Yes	34.2%	28.8%	36.2%	43.5%
	No	25.9%	17.8%	31.4%	26.1%
	I don't know	27.9%	42.5%	21%	13%
	No answer	11.9%	10.9%	11.4%	17.4%
27. Is your organization informed beforehand about the composition and the date of shipment of the donations?	Always[g]	29.9%	9.6%	41.9%	39.1%
	Sometimes[g]	19.4%	5.5%	29.5%	17.4%
	Never	20.9%	37.0%	10.5%	17.4%
	I don't know	18.4%	35.6%	7.6%	13.0%
	No answer	11.4%	12.3%	10.5%	13.0%
28. Does your organization receive invoice documents with the DDs?	Always[h]	27.9%	11.0%	38.0%	34.8%
	Sometimes[h]	15.4%	8.2%	20.0%	17.4%
	Never	29.4%	42.4%	21.0%	26.1%
	I don't know	16.4%	27.4%	10.5%	8.7%
	No answer	10.9%	11.0%	10.5%	13.0%
29. Are the drugs received included in the National Drug List of Tanzania?	Exclusively[i]	20.4%	23.3%	21.0%	8.7%
	Partly[i]	44.8%	46.6%	47.6%	26.1%
	No	14.9%	9.6%	15.2%	30.4%
	I don't know	7.5%	9.6%	3.8%	17.4%
	No answer	12.4%	11.0%	12.4%	17.4%

Table 10. Continued

30. Are the drugs received included in the WHO Essential Drug List?	Exclusively[i]	20.9%	13.7%	26.7%	17.4%
	Partly[j]	30.3%	31.5%	32.4%	17.4%
	No	10.0%	2.7%	12.4%	21.7%
	I don't know	25.9%	41.1%	15.2%	26.1%
	No answer	12.9%	11.0%	13.3%	17.4%

[a] Religious sector and NGOs vs. public sector: $\chi^2 = 58.609$; $p < 0.001$.
[b] Public sector and NGOs vs. religious sector: $\chi^2 = 146.033$; $p < 0.001$.
[c] Public sector and NGOs vs. religious sector: $\chi^2 = 19.185$, $p < 0.001$.
[d] Public vs. religious sector: $\chi^2 = 67.184$; $p < 0.001$ / Religious sector vs. NGOs: $\chi^2 = 68.610$; $p < 0.001$ / Public sector vs. NGOs $\chi^2 = 8.469$, $p = 0.004$.
[e] (Answers exclusively and partly) Religious sector and NGOs vs. public sector: $\chi^2 = 65.377$; $p < 0.001$.
[f] (Answers exclusively and partly) Religious and public sector vs. NGOs: $\chi^2 = 41.825$; $p < 0.001$.
[g] (Answers always and sometimes) Religious sector and NGOs vs. public sector: $\chi^2 = 41.825$; $p < 0.001$.
[h] (Answers always and sometimes) Religious sector and NGOs vs. public sector: $\chi^2 = 150.209$; $p < 0.001$.
[i] (Answers exclusively and partly) Religious and public sector vs. NGOs: $\chi^2 = 48.605$, $p < 0.001$.
[j] (Answers exclusively and partly) Religious and public sector vs. NGOs: $\chi^2 = 27.297$, $p < 0.001$.

percent of public health facilities covered their basic needs through kits. The results on the purpose for receiving DDs provided information about the activities of organizations in the sectors. Religious facilities worked more in primary health services and in rural areas. Involvement of NGOs in programs and in the treatment of specific diseases was more on an administrative level. Involvement of the public sector in programs showed the shift from a more vertical distribution to an integration of DDs in basic healthcare

A large proportion of all recipients (44%) covered 10% or less of their drug supply with DDs: 53% in the religious sector and 34% in the public sector and in NGOs; only 17% of the public and non-governmental sectors and only 3% of the religious sector covered their drug supply with 91–100% DDs. At first glance, this seems a small contribution of DDs to the drug supply of organizations. But, on average, 27% of the drug supply was covered by DDs: 42% in the non-governmental, 37% in the public and 17% in the religious sector. This distribution among sectors was expected to be rather the reverse, but an explanation can be provided: The average of 37% in the public sector might be due to the perception of kits as DDs and to participation in programs. The NGO average of 42% might also be due to participation in programs. Local NGOs sometimes cover their entire drug supply through DDs. On average, 25% of recipients had no answer to this question. Either the data on DDs were not available, process steps were not transparent or the respondents were not in charge of DD issues. This assumption is strengthened by a similar reply to the question on the value of DDs. Since Reich interviewed only nine health facilities, it is difficult to rate and compare his estimate of coverage (Reich 1999).

An evaluation of DD processes was carried out by 39% of NGOs, 24% of religious organizations and 16% of public facilities. In each sector, more than 50% have never done an evaluation. This relates to a lack of data for other questions, such as the value of DDs or the coverage of the drug supply by DDs.

Almost 70% of DDs in the public and religious sectors were always or partly included in the Tanzanian EDL and 50% in the WHO EDL. Only 35% of DDs from NGOs were always or partly included in the Tanzanian and the WHO EDL.

Of all recipients, an average of 45% said that the DDs they received had been exclusively or partly requested. The religious sector had the highest rate with 54%, followed by the NGOs with 50% and the public sector with 30%, while 30% of the public sector gave no answer. In contrast, only 17% of NGOs and about 40% of public and religious facilities received DDs they had not requested. Interviewees in Reich's study expressed concerns that donors did not provide the types

of products expected, shipments did not contain all the items that were requested and the products were not appropriate (Reich 1999). Only 15% of our recipients in the public sector were always or sometimes informed beforehand about the composition and the date of shipment, in contrast to 71% in the religious and 56.5% in the non-governmental sectors. The same picture emerged for invoice documents: 19% of recipients in the public sector, 59% in the religious sector and 52% of NGOs always or sometimes received invoices. Communication between donors and recipients was better developed in the religious and non-governmental sectors.

Table 11. Quality of donated drugs

Question	Answer	All Recipients	Public Sector	Religious Sector	NGOs
	Single Answers	*N* 201=100%	*N* 73=100%	*N* 105=100%	*N* 23=100%
31. How long is the average shelf life of the DDs received?	Min. 1 year[a]	35.8%	23.3%	41.9%	47.8%
	6 to 12 months	24.4%	30.1%	23.8%	8.7%
	Up to 6 months	12.9%	19.2%	10.5%	4.3%
	Expired	5.5%	4.1%	7.6%	0.0%
	I don't know	8.0%	11.0%	5.7%	8.7%
	No answer	13.4%	12.3%	10.5%	30.4%
32. Are the DDs labelled in a local language?	Always[b]	29.4%	38.4%	28.6%	4.4%
	Sometimes[b]	27.4%	26.0%	29.5%	21.7%
	Never	25.9%	20.6%	26.7%	39.1%
	I don't know	6.0%	2.7%	5.7%	17.4%
	No answer	11.4%	12.3%	9.5%	17.4%
33. Does your organization receive a quality certificate with the DDs?	Always[c]	11.9%	5.5%	16.2%	13.0%
	Sometimes[c]	10.9%	5.5%	16.2%	4.3%
	Never	40.8%	42.5%	38.1%	47.8%
	I don't know	22.9%	35.6%	15.2%	17.4%
	No answer	13.4%	11.0%	14.3%	17.4%
34. Does your organization receive "unused" drugs (drugs returned by patients to pharmacies)?	Exclusively	0.5%	1.4%	0.0%	0.0%
	Partly[d]	14.4%	12.3%	18.1%	4.3%
	No	66.2%	67.1%	64.8%	69.6%
	I don't know	6.0%	5.5%	5.7%	8.7%
	No answer	12.9%	13.7%	11.4%	17.4%

[a] Religious sector and NGOs vs. public sector: $\chi^2 = 196.710$; $p < 0.001$.
[b] (Answers always and sometimes) Public vs. religious sector: $\chi^2 = 81.549$; $p < 0.001$ / Religious sector vs. NGOs: $\chi^2 = 60.782$, $p < 0.001$ / Public sector vs. NGOs $\chi^2 = 10.082$, $p = 0.001$.
[c] (Answers always and sometimes) Public vs. religious sector: $\chi^2 = 79.067$; $p < 0.001$ / Religious sector vs. NGOs: $\chi^2 = 58.447$, $p < 0.001$ / Public sector vs. NGOs $\chi^2 = 4.321$, $p = 0.038$.
[d] Public vs. religious sector: $\chi^2 = 47.792$; $p < 0.001$ / Religious sector vs. NGOs: $\chi^2 = 108.213$, $p < 0.001$ / Public sector vs. NGOs $\chi^2 = 3.517$, $p = 0.061$.

Quality of DDs

Quality criteria were based on the minimal requirements of the Tanzanian and WHO GDDs (Table 11). In this study, short expiry dates were perceived as one of the major negative arguments against DDs (Q 6). Forty-eight percent of the non-governmental, 42% of the religious and 23% of the public facilities received DDs with a remaining shelf life of 1 year or more, the average shelf life of 6 months up to more than 1 year was 60%, and an average of less than 6% of the DDs had expired. WHO and Tanzanian GDDs require a minimum shelf life of 1 year. In each sector, less than 50% fulfilled this requirement. This relates to the perception of all stakeholders that the expiry date was a major problem. The shelf life is important in countries with weak infrastructures (e.g., delays in customs clearance and transport) and tropical climates.

Looking at the other requirements of the guidelines, no labelling of DDs in a local language such as Swahili or English was reported by 27% of recipients in the religious sector, 21% in the public sector and 39% of the NGOs. A quality certificate was always or sometimes included in 11% of the public, 32.5% of the religious and 17.3% of NGO shipments. No organization received exclusively "unused drugs." The religious sector received a relatively high proportion of unused drugs (18%), which can be attributed to a high proportion of DDs given by individuals (Q 9). No difference was observed between the public sector and NGOs. The average of never receiving unused drugs was 66.2%. In Reich's study, every facility received unsolicited shipments of DDs including patient drug returns from abroad (unused drugs) (Reich 1999).

All questions about the quality of DDs had a high number of "no answer" and "I don't know" responses. This high rate might be explained by the administrative function of the recipient respondents. In the NGO sector, "no answer and I don't know" responses were sometimes nearly 40%.

In the meantime, the Tanzanian Pharmacy Board has established better quality control of drugs, including DDs, at all points of entry and covering all sectors (Kowero 2001).

Main Problems in the DD System

Problems reported by interviewees in the exploratory study (see above) were presented to the recipients as a list of possibilities, with the request to rate the various statements (Q 35). Multiple answers were possible. Of all recipients, 168 (84%) answered (Table 12).

The most frequently mentioned and apparently most relevant problem for all sectors was the fact that the quantity of DDs was not sufficient for long-term treatment (20%). This fact reveals the daily challenge to the Tanzanian healthcare system to cope with economic constraints and with the problems of sustainability in drug supply.

All the other problems varied from sector to sector. Non-relevance of DDs for local diseases was a main problem for the religious and public sectors (13%). This problem, together with the insufficient quantity of DDs, indicates that DDs persist in being more supply than demand driven. All other problems highlight problems of structure and process: the implementation of GDDs in the public and religious sectors, high shipment and custom fees for religious and non-governmental organizations, low transparency and insufficient communication between donor and recipient in the public sector, and insufficient infrastructure and training for NGOs. The quality of donated drugs was a minor problem in every sector. This can be explained by the pyramid of needs: As long as drugs are not available and affordable in the country, access to treatment is more important and the quality of donated drugs remains a minor issue.

Optimization of the DD System

To the open question "In your opinion, what are the most important actions needed to optimize drug donations?" 157 recipients (78%) answered, with 330 multiple answers (Figure 2). The question was not specifically analyzed by sector.

The most important suggestion of the recipients of DDs was to improve communication. Without good communication between donor and recipient, the supply of requested drugs cannot be improved, local needs are not met and transparency is not guaranteed. Even though drug quality

was not a major problem for recipients because drug availability was the more important issue, quality remains a very important factor in the supply chain. Quality can also be improved through communication and the distribution of GDDs (fourth suggestion).

All suggestions were a logical consequence of the main problems identified and were consistent with the core principles of the WHO GDDs: (a) maximum benefit of the recipients (meeting local needs), (b) respect of the wishes of the recipient (participatory approach), (c) no double standard in quality (quality aspects) and (d) effective communication between donor and recipient.

Table 12. Main problems with DDs in recipient organizations

Question	Answer	All Recipients	Public Sector	Religious Sector	NGOs
	Multiple Answers	*N* 588=100%	*N* 259=100%	*N* 275=100%	*N* 54=100%
35. What causes the main problems in the drug donation processes of your organization?	Quantities not sufficient for long-term treatment	19.6%	15.4%	23.6%	18.5%
	GDD and other tools not implemented	11.7%	14.3%	10.2%	7.4%
	Not relevant for local diseases	11.7%	12.7%	12.7%	1.9%
	Shipment and customs fees	10.5%	4.2%	16.4%	11.1%
	No transparency in DD processes	9.9%	14.7%	5.5%	9.3%
	No communication between donor and recipient	9.7%	14.3%	6.9%	1.9%
	Insufficient infrastructure	8.8%	7.7%	8.4%	16.7%
	Insufficient training	8.5%	8.5%	6.9%	16.7%
	Poor quality of DDs	5.8%	6.2%	5.5%	5.6%
	None	1.9%	1.2%	1.5%	7.4%
	Others	1.9%	0.8%	2.5%	3.7%

Limitations of the Study

One important consideration is that the study was done as a stakeholder analysis reflecting views rather than providing facts. Results represent the situation in 2001, but in the years up to 2005 there were no important changes concerning DDs or in Tanzanian DD policy. A further limitation lies in the distribution of the questionnaire to the heads of districts, dioceses and facilities who themselves selected the respondents (selection confounder). Additionally, this approach can only focus on the system as a whole and cannot provide detailed aspects of its inner structure. It is possible to assess differences between sectors, but it is difficult to obtain very detailed insight into single DD processes and to differentiate between different strategies for donating drugs. The outcome of processes of DDs at the patient level was not assessed.

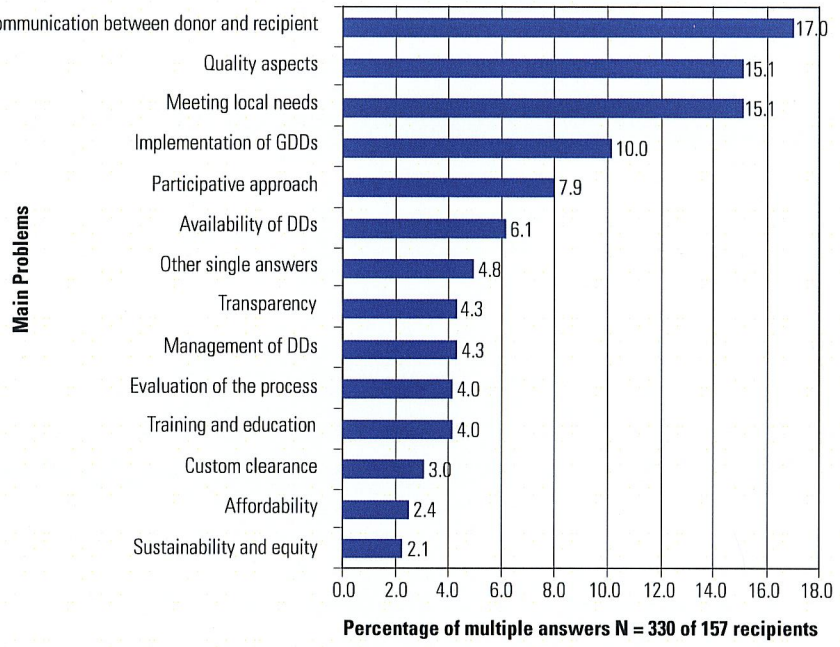
Conclusions

This descriptive study presents a first comprehensive analysis of stakeholders' perceptions and knowledge about the characteristics, structures and processes of in-kind DDs at a local level in Tanzania in 2001. The stakeholders' views cover the entire range of donation strategies: In-kind DDs given

directly to health facilities as well as DDs given as part of PPPs in the context of a program.

As in earlier published studies and reports, major contextual factors for DD systems in Tanzania were poverty, a resource-constraint economy, donor dependence as well as weak infrastructure. Consequently, in the eyes of stakeholders at every level of decision-making, including recipients and non-recipients, DDs were highly accepted for supporting the drug supply in a setting of poverty.

Figure 2. Optimization of drug donation processes (percentages of multiple answers, N 330)



An estimated average of 27% of the recipients' drug supply was covered by DDs. This important proportion of drug supply coverage is a relevant public health feature. Nevertheless, the prime concern of recipients of DDs was not drug quality, although quality assurance remained an ongoing concern, but the discrepancy between the recipients' needs and the donors' supply. DDs did not cover recipients' priority needs and their quantity was insufficient for sustainable treatment of patients and for continuous support to fill gaps in the access to essential drugs.

Other perceived problems varied among sectors and focused on drawbacks in structures and processes. The public sector requested more transparency in DD processes, which correlated with weaknesses in public structures as well as a lack of information and accountability. NGOs and religious facilities with better developed structures addressed problems such as shipment fees, insufficient infrastructure and training. These differences call for more collaboration of the private and public sectors and suggest that they could learn from each other, as recommended in the HSR.

Improved communication between recipients and donors was the major suggestion to render DD processes more effective. Donors should act in a transparent way, discuss with recipients any offer of DDs and respect recipients' needs. On the other hand, recipients were not always able to report clearly to donors what quantity of which drugs they actually needed. High numbers of "no answer" in the questionnaire highlight a lack of data, which makes useful quantification and selection of requested drugs very difficult. Recipients seemed to be disengaged from future involvement in reforming or planning drug supply, both of which are crucial for improving drug supply in general and DD processes in particular. The low response rate of recipients in charge of DDs reflected the

problem tackled in the HSR to better define responsibilities of the pharmaceutical sector within a pluralistic, decentralized healthcare delivery system.

Suggestions of recipients for optimizing DD processes corresponded fully with the principles of the Tanzanian and the WHO GDDs and called for broad distribution of the GDDs and their enforcement among donors and recipients. Finally, recipients should be empowered to apply and adhere to good DD practices while receiving continuing skills development in drug supply management.

List of abbreviations

CSSC = Christian Social Services Commission
Danida = Danish International Development Agency
DD = Drug Donation or donated drug
EDL = Essential Drug List
GDD = Guidelines for drug donations
GDP = Good Donation Practice
HSR = Health Sector Reform
MOH = Ministry of Health
MSD = Medical Store Department
NEDLIT = National Essential Drug List
NGO = Non-governmental Organization
NIMR = National Institute for Medical Research
PHC = Primary healthcare
PPP = Public/private partnership
PVO = Private voluntary organization
Q = Question or quest.
RDF = Revolving drug fund
SDC = Swiss Agency for Development Cooperation
SEAM = MSH Organization for Strategies to enhance Access to Essential Medicines
SWAp = Sector-wide approach
TFDA = Tanzanian Food and Drug Authority
UNICEF= United Nations Children's Fund
WHO = World Health Organization
WHO-GDDs = WHO Guidelines for Drug Donations

Acknowledgments

We would like to thank all the participants in the questionnaire survey in Tanzania for their excellent cooperation. A special thank you goes to the staff and the former manager Mr. Pierre Pichette of the Dar es Salaam Urban Health Project for help in collecting the data; to Dr. Zuhura Majapa (former Research Coordinator in Kinondoni) for the translation of the questionnaire into Swahili; to Mrs. Martha Lyimo (Pharmacy Board) and Mr. Joseph Muhume (Chief pharmacist, MOH Dar es Salaam) for their logistic support during the field work and to Mr. Hans Peter Bollinger (EPN Ouagadougou) for his assistance in analysing the data. These thanks are extended to colleagues at the Swiss Tropical Institute in Basel for their inputs and to Mr. Dan Anderegg and Dr. Anne Blonstein for review of the manuscript. The research work is approved by the National Institute for Medical Research (NIMR) in Tanzania and was supported financially by the Swiss Tropical Institute in Basel, Switzerland.

References

Autier, P., M.C. Ferir et al. 1990. "Drug supply in the aftermath of the 1988 Armenian earthquake." *The Lancet* 335(8702): 1388–90.

Autier, P., R. Govindaraj et al. 2002. *Drug Donations In Post-emergency Situations.* Washington DC, The International Bank for Restruction and Development/The World Bank.

Berckmans, P., V. Dawans et al. 1997. "Inappropriate drug-donation practices in Bosnia and Herzegovina, 1992 to 1996." *New England Journal of Medicine* 337(25): 1842–5.

Bürki, O. 2001. *End of Assignment's Report: Sector-wide Approach in Tanzania, The Health Sector Example, The observation from a Bi-Lateral.* SDC Swiss Agency for Development and Co-operation, Dar es Salaam, Tanzania.

Buse, K. and G. Walt. 2000a. "Global public-private partnerships: Part I-A new development in health?" *Bulletin of the World Health Organization* 78(4): 549–61.

Buse, K. and G. Walt. 2000b. "Global public-private partnerships: Part II--What are the health issues for global governance?" *Bulletin of the World Health Organization* 78(5): 699–709.

CIA. 2005. *The World Factbook.* Retrieved from http://www.cia.gov/cia/publications/factbook/geos/tz.html

Dull, H. B. and S. E. Meredith (1998). "The Mectizan Donation Programme–a 10-year report." *Annals of Tropical Medicine and Parasitology* 92 Suppl 1: S69–71.

Flick, U. 2000. Qualitative Sozialforschung: eine Einführung. Hamburg, Rowohlt Taschenbuch Verlag.

Guilloux, A. and M. Suerie. 2000. "Hidden Price Tags." Access to Essential Medicines Campaigns, Médecins Sans Frontières, MSF. Retrieved from http://www.accessed-msf.org/prod/publications.asp?scntid=492001217138&contenttype=PARA&:>: 27.

Hingora, A. 2001. "Personal information from Mr. A. Hingora, Project Coordinator, Health Sector Programme Support Member of Health Sector Reform Secretariat MOH, Dar es Salaam, Tanzania."

Hogerzeil, H.V. 2003. "Access to essential medicines as a human right." *WHO, Essential Drug Monitor* 33(33): 25–26.

Hogerzeil, H.V., M. R. Couper, et al. 1997. "Guidelines for drug donations." *British Medical Journal* 314(7082): 737–40.

Hutton, G. and M. Tanner 2004. "The sector-wide approach: a blessing for public health?" *Bulletin of the World Health Organization* 82(12): 893.

Junghanss, T. 2001. "Global-national-local." *Tropical Medicine and International Health* 6:(1): 1–3.

KFPE 1998. Schweizerische Kommission für Forschungspartnerschaften mit Entwicklungsländern, Leitfaden für Forschungspartnerschaften mit Entwicklungsländern. Retrieved from http://www.kfpe.ch/key_activities/publications/guidelines/guidelines_d.php. Bern.

Kigadye, F. 2001. "Personal Information from Dr. F. Kigadye, Director, CSSC, Christian Social Services Commission, Dar es Salaam, Tanzania."

Kowero, O. 2001. "Personal Information from the Acting Registrar, Ms Olympia Kowero; MOH, Dar es Salaam, Tanzania."

Kuper, M. and E. C. Njau. 1998. "Guidelines for Managing a Drug Revolving Fund - A Manual for Church Run Hospitals in Tanzania." Christian Social Services Commission CSSC, Church Pharmacy Support Unit CPSU, Tanzania.

Mayring, P. 1997. Qualitative Inhaltsanalyse Grundlagen und Techniken. Weinheim und Basel, Beltz Verlag.

MOH 1993. "Pharmaceutical and Supply Ministry of Health, The United Republic of Tanzania, Unit, A Short Information Manual."

MOH 1994. "Planning and Policy Department, Ministry of Health, The United Republic of Tanzania, Proposals of Health Sector Reform." 79.

MOH 1995. "Ministry of Health, The United Republic of Tanzania, Guidelines on donations of drugs and medical equipment to the health sector for Tanzania Mainland, Ministry of Health, The United Republic of Tanzania."

MOH 1997a. "Ministry of Health, The United Republic of Tanzania, Standard Treatment Guidelines And The National Essential Drug List For Tanzania."

MOH 1997b. "Review of the Pharmaceutical Sub-sector including IDA and Danish Support to the Medical Stores Department." Joint Ministry of Health MOH, United Republic of Tanzania, Danish International Development Agency Danida, Swiss Development Cooperation SDC, World Bank W.B: 105.

MOH 1999a. "Planning and Policy Department, Ministry of Health, The United Republic of Tanzania, The Health Sector Reform Plan of Action." 173.

MOH 1999b. "Planning and Policy Department, Ministry of Health, The United Republic of Tanzania, The Health Sector Reform Programme of Work, July 1999–June 2002." 108.

MOH 2000. "Pharmacy Board, Ministry of Health, The United Republic of Tanzania, Guidelines for Importation of Pharmaceuticals."

MOH 2002. "Planning and Policy Department, Ministry of Health, The United Republic of Tanzania, Health Statistics Abstract, Inventory Statistics, 2002." Vol. II.

MSH 1997. *Managing Drug Supply.* West Hartford, Connecticut, USA, Kumarian Press, Inc.

Muhume, J. 2001. "Personal Information from the Chief Pharmacist, Mr. J. Muhume; MOH, Dar es Salaam, Tanzania."

Oladele, O. 1999. Review of disease-specific drug donation programmes for the control of communicable diseases. MSF-WHO Workshop on "Drugs for Communicable Diseases, Stimulating Development and Securing Availability," Paris.

Pecoul, B., P. Chirac et al. 1999. "Access to essential drugs in poor countries: a lost battle?" *Journal of the American Medical Association* 281(4): 361–67.

Peters, D.H. and T. Phillips. 2004. "Mectizan Donation Program: evaluation of a public-private partnership." *Tropical Medicine and International Health* 9(4): A4–15.

Questionnaire 2001. The original copies of the questionnaires "Drug Donations in Tanzania" and "Dodoso: Madawa ya msaada Tanzania," available from Gaby Gehler, Swiss Tropical Institute, Socinstr. 57, 4002 Basel, Switzerland or <www.pharma.unibas.ch/pharmacare/drugdonations.htm>

Reich, M.R. 2000. "The global drug gap." *Science* 287(5460): 1979–81.

Reich, M.R. (Ed.) 1999. *An Assessment of US Pharmaceutical Donations: Players, Processes, and Products.* Boston: Harvard School of Public Health.

SEAM 2003. "Strategies for Enhancing Access to Medicines Program, Access to Essential Medicines: Tanzania 2001." Retrieved from http://www.msh.org/seam/reports/CR022304_SEAMWebsite_attach1.pdf:

Semali, I.A.I. 2003. "Understanding Stakeholders' Roles in Health Sector Reform Process in Tanzania: The Case of Decentralizing the Immunization Program." Philosophisch-Naturwissenschaftlichen Fakultät. Basel, Switzerland, University of Basel: 198.

Shretta, R., R. Brugha, et al. 2000. "Sustainability, affordability, and equity of corporate drug donations: the case of Malarone." *The Lancet* 355(9216): 1718–20.

Shretta, R., G. Walt, et al. 2001. "A political analysis of corporate drug donations: the example of Malarone in Kenya." *Health Policy and Planning* 16(2): 161–70.

UNDP 2002. "Human development reports 2002, United Nations Development Programme." Retrieved April 2005 from http://www.undp.org/hdr2003/indicator/cty_f_TZA.html>

Wehrwein, P. 1999. "Pharmacophilanthrophy." *Harvard Public Health Review (Summer Issue)*: 32–39.

Weiss, M.G., M. Isaac et al. 2001. "Global, national, and local approaches to mental health: examples from India." *Tropical Medicine International Health* 6(1): 4–23.

Weiss, S. 2002. "The private health care sector and opportunities for public/private partnership in the city of Dar es Salaam, Tanzania." Swiss Tropical Institute Basel, Switzerland and the Institute of Tropical Medicine and Medical Faculty Charité of Humboldt University at Berlin, Germany.

WHO. 1999. "World Health Organization, Guidelines for Drug Donations, Revised 1999." WHO/EDM/PAR/99.4.

WHO 2000a. "World Health Organization, First years experiences with guidelines for drug donations." <http://whqlibdoc.who.int/hq/2000/WHO_EDM_PAR_2000.1.pdf>.

WHO 2000b. "WHO Medicines Strategy: 2000 – 2003, Framework for Action in Essential Drugs and Medicines Policy." (WHO/EDM/2000.1).

Wiedenmayer, K. 2004. "Access to Medicines, Medicine Supply: Lessons learnt in Tanzania and Mozambique, Swiss Tropical Institute Basel and Swiss Agency for Development and Cooperation Berne." <http://www.sdc-health.ch/priorities_in_health/communicable_diseases/hiv_aids/access_to_drugs>.

Wiedenmayer, K. and D. Mtasiwa 2000. "Transforming drug supply in Dar es Salaam." *Essential Drug Monitor.* Geneva: WHO 28&29: 25–27.

Wyss, K., D. Whiting, et al. 1996. "Utilisation of government and private health services in Dar es Salaam." East African Medical Journal 73(6): 357–63.

PAPER 2

OPTIMIZING IN-KIND DRUG DONATIONS FOR TANZANIA

Je, Madawa Ya Misaada hii zimekubaliwa na wizara ya afya ?

Have the donated drugs been approved by the ministry of health?

Ist die Spenden - Medizin vom Gesundheitsamt genehmigt worden?

6 Optimizing in-kind drug donations for Tanzania a case study

Gaby Gehler Mariacher[1]*, Deo Mtasiwa[2], Karin Wiedenmayer[1], Rudolf Bruppacher[3], Marcel Tanner[1], Kurt E Hersberger[3]

[1]Swiss Tropical Institute, PO Box, 4002 Basel, Switzerland

[2]Dar es Salaam City Council, PO Box 9084, City Hall, Dar es Salaam, Tanzania

[3]Institute for Clinical Pharmacy, University of Basel, Klingelbergstr. 50, 4056 Basel, Switzerland

---

This paper was published in

International Journal of Health Planning and Management, September 2007

INTERNATIONAL JOURNAL OF HEALTH PLANNING AND MANAGEMENT
Int J Health Plann Mgmt (2007)
Published online in Wiley InterScience
(www.interscience.wiley.com) **DOI**: 10.1002/hpm.901

Optimizing in-kind drug donations for Tanzania—a case study

Gaby Gehler Mariacher[1]*, Deo Mtasiwa[2], Karin Wiedenmayer[1], Rudolf Bruppacher[3], Marcel Tanner[1] and Kurt E. Hersberger[3]

[1]*Swiss Tropical Institute, Basel, Switzerland*
[2]*Ministry of Health and Social Welfare, Dar es Salaam, Tanzania*
[3]*Institute for Clinical Pharmacy, University of Basel, Basel, Switzerland*

SUMMARY

A questionnaire survey (QS) among stakeholders in Tanzania had shown that in-kind drug donations (DDs) are important to boost the drug supply system. Major problems were their insufficient quantity for sustainable treatment and the discrepancy between the needs of the recipients and the donors' supply. Objectives in this study were to discuss these findings and to learn from key informants (KIs) how to improve the DD process. Data were collected through KI interviews in 2001/2002.

A 30% gap in drug supply has to be bridged by DDs. KIs confirmed the importance of the World Health Organisation and Tanzanian DD guidelines as a tool for good donation practice and emphasized the role of the government in their implementation. They requested that donors meet the recipient country's regulatory requirements. In contrast to QS respondents, KIs did not view DD quality as a minor problem, and proposed that DD quality should be adapted to the national quality assurance procedures. DD processes could be improved through (a) effective implementation of DD guidelines as an aid for decision-making and for quality assurance, (b) availability of data to improve communication between donors and recipients, (c) transparency between recipients and donors and (d) clearly defined accountability.

KEY WORDS: in-kind drug donations; Tanzania; key informant interviews

ABBREVIATIONS — CSSC, Christian Social Services Commission; DD(s), drug donations, donated drugs; DSM, Dar es Salaam; EDL, essential drug list; GDD, guidelines for drug donations; GPPP, global public/private partnership; HSR, health sector reform; KI(s), key informants; MOH, Ministry of Health; MSD, Medical Store Department; NGO, non-governmental organization; NEDLIT, National Essential Drug List of Tanzania; PfP, private for profit; RDF, revolving drug fund; Q, key question; QS, questionnaire survey; SOPs, standard operating procedures; SWAp, sector-wide approach; WHO, World Health Organisation.

* Correspondence to: G. Gehler Mariacher, Swiss Tropical Institute, P.O. Box, 4002 Basel, Switzerland.
E-mails: gema@bluewin.ch; gaby.gehler@unibas.ch

BACKGROUND

In development cooperation, in-kind drug donations (DDs) have been proposed for supporting underfunded, weak drug supply systems over the short or middle term, if targeted at specific diseases and if they do not hinder efforts to develop a sustainable financing mechanism of drug supply (WHO, 1998; Reich, 2000; WHO, 2004). To maintain good donation practice, the World Health Organisation Guidelines for DDs (WHO GDD) (WHO, 1999) are an essential tool for all stakeholders involved in DD processes (Table 1). They are valid for all DD strategies in development cooperation in the form of: (a) DDs given directly to the basic health care system and made available through private humanitarian institutions (religious, non-governmental and private voluntary organizations), (b) single-source DDs given through private companies and individuals and (c) DDs given as part of global public/private partnerships (GPPPs) with a clearly defined public health goal. The core principles of these guidelines are: (a) maximum recipient benefit, (b) respect of the recipients' wishes, (c) no double standard in quality and (d) effective communication between donor and recipient. These principles are operationalized in 12 guidelines, whose positive impact on the quality of DDs and DD processes is well documented (Hogerzeil *et al*., 1997; Oladele, 1999; Reich, 1999; WHO, 2000; Autier *et al*., 2002).

However, letters, news reports and a number of peer-reviewed articles have reported that DDs still do not comply with common standards and burden the recipients' health care system. In 2000, a Médicins sans Frontières study found that disease-specific DDs cost the donor's systems four times more than other models, for example, purchasing lowest-priced quality generics, and burden the recipient system with unsustainable access to drugs and costs because DDs depend much on the good will of donors (Guilloux and Suerie, 2000). In a preliminary field investigation in 1999, the Harvard study of health facilities in Armenia, Haiti and Tanzania showed that DDs were not cost free for recipients, that the impact of DDs varies and that DD processes were very complex, with problems of communication, logistics and standards among the organizations investigated (Reich, 1999). On the other hand, evaluation of the Mectizan Donation Programme in 2004 described an example of important achievements in public health through DDs in the framework of a GPPP. The strengths of this programme lay in good governance and management and free provision of the drug until the disease was under control (Peters and Phillips, 2004).

To achieve appropriate DDs, better understanding of current DD processes at the global and local level is required. The appropriateness of DDs depends not only on

Table 1. Interagency WHO guidelines for drug donations: principles and applications (WHO, 1999)

Core principles	Practical application
• Maximum benefit to the recipient	• Selection of drugs
• Respect for the wishes and authority of the recipient	• Quality assurance and shelf-life
• No double standard in drug quality	• Presentation, packing and labelling
• Effective communication between donor and recipient	• Information and management

DOI: 10.1002/hpm

the motivation, commitment and awareness of the donor, but also on recipients' motivation, perception and knowledge and on their ability to integrate DDs effectively into the drug supply system or to refuse unwanted and useless DDs. Within this context, we were interested in understanding in more depth how stakeholders in a recipient country (Tanzania) viewed in-kind DDs.

Policies relevant to DDs in Tanzania

Tanzania is one of the poorest countries in the world, with a low rated access to essential drugs, and it receives substantial in-kind DDs from abroad (Reich 1999; WHO, 2001). The main indicators affecting DD processes in Tanzania are listed in Table 2. The economic value of DDs for Tanzania was available in 2001/02 only for single organizations and programmes and thus it was difficult to judge the effective impact of DDs for the pharmaceutical sector in Tanzania.

Already in the early 1990s, Tanzania had developed instruments for the regulation of DD processes, all of which are binding for stakeholders involved in DD processes (Ministry of Health, 1995, 1997b, 2000, 2001, 2003; Ministry of Finance, 2005): 'Guidelines on the donation of drugs and medical equipment to the health sector for the Tanzanian mainland' (published in 1995, currently in revision) are primarily targeted at donors. These GDD are oriented on the Tanzanian national essential drug list (NEDLIT, 1991, 2nd ed. 1997). At the time of the interviews, the NEDLIT was again under review. The NEDLIT stratifies drugs by facility level and adapts drug supply to the educational level of the health staff in the facilities. The Tanzanian GDD also say that DDs have to be declared to the MOH for clearance, and all importation of any pharmaceutical product requires approval by the Pharmacy Board and must undergo a registration procedure (The Tanzania Food, Drugs and Cosmetics Act No. 1, 2003). Assistance for the process of importation is given with the guidelines for Importation of Pharmaceuticals (2000). The 'Tanzanian Procurement Act' (2005) is designed to provide transparent procedures for use in the procurement of goods and services for the government and its institutions and to prevent corruption. The Tanzanian GDD, published before the WHO GDD, demand in addition that donors should understand Tanzania's DD policies and that a financial contribution of the donor should be considered, since it may be more cost effective to buy drugs locally. A list of donor and recipient responsibilities in the DD process is appended to the Tanzanian GDD.

A health sector reform (HSR) was launched in 1994 with the aim of improving equity, quality, accessibility and efficiency of the health care system (Ministry of Health, 1994, 1997a). The supply system was decentralized, with drug provision at district level and local procurement from the Medical Stores Department (MSD). Drug supply was financed by cost-sharing schemes and government contributions. Private sector participation in health care was promoted (Wiedenmayer, 2004). Within the HSR, in 1998, Tanzania adopted the concept of a sector-wide approach (SWAp), which redefined the donors' role. Donors' funds are now pooled and earmarked for priority activities (basket funding) and the donors are responsible for synchronizing and reviewing their aid. Through the transfer of the authority of health care to the district and local levels, the HSR also led to a decentralized DD process.

DOI: 10.1002/hpm

Table 2. Indicators important for the Tanzanian DD system (WHO, 2001; UNDP, 2002; Muhume, 2001)

Indicator	Year	Tanzania
Demographic Indicators		
Population	2001	35 million (estimated)
Adult literacy rate at age 15	2000	76%
Population living in urban area	2001	33%
Epidemiological Indicators		
Life expectancy at birth, years	2001	44
Under-five mortality rate per 1000 live births	2001	165
Estimated HIV/AIDS prevalence rate	2001	7.8%
Economic Indicators		
Population living below USD 1 per day	2001	20%
Poverty line of USD 2 per day	2001	60%
GDP per capita in USD	2001	520
Health Sector		
Leading diagnosis for the whole country	1998	Malaria 37% Acute respiratory infections 13% Diarrhoeal diseases 6%
Expenditure on health as per cent of total government expenditure	2001	12.1%
Governments expenditure on health, in mio USD	2002	84
External resources for health as per cent of the government health expenditure	2001	29.5%
Total expenditure on health as per cent of GDP	2001	4.4%
Total number of healthcare facilities	2000	4717
Hospital beds per 1000	2000	9
Physicians for the entire country	2001	355
Nurses for the entire country	2001	5288
Pharmacists for the entire country	2001	42
Pharmaceutical technicians for the entire country	2001	91
Population with sustainable access to essential drugs	1999	50–79%
Government expenditure on drugs as per cent of total health expenditure	2000	47%
Thereof paid (Muhume, 2001) by		
the government		50%
through cost-sharing		20%
through development partners with basket funding		30%

Despite the new policy, Tanzania still received substantial in-kind DDs from abroad (Reich, 1999).

Stakeholders' views on DDs in Tanzania—a situation analysis

The aim of our study project was to gather comprehensive information on the views, knowledge and practice of stakeholders in Tanzanian DD processes. We used a qualitative approach, as discussed in the publications of Varvasovszky and Brugha (2000) to generate knowledge about actors in DD processes and for mapping

DOI: 10.1002/hpm

components of their problems, and we designed the entire study on the triangulation of data and methods. First, in 2001, we conducted a countrywide situation analysis with a semiquantiative postal questionnaire, involving stakeholders at every level of decision-making (Gehler Mariacher *et al*., 2007). We included all strategies of DDs (according to the Tanzanian GDD) and defined in-kind DDs as products donated by other countries to the recipients.

An estimated average of 27% of the recipients' drug supply was covered through DDs, and 44% of the recipients covered 10% or less of their drug supply with DDs. The proposals of recipients for optimized DD processes corresponded fully with the core principles of the WHO GDD (WHO, 1999). The Tanzanian GDD were known to 45% of recipients, the WHO GDD to 30%. In the context of the core principles of the WHO GDD, our major findings were as follows (Table 3):

Maximum benefit to the recipient. The study showed that DDs were highly accepted as an important factor for boosting the drug supply system. The monetary value of DDs to their organization was known to only 28% of the recipients, and best to NGOs because of the better structure of their organizations. Only 16% of recipients received donations in cash for buying drugs as recommend in the Tanzanian GDD. The most important problem for each sector involved in DDs was the insufficient quantity of DDs for sustainable treatment.

Respect for the wishes and authority of the recipient. An estimated average of 45% of recipients said that the DDs they received had been exclusively or partly requested. Almost 65% of DDs were always or partly included in the Tanzanian EDL and 51% in the WHO EDL.

No double standard in drug quality. The prime concern of DD recipients was not the quality of drugs, although quality assurance remained an ongoing concern, but the discrepancy between the needs of the recipients and the donors' supply. The average shelf-life of 6 months up to more than 1 year was 60%, and an average of less than 6% of the DDs were expired. No or only partial labelling of DDs in a local language such as Swahili or English was reported by 57%. No organization received exclusively 'unused drugs'.[1]

Effective communication between donor and recipient. Although recipients considered that communication was the most important factor to be improved, less than half (47%) of them had a list of needed drugs. However, 49% of the recipients were informed in advance by the donor about the composition and the date of shipment.

While this questionnaire survey (QS) gave an overview of the existing situation in the DD system in Tanzania, the aim of the study reported here was to validate these findings with a qualitative approach through standardized key informant (KI) interviews. We were interested in consolidating the views, knowledge and practice of the recipients of the QS as actors in DD processes. We wanted deeper insight into not only possible deficiencies in DD processes but also the actions that might be taken to rectify them. The specific objectives of the work described in this paper were: (a) to

[1]Unused drugs are drugs returned to pharmacies from patients and free samples given to health professionals.

DOI: 10.1002/hpm

Table 3. Selected results from the questionnaire survey (Gehler Mariacher *et al.*, 2007)

Questions	Answers	All recipients	Public Sector	Religious Sector	NGOs
	Single Answers	*N* 201 = 100%	*N* 73 = 100%	*N* 105 = 100%	*N* 23 = 100%
Value of DDs: What is the value of the DDs received in 2000?	Value known	27.9%	15.1%	30.5%	56.5%
	I don't know	44.3%	63%	38.1%	13%
	No answer	27.8%	21.9%	31.4%	30.5%
Coverage of Drug Supply through DDs: What percentage of your drug supply was covered in 2000 by drug donations?	0–10%	44.3%	34.2%	53.3%	34.8%
	11–50%	14.4%	11%	17.1%	13%
	51–90%	6.5%	6.9%	3.8%	17.4%
	91–100%	9.4%	16.4%	2.9%	17.4%
	No answer	25.4%	31.5%	22.9%	17.4%
	The following row presents the percentages of the average of coverage of the drug supply through DDs. "No answers" are neglected, because it is assumed that the non-respondents for this question have a similar average of coverage				
Average of coverage		26.9%	37.1%	17.1%	41.6%
Tanzanian GDD: Are you familiar with the "Guidelines on Donations for Tanzania Mainland" of the MOH?	Yes	45.3%	35.6%	54.3%	34.8%
	No	51.7%	63.0%	41.0%	65.2%
	No answer	3.0%	1.4%	4.8%	0.0%
WHO GDD: Are you familiar with the WHO Guidelines for DDs?	Yes	30.3%	15.1%	39.1%	39.1%
	No	65.7%	83.5%	55.2%	56.5%
	No answer	4%	1.4%	5.7%	4.4%
Donation in cash: Has your organisation ever received earmarked money in cash for buying drugs?	Yes	16.1%	13.4%	24.3%	9.4%
	No	61.3%	52.9%	55.2%	79.7%
	I don't know	10.9%	18.5%	12.2%	0.0%
	No answer	11.7%	15.1%	8.3%	10.9%
Selling in-kind DDs: Do you think is it justifiable to sell donated drugs?	Yes	41.3%	23.3%	56.2%	30.4%
	No	53.2%	71.2%	38.1%	65.2%
	No answer	5.5%	5.5%	5.7%	4.3%

DOI: 10.1002/hpm

Stewardship: Are you the person in-charge of DDs in your organisation?	Yes	52.2%	43.8%	53.3%	73.9%
	No	38.8%	46.6%	37.1%	21.7%
	No answer	9.0%	9.6%	9.5%	4.4%
Requested DDs: Did you receive in 2000 donations that you specifically asked for?	Exclusively	16.9%	13.7%	19.0%	17.4%
	Partly	28.4%	16.4%	35.2%	34.8%
	No	35.3%	39.7%	31.4%	39.1%
	I don't know	8.0%	12.3%	5.7%	4.3%
	No answer	11.4%	17.8%	8.6%	4.3%
List of needed drugs: Do you have a list of needed drugs, which you give to the donors?	Yes	46.8%	17.8%	65.7%	52.2%
	No	39.8%	61.7%	24.8%	39.1%
	I don't know	6%	12.3%	2.8%	0%
	No answer	7.4%	8.2%	6.7%	8.7%
Nedlit: Are the drugs received included in the National Drug List of Tanzania?	Exclusively	20.4%	23.3%	21.0%	8.7%
	Partly	44.8%	46.6%	47.6%	26.1%
	No	14.9%	9.6%	15.2%	30.4%
	I don't know	7.5%	9.6%	3.8%	17.4%
	No answer	12.4%	11.0%	12.4%	17.4%
WHO EDL: Are the drugs received included in the WHO Essential Drug List?	Exclusively	20.9%	13.7%	26.7%	17.4%
	Partly	30.3%	31.5%	32.4%	17.4%
	No	10.0%	2.7%	12.4%	21.7%
	I don't know	25.9%	41.1%	15.2%	26.1%
	No answer	12.9%	11.0%	13.3%	17.4%
Shelf life: How long is the average shelf life of the DDs received?	Min. 1 year	35.8%	23.3%	41.9%	47.8%
	6 to 12 months	24.4%	30.1%	23.8%	8.7%
	Up to 6 months	12.9%	19.2%	10.5%	4.3%
	Expired	5.5%	4.1%	7.6%	0.0%
	I don't know	8.0%	11.0%	5.7%	8.7%
	No Answer	13.4%	12.3%	10.5%	30.4%
Labelling: Are the DDs labelled in a local language?	Always	29.4%	38.4%	28.6%	4.4%
	Sometimes	27.4%	26.0%	29.5%	21.7%
	Never	25.9%	20.6%	26.7%	39.1%
	I don't know	6.0%	2.7%	5.7%	17.4%
	No answer	11.4%	12.3%	9.5%	17.4%

(*Continues*)

DOI: 10.1002/hpm

Table 3. (Continued)

Questions	Answers	All recipients	Public Sector	Religious Sector	NGOs
	Single Answers	*N* 201 = 100%	*N* 73 = 100%	*N* 105 = 100%	*N* 23 = 100%
Unused drugs: Does your organisation receive "unused" drugs (drugs returned by patients to pharmacies)?	Exclusively	0.5%	1.4%	0.0%	0.0%
	Partly	14.4%	12.3%	18.1%	4.3%
	No	66.2%	67.1%	64.8%	69.6%
	I don't know	6.0%	5.5%	5.7%	8.7%
	No answer	12.9%	13.7%	11.4%	17.4%
Unwanted DDs: Did you receive in 2000 donations that you had not asked for?	Exclusively	3.5	2.7%	3.8%	4.3
	Partly	34.8	37.0%	38.1%	13.0
	No	44.3	31.5%	47.6%	69.6
	I don't know	8.5	17.8%	3.8%	0.0
	No answer	9.0	11.0%	6.7%	13.0
Information of recipients: Is your organisation informed beforehand about the composition and the date of shipment of the donations?	Always	29.9%	9.6%	41.9%	39.1%
	Sometimes	19.4%	5.5%	29.5%	17.4%
	Never	20.9%	37.0%	10.5%	17.4%
	I don't know	18.4%	35.6%	7.6%	13.0%
	No answer	11.4%	12.3%	10.5%	13.0%
	Multiple Answers	*N* 588 = 100%	*N* 259 = 100%	*N* 275 = 100%	*N* 54 = 100%
Main problem: What causes the main problems in the drug donation processes of your organisation	Quantities not sufficient for long-term treatment	19.6%	15.4%	23.6%	18.5%
	GDDs and other tools not implemented	11.7%	14.3%	10.2%	7.4%
	Not relevant for local diseases	11.7%	12.7%	12.7%	1.8%
	Shipment and customs fees	10.5%	4.2%	16.4%	11.1%
	No transparency in DD processes	9.9%	14.7%	5.5%	9.3%
	No communication between donor and recipient	9.7%	14.3%	6.9%	1.8%
	Insufficient infrastructure	8.8%	7.7%	8.4%	16.7%
	Insufficient training	8.5%	8.5%	6.9%	16.7%
	Poor quality of DDs	5.8%	6.2%	5.5%	5.6%
	None	1.9%	1.2%	1.5%	7.4%
	Others	1.9%	0.8%	2.5%	3.7%

DOI: 10.1002/hpm

highlight the context of stakeholders' and recipients' responses in the QS, (b) to clarify different interests, (c) to discuss discrepancies and ambiguities in the QS and (d) to learn about KIs' recommendations for an optimized local drug supply and for policy development in DD systems in Tanzania.

METHODS

In June 2001, we analysed the first 230 returned questionnaires in the QS to develop key questions (Q), which guided us through the semistructured KI interviews[2] (Gläser and Laudel, 2004; Gehler Mariacher *et al*., 2007). We focussed on five topics: QA–D, emerged from results of the QS. QE tackled the personal opinions of the KIs (For the entire interview guide see Table 4). Our aim with these questions was to cover all important aspects of the DD system (Figure 2): coverage of drug supply with DDs, economic value of DDs, main problems with DDs and proposals for optimization of DD processes as well as strengths and weaknesses of DD processes.

We conducted the KI interviews in (a) Dar es Salaam as an urban setting, (b) Moshi (Kilimanjaro Region) as a rural setting with a comparatively high income and education level, (c) Songea and Mbinga (Ruvuma Region) as rural settings with a comparatively low income and education level. KIs as stakeholders of DD processes had experiences with DDs, were experts in the social context and were able to transcend cultural positions (Brugha and Varvasovszky, 2000; Varvasovszky and Brugha, 2000).

KIs were recruited from QS respondents from each of the three settings. We interviewed all KIs who were reachable within the limited timeframe of the data collection; KIs were stakeholders of the DD system—recipients and non-recipients. KIs were visited prior to the interviews, received the interview guide and were informed about the purpose of the study. All interviews were conducted face-to-face by the first author at the KIs' workplace. Interviews were 1 h in duration. Each KI was asked for consent for the interview to be recorded. The transcripts of the interviews were sent to the KIs for assessment.

For the text analysis of the transcripts, we applied the theory of content analysis used in expert interviews, which allowed us to focus on specific substantial aspects of interest in the context of the interview guide (Gläser and Laudel, 2004). To analyse the frequency of themes, we used the software MAXqda® (Verbi Software, Udo Kuckartz, Berlin 2002). Each interview was entered as a single file. The files were coded and interpreted with the same scheme used for analysis in the QS (Table 5).

RESULTS

Procedure, respondent rates and profile of the KIs

The profile of the 29 KIs, interviewed in August 2001 to January 2002, is given in Table 6.

[2]The original interview guide is available from the first author.

DOI: 10.1002/hpm

Table 4. Topics of the key questions of the interview guide

Topic	Question of the interview guide
QA Coverage	Very often respondents noted (with the exception of donation programmes) that drug donations cover up to 10% of their annual drug supply. On the other hand, drug donations are seen as being very important for the drug supply system in Tanzania (see Table 3)
QA 1 Coverage of drug supply	How is the remaining 90% of the drug supply covered?
QA 2 Coverage of drug supply through DDs	Why do you think that 10% coverage by drug donations is important for the drug supply system in Tanzania?
QB Value of DDs	We received few responses to the question 'What is the value of the donations received in 2000?' How do you interpret this result? (see Table 3) – The numbers are too sensitive to be published – Donations are perceived as gifts and not as commercial goods – It is difficult to estimate the value of donations – Other reasons
QC Main Problems	To the question: 'What causes the main problems in the drug donation processes of your organization?' the problems were ranked as below. How would you interpret this ranking according to your own experience?
QC 1	Long-term treatment
QC 2	Guidelines for DDs
QC 3	Relevance for local diseases
QC 4	Shipment and custom fees
QC 5	Transparency
QC 6	Communication
QC 7	Infrastructure
QC 8	Training
QC 9	Quality of donated drugs
QD Optimization of DD processes	To the open question: 'In your opinion, what are the most important actions needed to optimize drug donation processes?', we present you with the five top answers (Figure 1). Do you think that these proposed actions would be effective or do you suggest other solutions for optimizing donation processes?
QE Strengths and weaknesses of DD processes	What are the three strongest and three weakest features of donation processes according to your own experience?

DOI: 10.1002/hpm

Table 5. Characteristics of DD systems elaborated in the questionnaire survey (Gehler Mariacher *et al*., 2007).

Determinants	Indicator	Guidelines for DDs	
		WHO	Tanzania
Environment			
Demographics	Population		
Epidemiology	Morbidity, life expectancy, prevalence of HIV/AIDS, child mortality of under fives		
Economy	Poverty, GDD per capita		
Education	Adult literacy rate		
Geography	Paved roads		
Health sector and DDs	Sectors involved. Distribution channels for DDs, Number of pharmacists and educated healthcare staff, Public spending for health, Control of importation of DDs		
National Drug Policy	Guidelines for DDs, Laws for importation, Essential Drug List		No. 4.1 No. 4.2a-c
Resources and structures			
Organizations	Characteristics of the organizations Involvement in DD processes		
Staff competence	Accountability Knowledge of GDD		
Documents	List of needed drugs Quality criteria for DDs Treatment criteria for DDs Availability of GDD		No. 3
Financial aspects	Shipment and custom fees Value of DDs Paying for DDs	No. 12	
	DDs in cash earmarked for buying drugs		No. 3
Process			
Selection of drugs	Expressed need by recipient	No. 1	
	DDs part of the EDL of the country or of the WHO	No. 2	No. 4.2d
Management	Origin of DDs Coverage of drug supply with DDs Use of DDs Disposal of unwanted drug		
Transparency	Evaluation of DD processes		
Communication	Information by donors Collaboration with partner organizations	No. 10	No. 3
	Receiving invoice documents	No. 10	
Quality of the donated drug			
Quality assurance	Certificate schemes on the quality of DDs	No. 4	No. 4.2h

(*Continues*)

DOI: 10.1002/hpm

Table 5. (Continued)

Determinants	Indicator	Guidelines for DDs	
		WHO	Tanzania
	Shelf-life	No. 6	No. 4.2g
	Unused drugs	No. 5	No 4.2j
Presentation	Labelling	No. 7	No 4.2f
Perception of stakeholders			
Satisfaction of recipients	Long-term treatment, Implementation of GDD, Relevance of DDs, Shipment and custom fees, Transparency in DD processes, Communication between donor and recipient Infrastructure, Training of healthcare staff, Quality of DDs		
Usefulness of DDs			

Because only eight KIs agreed to a recording, notes were taken during all the interviews. We sent the interview transcript to the KIs for checking. From 19 KIs we received comments or consensus; 10 did not respond to transcript mailings. None of the KIs was hesitant about their views becoming publicly known.[3]

We broke down the views of KIs into three different groups (Table 6) according to their: (a) sector (public, religious, NGO, private for profit, (b) level (national, district, local) and (c) function (administrative or working directly with the patient and supply). All KIs were involved in DDs directly or in decision-making (with 1 exception) and all were very interested in the issue. We did non analyse the level of influence. Our aim was not to gather data for later policy implementation, but data for a situation analysis. We excluded from the analysis two KIs who had no or very limited experiences with DDs.

Each question was addressed by an average of 80% of the KIs. Two KIs from the private-for-profit sector did not have in-depth experience with every aspect of DD processes (44% and 31%, respectively, of the questions tackled). Two KIs of bilateral and multilateral cooperations discussed in-kind DDs within the interview guide mainly from the perspective of HSR strategies (31/13% of the questions tackled). Most emphasis was given to personal experiences with DDs (Q E): every KI answered this question.

Q A: Coverage (discussed by 28 KIs)

The Chief Pharmacist provided numbers for drug supply coverage by the government, which were confirmed by three other representatives of the public sector.

[3]Key informants provided us with a comprehensive insight into the problems with DD processes in Tanzania. We noted here only a few comments. Readers who wish to have a more in-depth view should contact the first author.

DOI: 10.1002/hpm

Table 6. Description of key informants (KIs) interviewed in August 2001 and January 2002

Sector	Level	Function	KI	Position	Involvement in DDs	Region
Public sector	District	Administrative	1	District Pharmacist	Member of the district council health management team headed by the DMO; has to decide what happens with DDs given to the district, mostly from MSD	DSM
	District	Administrative	2	District Medical Officer DMO	Leading health authority in the district and involved in decisions regarding DDs in the district. All the DDs given to the public sector of the district pass through the DMO office; the district pharmacist distributes them	Songea
	District	Administrative	3	District Medical Officer DMO	Leading health authority in the district and involved in decisions regarding DDs in the district, responsible for all district health facilities and involved in DD processes at an administrative level. Previously, the DMO had worked as MD in a mission hospital and had to deal with DDs at a practical level	Moshi

(*Continues*)

DOI: 10.1002/hpm

Table 6. (Continued)

Sector	Level	Function	KI	Position	Involvement in DDs	Region
	National	Administrative	4	Chief Pharmacist	The Chief Pharmacist is head of the pharmaceutical services section in the directorate of the curative health service; responsible for the essential drug programme and the donation policy He has practical experience with DDs through former job activities in the pharmacy of a referral hospital	DSM
	National	Administrative	5	Acting Registrar	The acting registrar is the substitute for the director of the Pharmacy Board (since 2003 under the Tanzanian Food and Drug Authority, TFDA), who is responsible for implementing the NEDLIT and for policies regarding the importation of drugs and is also in charge of the National Drug Quality Control Laboratory	DSM
	National	Administrative	6	Director of Hospital Services	Director of hospital services in the MOH. He is informed about DDs in the hospital, has influence on policy and at the administrative level	DSM
	Local	Facility	7	Pharmaceutical Technician (District Hospital)	Was in charge of the pharmacy of a district hospital in DSM. Has practical experience with DDs and dealing with DDs given directly to the hospital or coming from MSD	DSM

DOI: 10.1002/hpm

Local	Facility	8	Pharmacist (Referral Hospital)	Pharmacist at a referral hospital pharmacy, involved in DDs given by MSD, individuals as well as in DD programmes	DSM
National	Facility	9	Vice manager (public pharmaceutical company)	Vice manager of the only joint venture pharmaceutical company between the government and another country and under the ministry of defence. DDs are given from the army of China to the army of Tanzania. The interviewee also had experience with DDs through his former job on the Pharmacy Board	DSM
National	Facility	10	Acting Director MSD (Advisor for financial issues)	Because of a vacancy in the director's position, the acting director was interviewed. MSD is obliged to accept donations. They normally relate to programmes, but are also DDs given from individuals and companies, in both emergency situations and for development cooperation. DDs outside programmes were given to health facilities of the public sector	DSM

(*Continues*)

DOI: 10.1002/hpm

Table 6. (Continued)

Sector	Level	Function	KI	Position	Involvement in DDs	Region
Religious sector	National	Administrative	11	Director of CSSC	Director of the umbrella organization of Christian churches, which provides social services; chief executive and involved in all management issues	DSM
	National	Administrative	12	Pharmacist of CSSC	The pharmacist's overall duty is the improvement of the pharmaceutical services of CSSC in managing the financing of the drug supply and in optimizing the capacity of health personnel in the pharmaceutical sector	DSM
	National	Administrative	13	Head of the organization/ Medical Doctor	Head of the umbrella organization providing humanitarian relief services and emergency assistance. The organization purchases drugs at MSD and receives DDs mostly from Tanzania	DSM
	Local	Facility	14	Hospital Administrator i/C for the Pharmacy (Mission Hospital)	Responsible for the drug procurement in the hospital and for DDs received	Songea

DOI: 10.1002/hpm

	Local	Facility	15	Medical Doctor /Head (Mission Hospital)	Head of hospital, involved with all kinds of DDs from individuals, companies, NGOs and programmes. The hospital purchased about 70% of its drugs on the local market	Songea
	Local	Facility	16	Pharm. Assistant (Mission Hospital)	Represented the pharmacist of the hospital absent on continuing education. Had no decision-making power but was well informed about the DDs received. The hospital was at the time of the interview dependent on DDs from abroad, from both individuals and companies	Songea
	Local	Facility	17	Director of Medical Services (Referral Hospital)	Is directly involved in DDs given to the hospital and in decision-making. The hospital purchases most of the drugs at MSD	Moshi
	District	Facility	18	Medical Doctor	In charge of the drug supply of the diocesan health facilities. About 70% of the drugs are purchased at the local market and from NGO wholesalers. The gap is filled by DDs	Songea

(*Continues*)

DOI: 10.1002/hpm

Table 6. (Continued)

Sector	Level	Function	KI	Position	Involvement in DDs	Region
NGOs and international organizations	National	Administrative	19	Representative of the Programme	Representative of the IMA and Onchocerciasis Control Programme.	DSM
	National	Administrative	20	Representative of the Programme	Representative of the ITI International Trachoma Initiative in Tanzania	DSM
	National	Administrative	21	Research Manager	Through long-term research in the health care system of Tanzania, profound knowledge about coherences and action in the system. No direct influence on DD processes	DSM
	National	Administrative	22	Director	The programme is involved in family planning programmes and in DDs for contraception	DSM
	Local	Facility	23	Chairman	Chairman of a local NGO, which receives DDs from the EPI (Expanded Programme on Immunization) and vitamin A programme	DSM
	Local	Facility	24	President	The local NGO covers the drug needs nearly entirely through DDs and is dependent on regular provision of DDs	Moshi

DOI: 10.1002/hpm

	District	Administrative	25	Cluster Manager	Drug supply is the main issue of the cluster, especially drugs for HIV, which are given free to patients. Most of the drugs were coming from religious organizations. The cluster coordinates activities, capacity building of the NGO members and was supported by USAID and financially by NACP (National Aids Control Programme)	Moshi
	National	Administrative	26	Senior Programme Officer 'Health'	Development assistance which essentially aims at improving the living conditions of the poor; involved in the health sector	DSM
	National	Administrative	27	Programme Manager	Programme manager of TB and Leprosy programme at WHO and directly involved in the entire DD process of the programme in Tanzania	DSM
For profit	National	Facility	28	Corporate business advisor (of local pharm. company)	Involved in administration of the local pharmaceutical company and informed about the impact of DDs on the local market. But no direct influence on DD processes	Moshi
	Local	Facility	29	Pharmacist (private pharmacy)	Well-informed pharmacist of a private pharmacy and wholesaler. Not directly involved in DD processes, but affected by DDs through merchandising drugs	DSM

DOI: 10.1002/hpm

KI 4 (Public): The government is able to provide 50% of the requirements. That means we have a deficit of 50%. We bridge this through other financing options, the 'cost sharing'. But not everybody can pay. The maximum we can collect out of the remaining 50% is only 20%. There remains a gap of 30%, which is covered by the donors, today called development partners, through the basket funding (programmes are included in these numbers).

He stated that 70% of the DDs received by the government (except those for programmes) were for non-communicable diseases, and yet communicable diseases are the prime cause of morbidity in Tanzania.

Religious hospitals were able to procure up to 70% of their drug supply from the local market, because the services of the MSD have been significantly improved. An exception was a rural hospital, which covered a major part of its drug supply through DDs from Germany. Local NGOs as well as NGOs that were part of donation programmes covered up to 100% of their drug supply through DDs. Drugs needed outside the programme had to be purchased on the local market, where affordability was the major problem. KIs from the private or profit sector did not comment on this issue.

Coverage of drug supply through in-kind DDs was perceived as very important for Tanzania by 16 KIs, while five KIs with administrative functions said that Tanzania was not dependent on DDs. Another five KIs said that Tanzania is too poor to choose whether or not it should accept DDs. Proposed solutions always focussed on the optimization of the drug supply system and the fight against poverty. Statements of KI s reflect very clearly their differences of opinion:

KI 6 (Public) Tanzania is not dependent on donations. This perception should be given up.

KI 7 (Public): DDs are very important for Tanzania. DDs for programmes as for example, the TB/Leprosy Programme NTLP have a very important impact.

KI 11 (Rel.) Currently Africa is not able to live without donations and needs support. The church still needs donations.

KI 12 (Rel.) Tanzania needs DDs because drug supply is not sustainable. The local industry covers just 12% of the pharmaceutical supply of the country. The import of drugs is very expensive as well as the registration of drugs.

KI 14 (Rel.) Every little bit counts. In church circles we're sometimes happy for anything, although that seems to contradict previous statements. Mission hospitals are always concerned about how they are going to survive financially.

KI 15 (Rel.) Overall it has to be said that DDs, as they are currently defined, are obsolete.

KI 28 (PfP) This problem depends on the economy of a country. A poor country like Tanzania is a prototype of a recipient country and always receives donations.

DOI: 10.1002/hpm

QB: Value of DDs (discussed by 24 KIs)

Independent of their group, there was a general agreement (14 KIs) that estimating the value of DDs is difficult. The value of in-kind DDs should be estimated on the basis of the wholesale price in Tanzania or on the international market price (five KIs). There was consensus that it is very difficult to calculate the value of a nearly expired drug and of unused drugs (drugs returned by patients to pharmacies). Four KIs assumed that recipients are not interested in estimating the value. A further three KIs from the national level and with an administrative function said that no data are available. Without such data there is no basis for discussing alternatives to DDs.

KIs of mission facilities stated that DDs often generated costs: (a) customs clearance had to be paid, (b) the transport of 1 kg of drugs costs about the same as 1000 aspirins on the local market, (c) the disposal of inappropriate DDs is costly. The liveliest discussion was on costs due to shipment and custom fees. In 2000, the government withdrew the exemption for custom fees from NGOs and mission facilities, stating that DDs were getting into the wrong hands and ending up on the black market. The director of the *Christian Social Services Commission* (CSSC) verified that this was a big problem for mission facilities, but in 2001, taxes were abolished again, because the CSSC took over responsibility for correct handling at custom clearance.

> KI 9 (Public) Donations are coming into the country through different channels and not through one specific centre. Therefore it is difficult to estimate the value of donations countrywide. A centre like a central store for donations should be founded to optimize the transparency.
>
> KI 19 (NGO) I am working for a DD programme. Everything is very clearly marked out. It was interesting for me that the people did not want to talk about the value of their received drugs. I think they may not know it.
>
> KI 21 (NGO) This is a big issue. It would be important to calculate in a case study the value and then to think about costs and value. A drug has a value and has a cost. Drugs are an important part of the health system. It is the challenge to know, but it is difficult to find the information. People are too busy, especially in NGOs.

A further five KIs (local and district level) thought that the perception of DDs as a gift without commercial value might explain the absence of data on the value of DDs. Respondents from NGOs said that a donation has a much more elaborate procedure behind it than a gift.

QC: Main Problems (each KI contributed to some of the Q)

The ranking of main problems (Table 4) was seen by 19 KIs as self-evident and corresponding to their own experiences. For the purpose of this paper, we focussed on the four main problems, which were discussed by an average of more than 60% of

DOI: 10.1002/hpm

the KIs: (a) quantities of DDs are not sufficient for long-term treatment, (b) GDD and other tools are not implemented, (c) lack of communication between donors and recipients, (d) poor DD quality.

Long-term treatment (discussed by 25 KIs). For six KIs (working at national level and in an administrative function) it was understandable that this problem ranked highest. For another eight KIs (working at the facility level) the quantity of DDs was insufficient not only in the long term but also for the short term. This was perceived as an issue of sustainability and leads to an ethical dilemma: if DDs are provided through charity, recipients become accustomed to them and have high expectations of their availability. If the DD stops and people have to pay the full price, they are often not able to do so. KIs from the religious sector were confronted with the difficulty of drawing up an annual budget for drug supply because donors do not ask what is needed and recipients are not able to clearly define their needs.

> KI 11 (Rel.) This result confirms the feeling of many people. DDs are always somehow available, but seldom in the right amount.
>
> KI 27 (NGO) Who identifies the local needs? The process of the need quantification and the process of priority setting must begin at the district. When the problems are identified and the priorities known then DDs could make sense.

Guidelines for DDs (discussed by 20 KIs). KIs from each sector highlighted the positive impact of GDD on good donation practice. KIs from the public sector, especially from the MOH stated that GDD were available, but the distribution and implementation was not enforced. According to religious KIs, Christian facilities should be aware of GDD because the Christian umbrella organization CSSC was very active in distributing them and providing training. They suggested that a translation into Swahili could optimize the impact of GDD. NGOs pointed out that GDD were seldom neither available nor known and were surprized that this problem ranked at second place. Three KIs did not know any GDD.

Communication (discussed by 18 KIs). The lack of communication was perceived by 18 KIs throughout all groups as a major problem in DD processes. Seven KIs discussed the role of the donors, who seldom clarified recipients' needs. Two KIs from the religious sector noted that communication had ameliorated in recent years:

> KI 11 (Rel.) A company wanted to donate vaccines for Hepatitis B. There was a dialogue between donor and recipient. The company was not ready to donate more than once. For that reason, MOH did not allow the recipient to accept donations. This is a positive example of communication in the country and

DOI: 10.1002/hpm

between the countries. But this example does not show the common situation. It shows the desirable.

KI 20 (NGO) It should be the principle that the recipient requests the donation. The ideal for DDs should be a pull situation not a push situation. People in the recipient countries are often too shy to say 'no'. But after all it is also not polite just to give anything without knowing the situation.

Transparency was strongly associated with communication according to 14 KIs. The Chief Pharmacist stated that transparency is not only needed between donors and recipients but at the local level as well and should be based on accountability.

Quality of the donated drug (discussed by 19 KIs). Poor quality was discussed equally by each sector, but for six KIs, four from NGOs working in programmes, it was not a major problem. They felt that drug quality was mostly well controlled in their organization, with a few exceptions. MOH, CSSC, but also NGO representatives associated the low ranking of this problem to the low educational level of the staff. Nevertheless, it was claimed that the Pharmacy Board[4] has optimized its work, control and its impact. Independent research on the quality of DDs was lacking. KIs from each sector working directly with patients (facility level) quoted examples of poor-quality DDs. Concrete problems were short expiry dates and inadequate labelling. There was a feeling that donors sometimes wanted to dispose of leftovers.

QD: Optimization of DD processes (discussed by 25 KIs)

We presented to the KIs the five most important suggestions from the QS for optimizing the DD system (Figure 1). Nineteen KIs agreed fully with these suggestions, of which communication was perceived by seven KIs as the most important factor. Eight KIs had nothing further to add. KIs from the private-for-profit sector did not discuss this issue.

Focussing on the required optimal quality of DDs (six KIs), the acting registrar and a representative of an NGO pointed out that if drugs were submitted for registration—which is officially an obligation (Ministry of Health, 2000)—quality could be assured. The acting registrar was aware that this is a long-term goal. Participative collaboration (four KIs) depends strongly on the person who initiates the DD. For example, a bishop from a rural area, travelling in Europe, would not necessarily be able to clearly define local needs, a problem discussed by another four KIs. They highly recommended respecting the NEDLIT. Six KIs underlined the effectiveness of the national regulations and the duty of the recipient to inform the donor about them.

QE: Strengths and weaknesses of DD processes (discussed by every KI)

We asked interviewees to define weak and strong features in the entire DD system (Figure 2). Every KI commented on this question, arguing more in terms of problems than of weak and strong features.

[4]The Pharmacy Board is today The Tanzanian National Food and Drug Administration.

DOI: 10.1002/hpm

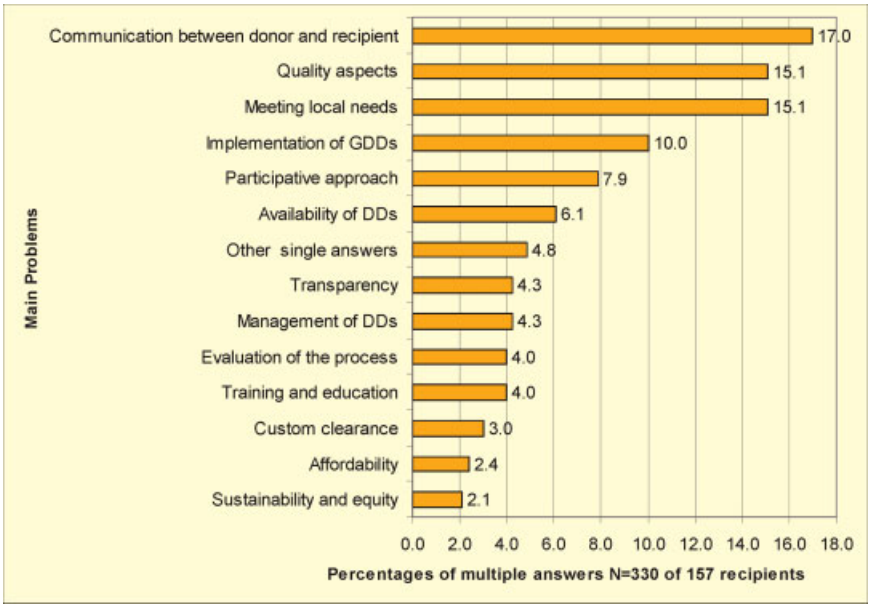


Figure 1. Optimization of drug donation processes, results from the QS (Gehler Mariacher *et al*., 2007)

The role of *donors* was discussed by 10 KIs (3 public, 4 religious and 3 NGOs and mostly at administrative level), awareness and attitude being the major concern, especially for the KIs from the religious sector. Donors were recommended to conduct a preliminary analysis of how the health care system is organized in Tanzania and of existing storage and transport facilities. One KI (NGO) stated that the awareness of companies had improved in response to public discussion of their role. Other inputs focussed on the non-transparent procurement through donors and on the call for a definite end to the collection of unused drugs.

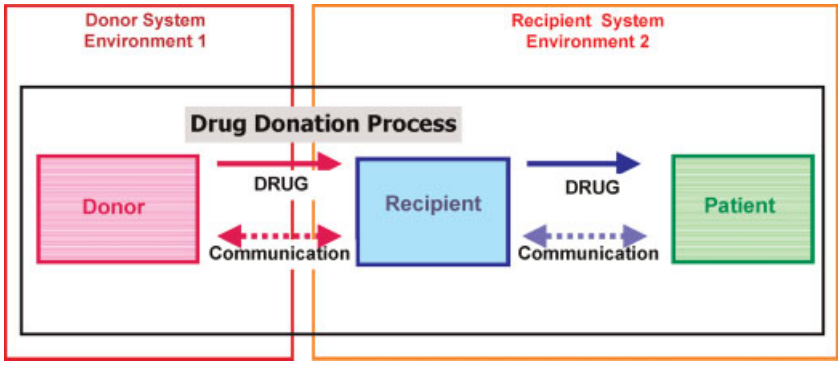


Figure 2. Drug donation system (DD-system)

DOI: 10.1002/hpm

KI 5 (Public) Up to now donors do not comply with the regulations of Tanzania. Why do they not bring the money into the country and buy the drugs at MSD? Like this the labelling, the expiry date etc. would be controlled and the problem with unused drugs will come to an end.

Very often the Pharmacy Board is not sure, whether the drugs were going to the recipients or to the black market. Some donations are used as commercial goods. They were imported as donations but afterwards they were sold in private shops.

The EDL is very well elaborated. It contains drugs that are affordable. Imported and donated drugs are very expensive. Villagers and old people believe that a drug that is costly has a better effect and that they are cured after the treatment. Therefore, it is very important to follow the EDL and not to create irrational requests.

Major problems *within the process between donors and recipients* were again communication (seven KIs) and transparency (eight KIs), both of which are prerequisite for sustainable donation processes. For NGOs, an additional problem was maintaining a stable supply. One KI added that in-kind DDs given by individuals or companies could interfere with programmes. Another KI of the private-for-profit sector saw a need for monitoring entire DD processes. The inputs were given equally from each group and each level—but only from two KIs from the religious sector.

The role of *recipients* was discussed by 22 KIs (9 public, 4 religious, 8 NGOs, 1 PfP). Eight KIs (five NGOs) complained about a lack of education and training of health care staff, Mission hospital and MOH representatives said that dispensary staff were not sufficiently trained to handle drugs from abroad. Thirteen KIs perceived management and logistics as problematic areas. The main focus was on storage and transport to very rural areas. The acting registrar mentioned that health workers were not aware of these problems because of their low education level. Single statements were given on governance (with a special focus on corruption) and on missing data. The following achievements were highlighted: the Pharmacy Board had done a good job in the prior 12 months and the MSD has optimized their system, with a positive knock-on effect on the DD processes. There were no striking different views among the different groups of KIs.

Rational drug use was the only, but important, problem raised with regard to the relationship *between recipient and patient* (seven KIs, four public, two religious and one NGO). None of the KIs was working directly with patients, and none were from the local level. Inappropriate DDs cause irrational drug use. KIs asked for a programme for rational drug use of DDs, adapted to the Essential Drug Programme and to the education level of the staff employing DDs.

The discussion of *patient* awareness was somewhat contradictory. Four KIs (three public, one religious, all administrative function) believed that patients are aware when they receive DDs and place a higher value on a purchased drug than on a donated drug, while six KIs (two public, two religious, two NGOs, district and local level) said that patients sought adequate treatment, trusted in health care staff and did not care about the origin of the drug.

DOI: 10.1002/hpm

Final remarks

The diversity of themes added by the 24 KIs (all of the public and private for profit, five religious sector, seven NGOs) through final remarks was striking. The mutual issue among all the sectors was the time needed for changes to improve the structures of the health care system. For the KIs, important barriers for an adequate understanding between recipients and donors included cultural differences and the recipients' self-perception that they lack power.

KIs from the public sector merged two concerns: strengths and weaknesses of the new financial schemes (e.g. cost sharing, basket funding) and the kit system.[5] The kit system was considered as the best solution in a setting with poorly educated health care staff. The problem is that kits do not consistently match local supply needs. This fact often stimulated health workers to accept DDs as gifts in-kind. In contrast to the results of the QS, KIs did not perceive kits as a donation.

KIs proposed further research for better understanding of the impact of DDs in the context of drug supply at the local level, but also in the context of development cooperation. Comparative studies should be done in the different sectors and between urban and rural areas. There is also no independent research on DD quality. More information is needed about the financial value of DDs and their transaction costs. There was dissent among KIs about the role of the patient: further studies are needed to elaborate the attitude of patients towards DDs in order to improve rational drug use. Finally, more and better statistics on drug requirements and on the pharmaceutical market in Tanzania are needed if one wants to discuss alternatives to donations.

DISCUSSION

The study was carried out within the health care system of Tanzania and at the local level in three regions—Ruvuma, Kilimanjaro and Dar es Salaam. Data were gathered in 2001/02 through KIs selected from a convenient sample of respondents to the QS (Gehler Mariacher *et al*., 2007). Not all results might be representative for other countries. All the interviews were conducted by the first author, who has long practical experiences with DDs (Gehler Mariacher *et al*., 1998). While this provided consistent data collection, the results might be influenced by her experience and attitude.

The definition of an in-kind DD was comprehensively conceptualized according to the definition of DDs in the Tanzanian GDD (Ministry of Health, 1995). It was not always possible to clearly distinguish between in-kind DDs given (a) in the framework of a programme, (b) as single donations from individuals or (c) as corporate DDs from pharmaceutical companies. Despite these *limitations*, detailed insights of this study should contribute to a better understanding of DD processes at the local level in Tanzania. Furthermore, the expertise of KIs produced discussions

[5]Drug supply for health centres and dispensaries in the public sector of Tanzania is based on prepacked standardised kits as part of the National Essential Drug Programme. The composition of the kits is based on the NEDLIT and on national morbidity data.

DOI: 10.1002/hpm

about fundamental issues and important statements on how to face the problems and challenges of DDs given to the Tanzanian drug supply system.

By using an interdisciplinary approach of data collection (triangulation), we amended the data reliability of the QS (Gehler Mariacher *et al*., 2007). We found *similarities* for coverage of the recipients' drug supply through DDs (27% Q S, 30% KIs), which corresponded also to the country's low indicator for access to essential drugs (WHO, 2001). The ranking of 'main problems in DD processes' was perceived by KIs as rational and understandable.

KIs working in DD programmes stated that the value of DDs was clearly defined in their own programmes (e.g. Mectizan Donation Programme, Trachoma Initiative). This result correlated with the high number of NGO responses (57%) in the QS, that is, by those who were most aware of the monetary value of DDs (Table 3).

KIs concurred with and went into greater depth on the problems in DD processes raised by the QS: DD processes and DD quality were often not appropriate.

KIs endorsed the proposals for the *optimization of DD processes* suggested by the QS respondents and they had little to add. These proposals were consistent with the core principles of the WHO GDD (WHO, 1999). This agreement between KIs and the respondents of the QS confirms the importance of the WHO GDD as a tool for good donation practice, as discussed in previous studies (Reich, 1999; Autier *et al*., 2002). Therefore, the core principles of the WHO GDD are suitable for structuring the discussion below of the problems of DDs identified by our investigation.

Maximum benefit of the recipients

The aim of the Tanzanian Essential Drug Programme is to ensure that drugs for treating the most common diseases are available, accessible and affordable to the entire population. In 2001/2002, however, the reality was far from ideal. The 30% gap in the drug supply system is due to 'poverty, diseases and ignorance' (KIs 7, 9), which have accumulated in a vicious circle. To cover this gap, KIs appreciated the support through DDs within the framework of DD programmes as part of GPPPs with a known public health effect. However, DDs given from a surplus, as gifts from individuals or as single-source and corporate DDs were perceived controversially. KIs working at administrative or organizational levels and KIs from the private-for-profit sector stated that in-kind DDs from individuals should be abrogated, since Tanzania should not be dependent on them. For any DD strategy, maximum benefit depends on *sustainability*. Corporate DDs could be helpful as long- or mid-term DDs (for a minimum of one year), while disburdening the annual budget.

Concerns arose about health workers who accepted poor-quality in-kind DDs. However, treating patients without drugs is perceived as disenchanting. Thus, even a 10% *coverage* of drug needs through in-kind DDs could be appreciated to ease gaps, but it might generate an ethical dilemma through a conflict between individual needs created by poverty and the targets of the health policy. Here, donors were charged with responsibility, because poverty creates dependency and hinders free decision-making.

KIs questioned the basis for estimating the monetary *value* of an in-kind DD, especially when the drug is nearly expired, not well labelled or lacks a quality

DOI: 10.1002/hpm

certificate. The pharmaceutical quality of a DD should be optimal if it is to be compared with the wholesale price of its generic equivalent in the recipient country (WHO GDD (WHO, 1999)). The Tanzanian GDD do not address the issue of value (Ministry of Health, 1995). When considering value, DD-related *costs* have to be considered as well. The transaction costs evoked through transport, shipment fees and costs for disposal can be higher than the value of the donated drug. The new tax for custom clearance was a significant problem in 2001, especially for the religious sector and the NGOs. Recognizing the problems in recipient countries, the WHO GDD request that the donor should pay for shipment and custom fees. This is rarely the case.

KIs offered thoughts to animate the discussion on how to boost the benefit of DDs. Why not, instead, donate money to support local activities and the HSR strategy? This would overcome the problem of treating DDs like gifts and the sometimes questionable motivation of the donors. DDs in cash are also an expressed request of the Tanzanian GDD in order to support local manufacturers (Ministry of Health, 1995). But earmarked donations in cash were given to only 16% of the recipients in the QS (Table 3). A second suggestion was to establish a central store for the management of DDs, to control the importation of DDs and to distribute them to facilities in need of specific drugs. Third, why should patients not pay for DDs according to the customary financing schemes? In the QS, 40% of the recipients, especially in the religious sector, supported this proposal (Table 3). With a revolving drug fund (RDF), based on a DD, the Christian sector had achieved first positive results. The RDF gives a chance to the Christian health facilities to build up a sound basis for a self-reliant drug supply (Kuper and Njau, 1998).

Respecting the wishes of the recipient

A consensus was that DDs were often not donated for an *expressed need*; in the QS also, 38% of recipients were confronted with this problem (Table 3). KIs assumed that data on needs were not collected because needs assessment has not been systematized, as suggested also in the QS results (Table 3). The lack of data on DD needs was also perceived as a major drawback for decision-making within the strategy of the HSR (Ministry of Health, 1999; Bürki, 2001), such that recipients had no power to refuse DDs of questionable quality. These problems result from a lack of accountability, an issue already raised in the QS (Table 3).

Tanzania has developed all the necessary tools for a good donation practice. KIs wanted an optimal scenario for DDs following the essential drug list (NEDLIT) and the standard treatment guidelines (Ministry of Health, 1997b; Wiedenmayer and Mtasiwa, 2000). Selection criteria should be established with regard to local needs: DDs should cover the diseases of the country and correspond with the prevalent morbidity rate. This process should ensure, as KIs stated, ‘the right drug in the right amount at the right place in the right time for the right patient’. If unknown drugs are given, problems with rational drug use and, possibly, adverse drug reactions were anticipated. KIs made quite clear that compliance either with the WHO and/or with the Tanzanian GDD would support an optimal DD process. But these tools need to be better implemented and enforced by both recipients and donors. In the Tanzanian DD

DOI: 10.1002/hpm

system, the GDD are in fact distributed to the public and to the religious sector, but they are mostly not implemented at all.

No double standard in quality

The quality of the donated drug was perceived as a minor problem in the QS (Table 3). We also found a distinction in the views of KIs working in DD programmes compared to KIs receiving in-kind DDs from individuals and as single-source DDs, e.g. in their judgement of the quality of DDs. KIs working with patients did not agree: inappropriate DDs created an extra workload in terms of sorting, storage and distribution, cause costs for disposal and easily overstretched the capacity of human resources. Three major DD quality issues were discussed: unused drugs or leftovers, the labelling of DDs and the expiry date. Unused drugs will boost stockpiling and encourage pilfering and black market sales. Together with mislabelled DDs, they were perceived as a reason for irrational drug use, a serious problem in Tanzania. Problems with a short shelf-life were stressed by the KIs: the donation of expired drugs is illegal because of the risks and should not be considered a matter of conscience or morality. Expiry dates are important: weak drug supply systems burdened by storage, transport and climate problems are challenged to maintain the quality of DDs (Ette, 2004).

Effective communication between donor and recipient

For all KIs, effective communication is prerequisite for a functional DD process. A participatory approach has to be initiated by the donors. They should act respectfully, meet the regulatory requirements of the recipient countries as well as the wishes of the recipients and not undermine the endeavours of recipients to optimize their drug supply system. Strongly associated with communication is transparency, not only within the process between donors and recipients but at the local level as well.

CONCLUSIONS AND RECOMMENDATIONS

All relevant DD-related *national regulations and guidelines of Tanzania* for ensuring a good donation practice are important for supporting recipients at the end of the supply chain in voicing their specific needs and in refusing poor-quality DDs, especially within the context of poverty.

DD quality should be adapted to the national quality assurance procedures with more stringent control at customs, and the recent efforts of the government should be supported. The idea of a centralized location for the import of DDs should be assessed.

DDs given as part of GPPPs have a positive impact on the Tanzanian drug supply system. In other cases, *money donations* as proposed in the Tanzanian guidelines for DDs and in the objectives of the HSR are recommended. But DDs cannot always be restricted to these requirements, and donating money is not the only alternative.

DOI: 10.1002/hpm

However, when drugs are donated, the focus has to be on the *Tanzanian Essential Drug List, the NEDLIT.*

This study confirmed and reinforced results from previous investigations: DDs were frequently not given for long-term treatment and did not meet the needs of the country. The lack of data, of accountability and of informed health workers are *major structural problems in the recipient country.* Insufficient transparency, irrational drug use and weak management and infrastructure (especially storage and transport problems) are other significant problems. For further improvements, continuing education of health workers, the provision and distribution of DD-related information, nationwide communication and clearly defined accountability are important issues to address.

As one possible approach, we suggest developing *standard operating procedures (SOPs*). The SOPs on drug requisition, transportation, storage, distribution and use, as they exist in the 'Tanzanian Procurement Act', could be transposed onto DDs. There is no substantive reason to handle a DD and a purchased drug as different kinds of goods. Thus, it should be possible to optimize education and rational drug use, and improve data collection.

Donors must act respectfully and meet regulatory requirements of the recipient countries as well as the wishes of the recipients. This could be achieved through a pull system, with optimized communication as a major tool. The basis should be transparency within and between donor and recipient systems.

Finally, when discussing optimization of the DD system, we should not forget the ultimate goal of DDs. Therefore, a participatory approach should be initiated by both donors and recipients based on awareness and mutual understanding in the interests of *patient* care.

ACKNOWLEDGEMENTS

We thank all the key informants in Tanzania who participated in the study for their excellent cooperation, the staff and the former manager Mr Pierre Pichette of the Dar es Salaam Urban Health Project for helping in collecting the data and Ms Claudia Sauerborn for assistance in the qualitative data analysis. These thanks are extended to Jennifer Jenkins for review of the interview guidelines and Anne Blonstein for review of the manuscript.

The research work was approved by the National Institute for Medical Research (NIMR) in Tanzania and was supported financially by the Swiss Tropical Institute, Basel, Switzerland.

REFERENCES

Autier P, Govindaraj R, Gray R, Lakshminarayanan R, Nassery H, Schmets G. 2002. Drug Donations In *Post-emergency Situations*. Washington DC, The International Bank for Restruction and Development/The World Bank.

Brugha R, Varvasovszky Z. 2000. Stakeholder analysis: a review. *Health Policy Plan* **15**(3): 239–246.

DOI: 10.1002/hpm

Bürki O. 2001. *End of Assignment's Report: Sector-wide Approach in Tanzania, The Health Sector Example, The observation from a Bi-Lateral*. SDC Swiss Agency for Development and Co-operation, Dar es Salaam, Tanzania.

Ette EI. 2004. Conscience, the law, and donation of expired drugs. *Ann Pharmacother* **38**(7–8): 1310–1313.

Gehler Mariacher G, Rota M, Hersberger KE. 1998. Rücklauf ungenutzter Medikamente in Apotheken. *Schweiz Rundsch Med Prax* **87**(43): 1441–1443.

Gehler Mariacher G, Mtasiwa D, Wiedenmayer K, Bruppacher R, Tanner M, Hersberger KE. 2007. *In-kind Drug Donations for Tanzania—Stakeholders view—a questionnaire survey.* accepted (Dec. 2006) by World Health and Population.

Gläser J, Laudel G. 2004. *Experteninterviews Und Qualitative Inhaltsanalyse*. VS Verlag für Sozialwissenschaften: Wiesbaden.

Guilloux A, Suerie M. 2000. Hidden Price Tags. Access to Essential Medicines Campaigns. *Médecins Sans Frontières, MSF* http://www.accessmed-msf.org/prod/publications.asp?scntid=492001217138&contenttype=PARA&: 27

Hogerzeil HV, Couper MR, Gray R. 1997. Guidelines for drug donations. *BMJ* **314**(7082): 737–740.

Kuper M, Njau EC. 1998. Guidelines for managing a drug revolving fund—A manual for church run hospitals in Tanzania. *Christian Social Services Comission CSSC, Church Pharmacy Support Unit CPSU, Tanzania*.

Ministry of Finance. 2005. *Public Procurement Regulatory Authority, the United Republic of Tanzania—Public Procurement Act of 2004 (Act of Parliarment Number 21 of 2004).*

Ministry of Health. 1994. Planning and Policy Department, Ministry of Health, The United Republic of Tanzania, Proposals of Health Sector Reform. 79.

Ministry of Health. 1995. The United Republic of Tanzania, Guidelines on donations of drugs and medical equipment to the health sector for Tanzania Mainland, Ministry of Health.

Ministry of Health. 1997a. Review of the Pharmaceutical Sub-sector including IDA and Danish Support to the Medical Stores Departement. *Joint Ministry of Health MOH, United Republic of Tanzania, Danish International Development Agency Danida, Swiss Development Cooperation SDC, World Bank W.B:* 105.

Ministry of Health. 1997b. The United Republic of Tanzania, Standard Treatment Guidelines And The National Essential Drug List For Tanzania.

Ministry of Health. 1999. Planning and Policy Department, The United Republic of Tanzania, The Health Sector Reform Plan of Action. 173.

Ministry of Health. 2000. Pharmacy Board, The United Republic of Tanzania, Guidelines for Importation of Pharmaceuticals.

Ministry of Health. 2001. The United Republic of Tanzania, National Essential Drug List for Tanzania (NEDLIT). Draft revised document.

Ministry of Health. 2003. Pharmacy Board, The United Republic of Tanzania, The Tanzania food, drugs and cosmetic act. 2003.

Muhume J. 2001. Personal Information from the Chief Pharmacist, Mr. J. Muhume; MOH, Dar es Salaam, Tanzania.

Oladele O. 1999. *Review of disease-specific drug donation programmes for the control of communicable diseases*. MSF-WHO Workshop on ''Drugs for Communicable Diseases, Stimulating Development and Securing Availability'', Paris.

Peters DH, Phillips T. 2004. Mectizan Donation Program: evaluation of a public-private partnership. *Trop Med Int Health* **9**(4): A4–A15.

Reich MR (ed.). 1999. *An Assessment of US Pharmaceutical Donations: Players, Processes, and Products*. Harvard School of Public Health, Reich M.R: Boston.

Reich MR. 2000. The global drug gap. *Science* **287**(5460): 1979–1981.

The United Republic of Tanzania—Ministry of Finance—Public Procurement Regulatory.

UNDP. (2002). Human development reports 2002, United Nations Development Programme. http://www.undp.org/hdr2003/indicator/cty_f_TZA.html 2005(April).

Varvasovszky Z, Brugha R. 2000. How to do (or not to do). A stakeholder analysis. *Health Policy Plan* **15**(3): 338–345.

DOI: 10.1002/hpm

WHO. 1998. World Health Organisation: Health Reform and Drug Financing: Selected Topics. *Ref.no. WHO/DAP/98.3*: 44.
WHO. 1999. World Health Organisation, Guidelines for Drug Donations, Revised 1999. *WHO/EDM/PAR/99.4*.
WHO. 2000. World Health Organisation, First years experiences with guidelines for drug donations. http://whqlibdoc.who.int/hq/2000/WHO_EDM_PAR_2000.1.pdf
WHO. 2001. World Health Organisation, Selected health indicators for Tanzania. http://www3.who.int/whosis/country/indicators.cfm?country=tza
WHO. 2004. World Health Organization, Equitable access to essential medicines: a framework for collective action. *WHO Policy Perspectives on Medicines*(8): 6.
Wiedenmayer K. 2004. *Access to Medicines, Medicine Supply: Lessons learnt in Tanzania and Mozambique*, Swiss Tropical Institute Basel and Swiss Agency for Development and Cooperation Berne http://www.sdc-health.ch/priorities_in_health/communicable_diseases/hiv_aids/access_to_drugs
Wiedenmayer K, Mtasiwa D. 2000. *Transforming drug supply in Dar es Salaam*. Vol. 28&29: Geneva: WHO: Essential Drug Monitor, 25–27.

DOI: 10.1002/hpm

PAPER 3

PRACTICAL SOLUTIONS FOR OPTIMISED DRUG DONATION PROCESSES IN TANZANIA

Mkutano ili kuongeza ubora wa madawa ya msaada

Meeting about the necessary improvement of drug donation processes.

Besprechung über notwendige Verbesserungen zum Thema Spendenprozess

7 Practical Solutions for Optimised Drug Donation Processes in Tanzania

Recommendations from an Intersectoral Workshop

Gaby Gehler Mariacher[1]*, Deo Mtasiwa[2], Karin Wiedenmayer[1], Rudolf Bruppacher[3], Marcel Tanner[1], Kurt E Hersberger[3]

[1]Swiss Tropical Institute, PO Box, 4002 Basel, Switzerland

[2]Dar es Salaam City Council, PO Box 9084, City Hall, Dar es Salaam, Tanzania

[3]Institute for Clinical Pharmacy, University of Basel, Klingelbergstr. 50, 4056 Basel, Switzerland

---

This paper is submitted to
East African Medical Journal

---

*"Researchers should not tell what the problems are, but how they could be solved" (*Prof. G.P. Mwaluko, Symposium on Drug Donations, National Institute of Medical Research, NIMR, 21.02 2000, Dar es Salaam)

Abstract

Background: In a questionnaire survey conducted in 2001, all sectors and levels of the Tanzanian health care system showed a high acceptance of in-kind drug donations (DD) for supporting the drug supply.

Objectives of this study were to disseminate and discuss the survey findings with these stakeholders survey and to elaborate practical solutions for optimised DD processes.

Method: With the support of WHO, in 2002 a one-and-a-half day participatory workshop was organised in Dar es Salaam, Tanzania, focussing on a) three main barriers to the optimisation of DD processes, b) three main strategies for improving DD processes, c) three main suggestions for strategy implementation. Participants were either randomly selected from the questionnaire survey (n=22) or individually invited because of their key function in DD processes (n=4).

Results: Major barriers identified in the recipients' country were insufficient transparency, and a lack of data, accountability and informed health workers. To address these problems, participants brainstormed practical solutions. Recommendations to donors include: a) respect the national drug policy of Tanzania, b) communicate actively with recipients during the entire DD process. Recommendation for recipients in Tanzania comprise: a) translation of the guidelines for DDs into Swahili, b) strengthen the collaboration between the public and the private sectors, c) establish an autonomous, centralised body for coordinating DDs given to Tanzania.

Conclusions: The focus has to be on the drug and not on the donation. Consequently, like all other drugs, a donated drug should conform to the national regulations and to recipients' requirements.

Introduction

As a country with low access to essential drugs, Tanzania uses in-kind drug donations (DDs) to bridge drug supply gaps [1, 2]. In-kind DDs are manufactured drugs imported free into the recipients' country. Since the early 1990s, the country has developed instruments for the regulation of DD processes and for the support of good donation practices by introducing a) an essential drug list, the NEDLIT (1991), b) guidelines on DDs (GDD) (1995), c) guidelines for the importation of pharmaceuticals (2000) [3-5]. As part of the health sector reform (HSR), in 1998 Tanzania adopted the concept of a sector-wide approach, and donors' funds are now pooled and earmarked for priority activities (basket funding) in the health sector. By transferring the authority of health care to the district and local levels, the HSR also brought about decentralised decision making in DD processes [6-8].

In 2001, we conducted a stakeholder analysis with a questionnaire survey to explore the views, knowledge and practices concerning in-kind DDs as a strategy to improve access to drugs [9]. When considering all DD strategies together, an average of 27% of the recipients' drug supply was covered by DDs. DD strategies in development cooperation are: a) DDs given directly to the basic health care system

and made available through private humanitarian institutions (religious, non-governmental and private voluntary organisations), b) single-source DDs given through private companies and individuals and c) DDs given as part of global public/private partnerships (GPPPs) with a clearly defined public health goal.

Stakeholders from every sector and different levels of the Tanzanian health care system showed a high acceptance of in-kind DDs as an important source for supporting the drug supply within the context of poverty. However, if DDs are not appropriate, they burden the drug supply system. The most important problem recognised by each sector involved in DDs was the insufficient quantity of donated drugs for sustainable treatment, and hence a prime concern of DD recipients was the discrepancy between the needs of the recipients and the donors' supply. On average, 45% of the recipients were familiar with the Tanzanian GDD and 30% with the World Health Organisation (WHO)-GDD.

In 2001/2002, we conducted standardised key informant (KI) interviews to consolidate the views of recipients, to clarify different interests and to identify KI recommendations for optimised local DDs [10]. Major structural problems identified in the recipients' country were lack of data, of accountability and of informed health workers. Insufficient transparency, irrational drug use and weak management and infrastructure (especially storage and transport problems) were other significant problems. For KIs, the problem of DD quality equalled that of problems related to DD systems, in contrast to the questionnaire respondents who had placed more emphasis on the latter. Both studies showed that the DD problems that arose between donors and recipients were mainly caused by communication failures. Donors should respect the wishes of the recipients, meet the regulatory requirements of the recipient countries and should not undermine — through inappropriate DDs — the endeavours of recipients to optimise the drug supply system. The proposals of recipients for optimised DD processes corresponded fully with the core principles of the WHO-GDD (Table 1) [11].

Against this background, in collaboration with the WHO we organised a participatory workshop with the following aims: a) to disseminate and discuss the findings of the questionnaire survey and the KI interviews [12], b) to identify possible interventions for the improvement of DD processes in Tanzania, c) to elaborate practical solutions for optimised DD processes and d) to increase the validity and credibility of our research work. In this paper, we present recommendations elaborated during the workshop and our final conclusions.

Methods

In October 2002, we organised a one-and-a-half day workshop in Dar es Salaam. Stratified by sector, we randomly selected 26 participants from the questionnaire survey. Of these, 22 were able to accept our invitation, providing representation from the public sector (2 facility level, 4 administrative level), the religious sector (5, 3), NGOs (2, 5) and private-for-profit organisations (1, 0). Four further persons with key functions in DD processes also participated in the workshop.

At the beginning of the first half day, the first author presented the results of the questionnaire survey and the KI interviews. Initial presentations were then followed by group work, for which the participants were

randomly assigned to four groups. Each group discussed a question for improving DD processes, based on the core principles of the WHO-GDD [11] and the recommendations of stakeholders in the questionnaire survey for optimising DD processes (Table 1).

Table 1: Questions tackled in the group work

Short Title	Questions for the group work adapted to the core principles of WHO	Core Principles WHO [11]
Quality of DDs	How do you to assure and control the quality of the drugs received?	No double standard in quality,
Participatory collaboration	What is required on your side to collaborate in a participatory way with the donor and within your own environment?	Effective communication between donor and recipient
Defining DD needs	What tools do you need for defining local needs (covering your own facility)?	Maximum recipient benefit
National regulations	How can you optimise the impact of GDD and what is required to follow the national regulations?	Respect of the wishes of the recipient

The workshop closed with the feedback from the group work focussing on a) three main **barriers** to the optimisation of DD processes, b) three main **strategies** for improving DD processes, c) three main **suggestions for strategy implementation.**

Results

The results of each group are given in Table 2 as they were presented in the plenary. Additionally, we summarise the key issues associated with each question, as raised in the plenary discussion.

Quality of DDs

It was emphasized that disseminating guidelines and routine inspections at entry points are not sufficient to ensure the quality of donated drugs due to three major barriers: a lack of transparency about donors' quality testing of DDs, inability of the recipient to handle inadequate DDs and policy interference between donors and recipients. Workshop participants were however, unable to add any new suggestions to those previously put forward to improve the quality of donated drugs These include a more transparent donation process, engaging qualified staff and development of tools for quality assessment. In addition, the suggestion of the WHO representative to blacklist donors who provide inadequate DDs was endorsed.

Participatory collaboration

For good collaboration between donors and recipients, informed health workers and information about drug needs are prerequisite. Recipients should proactively inform donors about their drug needs and about regulations concerning DDs. In this connection, an annual stakeholder meeting at which donors would receive first-hand information about the situation in a recipient country might be effective. Clearly, modern communication technology should be used to maintain continuous exchange and collaboration.

The suggestion was put forward to establish a centralised body for handling all DD imports. This body could benefit from the long-term experiences of the Christian umbrella "Christian Social Services

Committee" with DDs. Existing knowledge from disease control programmes receiving DDs should be used instead of starting a project from scratch. Objections raised against such a body were the lack of funds and the complexity of planning.

Table 2: Results of the group work

Barriers	Strategies	Suggestions for strategy implementation
Quality of DDs		
Differences in donation concepts between donor and recipient.	Educate donors about what you need and the quality you require.	Disseminate current donation guidelines – a Food, Drug and Cosmetic Act is currently being drafted.
Inability to make proper use of donated items – e.g. if the product/item is not labelled in an appropriate language.	Assure that donations conform to government policies and guidelines.	Communicate Food and Drug Administration (FDA) Act proposal.
Lack of reliable information about whether or not donors conduct quality testing before sending donations.	Conduct routine visual inspection (by pharmacists and Pharmacy Board) once DDs are in the country after screening at point of entry, e.g. change in colour, smell, etc.	Service delivery points to communicate their requirements for acceptable products and bulkware.
Participatory collaboration		
Lack of awareness and/or transparency of both donors and recipients about - Regulations - Guidelines - Procedures - Recipient drug needs - Packaging and shipping.	Educate/sensitise stakeholders about guidelines, procedures and regulations. Both the MOH and other users should be pro-active in disseminating this information	Establish an independent central platform for communication and exchange of information, e.g. availability and needs (Could be fully autonomous or semi-autonomous).
Lack of competent staff and lack of accurate data on drug requirements.	Have qualified staff to quantify drug needs.	Organise annual stakeholder meetings where donors and recipients can come together and discuss various issues pertaining to DDs.
Limited choice of drugs that forces recipients to accept what is available	Establish a centralised body for handling all pharmaceutical donations, i.e. a national body that will coordinate both private and public donations.	Empower recipients to access currently available sources of information both online and as hard copies (web sites, networks, etc.).
Defining DD needs		
Having access to appropriate and current data is a precondition for efficient drug need identification.	Improve health information system through the employment of qualified and dedicated/motivated staff.	Have a clear list of national essential drugs.
No plans for disease outbreaks/epidemics.	Solicit more funds.	Donors and recipients should adhere to existing guidelines.
Lack of funds – financial constraints can make clearing and transportation of donated items difficult to handle.	Improve networking and collaboration with other key stakeholders.	Prepare post-donation report/feedback – could be done at the annual meeting proposed earlier or just directly between the recipient and donor.
National regulations		
High costs, e.g. paying experts to review guidelines, printing costs, distribution logistics and other related costs.	Mass media campaign, including a topic on guidelines in seminars and workshops and other medical-related meetings	Regular scheduled meetings with minutes circulated to all major health care providers.
Non-compliance with regulations and policies (e.g. corruption).	The Permanent Secretary of the MOH should strengthen the functions of the national therapeutic committee (it is not functioning very well at the moment).	Use of new communication technologies, e.g. internet, email, etc.
Political lobbying is required to enhance awareness of problems with DDs.	Inclusion of guidelines in the training curricula of medical and paramedical courses, on-the-job training and continuous education.	Establish medical communication and information centres in all medical zones.

Defining DD needs

Definition and quantification of drug needs require epidemiological data and information about the national supply chain. Similarly, all donors should understand the relevant health care delivery systems with regard to the role and functions of the different levels of care, allowing donors to adapt their DDs to the specific level of health care, as required in the NEDLIT.

A longer discussion focussed on the need for qualified and motivated staff to improve data collection. The workload of health workers has to be considered, particularly as there are already many reporting requirements, but little coordination. An important suggestion was to insert a tool for drug need quantification into the GDD. Known seasonal patterns need to be included in the estimates of drug needs. The estimated buffer stock for emergency needs should be available at the parastate wholesaler Medical Store Department (MSD).

National regulations

Tanzania has developed guidelines and regulations for good donation practices. The plenary argued that establishing regulations is important, but they make little sense if there is no adherence to them. Discussion of guidelines in the curricula of basic or continuous training of health workers as well as the monitoring the guideline application was emphasised. The workshop participants addressed a lack of political will: a) the national therapeutic committee with its duty to monitor the implementation of guidelines has to strengthen its efforts at both the national and the district level, b) the MOH has to improve its communication of policies, c) corruption was seen as major obstacle in the DD process through unregistered pharmacies, unqualified pharmacists and unethical political lobbying and should be better controlled. In this respect, it is important to note that health workers often work in both the public as well as the private sector. This fact predisposes to corrupt practices.

For better use of guidelines, a translation of the most recent Tanzanian GDD [3] into Swahili could be useful. The Tanzanian GDD should be reviewed regularly and they should comply with the WHO-GDD and other relevant guidelines

Discussion and recommendations

Of the 26 randomly chosen invited persons, 22 or their representatives (85%) participated in the workshop. Thus, a good mix of opinions from all sectors involved and from all levels of influence in the Tanzanian health care system could be collected and discussed. The level and intensity of discussions throughout the workshop illustrated the importance of the topic. All participants showed substantial interest in elaborating practical solutions for better DD processes. Given the topic and the specific questions addressed, the issues raised are certainly relevant for the discussion of DDs in many other similar, low-income countries.

Another important barrier to optional donation practices identified by workshop participants are insufficiently trained and poorly informed health workers. This is a general issue for health care systems

in sub-Saharan Africa [13], and is already being addressed in the objectives of the HSR in Tanzania [7, 14, 15]. A lack of transparency, which hinders good collaboration between donors and recipients, was the other important barrier perceived by participants. Donor non-transparency about DD quality reduces recipients' influence on DD processes. However, participants were aware that there were transparency barriers in the recipient country as well, also based on a lack of accountability and a failure in political will. Despite all the efforts made in health care delivery systems to improve health information systems, the absence of projections of annual drug needs is surprising and was unanimously identified as another important barrier. Participants explained that this problem was not only caused by lack of data alone, but also by a waste of data. Reasons given were uncoordinated data gathering and the non-systematic collection of often irrelevant data. This reveals not only a structural problem, but also problems of process and communication. The lack of reliable data about drug needs at a local level results in DDs which are mainly supply/offer rather than demand driven.

The lack of awareness of existing national regulations and guidelines is an important problem for both donors and recipients. Although guidelines for drug donations are available even at the local level, they are often unknown and disregarded.

Most of the barriers found in this study were also identified by stakeholders in our previous studies [9, 10] or have already been discussed in other contexts [16]. This emphasises the importance of these barriers and confirms our results with a different approach.

Practical solutions for improving DD processes

Participants had concrete ideas about how to overcome these barriers. To improve communication, to raise awareness as well as to exchange information between donor and recipients, an regular stakeholder meeting as part of broader donor consultations were proposed. Participants also recommended that all sectors should collaborate and that stakeholders should learn from the long-standing experiences of the Christian Social Commission and of NGOs working in donation programmes. This addresses the importance of PPPs.

The participants proposed the translation of the Tanzanian GDD into Swahili, as suggested in our previous studies. A feasible new input is the addition to the Tanzanian GDD of models and tools for needs assessment. Modelling drug needs on the basis of routine data collection and including estimates of completeness might provide an effective way forward. The tools established by WHO, within the Tanzania Essential Health Interventions Project (TEHIP) programme or similar market-modelling software could be adapted and validated for DDs. This helps recipients not only in defining DD needs, but also in gathering quantification data for a regular drug supply, and could be an instrument to assess needs in emergency situations.

Drug quality was perceived as a crucially important issue. However, suggestions for improvement did not satisfy participants’ expectations. It is important to note here that at the same time in 2001, Tanzania was

beginning to set up laboratories for quality assurance at the entry points, including the control and listing of DDs through the Tanzanian Food and Drug Administration [17, 18].

The suggestion of the WHO representative to register donors who provide inadequate DDs in analogy and connected to the established global WHO register [19] was a new concept for participants and was perceived as helpful. The question was raised as to how to organise such a register without being perceived as donor blaming and thus discouraging DDs.

The idea of a centralised body for collecting all DDs entering the country was the most important suggestion. Factors to be considered are: a) access to information, b) clear structures, c) clearly defined procedures for all stakeholders, d) support in quality assurance, e) pooling of DDs for distribution and f) financing schemes to enable sustainable functioning. Advantages are: a) protection of developing countries from drug dumping, b) monitoring of incoming DDs and c) support to the collaboration between donors and recipients. Such centralisation could potentially ensure the appropriate distribution of donated drugs to those facilities which really need them. In the public sector, the MSD is already responsible for taking over all DDs and distributing them among their own clients. However, participants wanted an autonomous body for all sectors involved in DDs. Problems could arise in the area of accountability in a situation where there is a fairly decentralised health care system and in the costs of maintaining such a body. Participants emphasised that it is important to discuss both the consequences of the HSR and the impact of the decentralisation of authority on DD processes. But the Tanzanian case has shown that improvements are possible [8].

Conclusion

Participants were aware of the key problems they face in Tanzania and were motivated to make an effort for optimising DD processes. The barriers affecting DD processes raised by the workshop participants were similar to those affecting the entire health care and drug supply system: an insufficient number of trained health workers, missing accountability, failure in monitoring of and adherence to guidelines and regulations, and a weak data reporting system. DD-specific barriers were seen on both the donor and recipient sides: non-compliance with national regulations and guidelines, and shortcomings in transparency and communication.

To address these problems, participants brainstormed practical solutions with the goal to optimise the Tanzanian DD system. The recommendations to donors entail:

- Respect the national drug policy of Tanzania and the guidelines for DDs
- Communicate actively with recipients during the entire DD process
- Consider that DDs should be demand and not supply driven

The recommendation for recipients in Tanzania comprise:

- Translation of the guidelines for DDs into Swahili and addition of models for needs assessment to these guidelines

- Assure systematic collection of data linked to the general improvement of the health management information system
- Strengthen the collaboration and sharing of experiences between the public and the private sectors
- Establish an autonomous, centralised body for coordinating DDs given to the Tanzanian health care system

The important area of quality assurance at the entry points and the revision of the GDDs were also mentioned, issues which have already been taken up by the MOH, but are not yet fully implemented.

Within a DD process, both donors and recipients have to keep in mind that the focus has to remain on the drug and not on the donation. Consequently, like all other drugs, a donated drug should conform to the national regulations regardless of the country's wealth. Transparency and collaboration are prerequisites for good DD practices.

Competing interests

The authors declare that they have no competing interests.

Acknowledgements

We would like to thank all the participants of the workshop for their excellent cooperation. Special thanks go to Dr. Zuhura Majapa for her assistance in preparing and conducting the workshop, to Mr. Pierre Pichette for moderating the workshop under the chairmanship of one of the authors (Dr. Deo Mtasiwa) and finally to Mr. Isaac Vesso and the staff of DUHP for organisational support. Special thanks go to Dr. Robin Gray of WHO Geneva for his committed participation in the workshop. The WHO is acknowledged for financial support. A report of the workshop is available. Thanks also to Mrs. O. Kowero, Acting Registrar, and Mr. J. Muhume, Chief Pharmacist, for additional information on current actions taken for the drug supply system in 2002/2003. Finally we thank the Swiss Tropical Institute in Basel for their inputs and to Anne Blonstein for reviewing the manuscript.

Research clearance was obtained from the Medical Research Coordination Committee of the National Institute Medical Research through the Tanzanian Commission for Science and Technology .

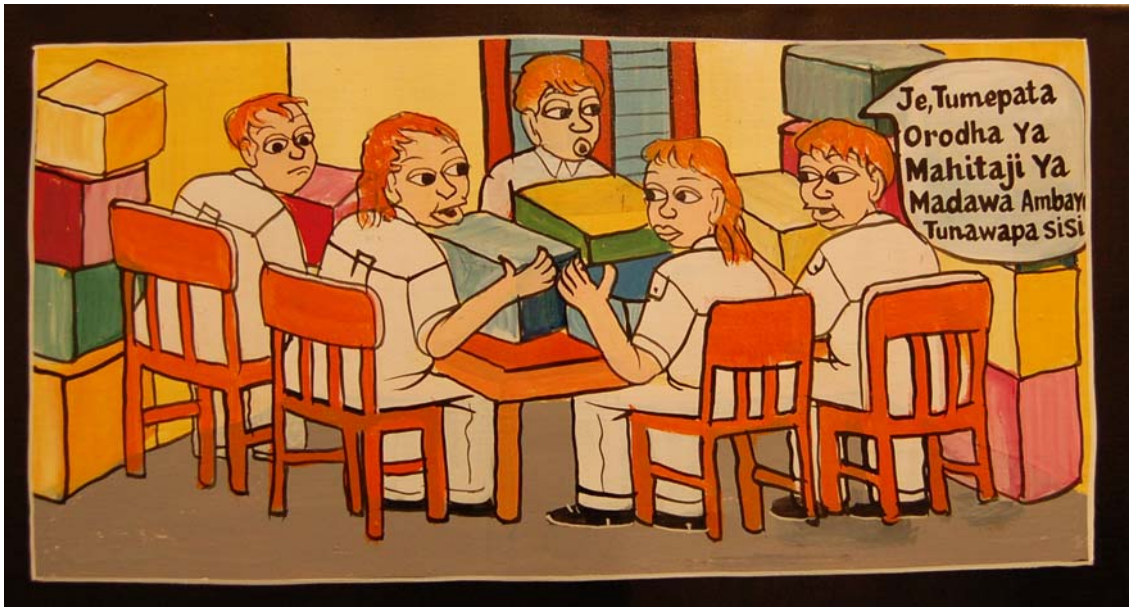
References

1. WHO, *World Health Organisation, Selected health indicators for Tanzania.* http://www3.who.int/whosis/country/indicators.cfm?country=tza, 2001.
2. Reich, M.R., ed., *An Assessment of US Pharmaceutical Donations: Players, Processes, and Products*. 1999, Boston: Harvard School of Public Health: Reich M.R.
3. Ministry of Health, *The United Republic of Tanzania, Guidelines on donations of drugs and medical equipment to the health sector for Tanzania Mainland.* 1995.
4. Ministry of Health, *Pharmacy Board, The United Republic of Tanzania, Guidelines for Importation of Pharmaceuticals.* 2000.
5. Ministry of Health, *The United Republic of Tanzania, Standard Treatment Guidelines And The National Essential Drug List For Tanzania.* 1997.

6. Hutton, G. and M. Tanner, *The sector-wide approach: a blessing for public health?* Bull World Health Organ, 2004. **82**(12): p. 893.
7. Wiedenmayer, K., *Access to Medicines, Medicine Supply: Lessons learnt in Tanzania and Mozambique*. 2004: Swiss Tropical Institute Basel and Swiss Agency for Development and Cooperation Berne, <http://www.sdc-health.ch/priorities_in_health/communicable_diseases/hiv_aids/access_to_drugs>.
8. Tanner, M., *Strengthening district health systems.* Bull World Health Organ, 2005. **83**(6): p. 403.
9. Gehler Mariacher G, et al., *In-kind Drug Donations for Tanzania - Stakeholders view - a questionnaire survey.* World Health and Population, http://www.longwoods.com/product.php?productid=18771&cat=469&page=1, 2007.
10. Gehler Mariacher G, et al., *Optimising In-kind Drug Donations for Tanzania - a Case Study.* submitted to International Journal of Health Policy and Management, 2007.
11. WHO, *World Health Organisation, Guidelines for Drug Donations, Revised 1999.* WHO/EDM/PAR/99.4, 1999.
12. Brugha, R. and Z. Varvasovszky, *Stakeholder analysis: a review.* Health Policy Plan, 2000. **15**(3): p. 239-46.
13. WHO, *The World Health Report 2006: - Working Together for Health*. 2006, Geneva.
14. Bürki, O., *End of Assignment's Report: Sector-wide Approach in Tanzania, The Health Sector Example, The observation from a Bi-Lateral.* SDC Swiss Agency for Development and Co-operation, Dar es Salaam, Tanzania, 2001.
15. Wiedenmayer, K. and D. Mtasiwa, *Transforming drug supply in Dar es Salaam.* Essential Drug Monitor. Geneva: WHO, 2000. **28&29**: p. 25-27.
16. Shretta, R., et al., *A political analysis of corporate drug donations: the example of Malarone in Kenya.* Health Policy Plan, 2001. **16**(2): p. 161-70.
17. Kowero, O., *Personal Information from the Acting Registrar, Ms Ollympia Kowero; MOH, Dar es Salaam, Tanzania*. 2002.
18. SEAM, *Strategies for Enhancing Access to Medicines Program, Access to Essential Medicines: Tanzania 2001*. <http://www.msh.org/seam/reports/CR022304_SEAMWebsite_attach1.pdf>, 2003: p. 124.
19. WHO, *Press Release WHO/54 8 October 1999.* http://www.who.int/inf-pr-1999/en/pr99-54.html.

WORKING PAPER

IN-KIND DRUG DONATIONS FROM SWITZERLAND



Je, tumepata orodha ya mahitaji ya madawa ambayo tunawapa sisi?

Did we even get a requirements list from the drugs we send?

Haben wir von der Medizin, die wir hier senden überhaupt eine Bedarfsliste bekommen?

8 In-Kind Drug Donations from Switzerland

Stakeholders' views – a questionnaire survey

Gaby Gehler Mariacher[1]*, Deo Mtasiwa[2], Karin Wiedenmayer[1], Rudolf Bruppacher[3], Marcel Tanner[1], Kurt E Hersberger[3]

[1]Swiss Tropical Institute, PO Box, 4002 Basel, Switzerland

[2]Dar es Salaam City Council, PO Box 9084, City Hall, Dar es Salaam, Tanzania

[3]Institute for Clinical Pharmacy, University of Basel, Klingelbergstr. 50, 4056 Basel, Switzerland

---

Working Paper

Abstract

Background: Switzerland has a long tradition in humanitarian aid, and both the public and the private (not-for-profit and for-profit) sector are involved in drug donation (DD) processes. **Objectives** of this study were a) to assess the characteristics of the DD system in Switzerland and b) to collect stakeholder and donor views on problematic areas in DD processes including all strategies of drug donation. **Methods:** Using a qualitative approach, data were collected through validated postal questionnaires in German and in French sent out in May 2001 countrywide to stakeholders of all sectors and levels of decision-making involved in health care in Switzerland. **Result:** Of 1115 mailed questionnaires, 359 were returned (32%) of which 279 (25%) were eligible for analysis. All respondents perceived economic aspects and the support of poor people as the most important justifications for DDs. The most frequently mentioned negative aspects of DDs were issues which burden the health care system of a recipient country. Sustainability of DDs and the non-relevance of donated drugs for local needs were viewed by donors as major problems in DD processes. In the donors' view, participatory collaboration could have the greatest impact on improving DD processes. Donors had little knowledge about guidelines and good donation practices. Quality aspects were of minor importance. Donors from the private-for-profit sector (community pharmacies as well as industrial companies) reported important donations of unused drugs. **Conclusions:** In 2001, the views of stakeholders and donors about strategies in development cooperation and DD policy largely complied with the then current Swiss policies. However, DD practices reflected a strongly supply-driven process with insufficient communication between donor and recipient.

Background

In-kind drug donations (DDs) are defined as manufactured drugs that are imported free to the recipients' countries. They have been proposed as a support for underfunded, weak drug supply systems over the short or middle term, but only if they do not hinder efforts to develop a sustainably financed mechanism of drug supply [1-3]. DD processes and systems are complex:

- Stakeholders in DD processes (donors, recipients, patients) belong to multiple organisations in different health care systems embedded in different environments (Figure 1).
- The settings for DDs are either a rapid response to an acute emergency or a component in development cooperation (DC).
- In development cooperation (DC), many DD strategies are possible: a) targeted DDs are given directly to the basic health care system and made available through private humanitarian institutions (religious, non-governmental and private voluntary organisations), b) single-source DDs are given through large corporations or through individuals, c) DDs are given as part of public/private partnerships (PPPs) with a clearly defined public health goal.

The World Health Organisation (WHO), in cooperation with major international agencies active in humanitarian relief, has issued the Interagency Guidelines for Drug Donations as a globally valid standard (Table 1) [4]. However, DDs still do not comply with these standards and burden the recipients' health care system [5-8]. Global standards alone do not assure a good donation process. DDs have to be adapted to the needs, capacity and system of the recipients' health care system [9-11].

A review of the literature showed that major problems in DD processes have their origin in the interaction between donors and recipients [12-15]. In a literature search for 2000, we found, however, only two papers which had a specific focus on donors [15, 16]. In a quantitative study, Reich assessed the relevance of DDs (listed in the essential drug list of the recipients' country or a therapeutic alternative) and time to expiry of two private voluntary organisations (PVOs) in the USA. In addition, he contacted 36 companies and 31 PVOs for the analysis of their donations policy [16]. One year after their introduction, WHO reviewed experiences with the DD guidelines with a view to their improvement where necessary. Donors were included in the evaluation.[15]. With this background and alongside our work on recipients' perception of DDs and DD processes [17-19], we sought to deepen knowledge about the donors' point of view, and present here preliminary results about Swiss donor attitudes towards problematic areas and gaps in DD processes.

Switzerland was selected as an exemplary donor country for several reasons:

- It has a long-standing involvement in DC with developing countries, including Tanzania.
- DD processes in both the public and the private sector are involved. The latter includes the for-profit sector (e.g. pharmaceutical companies and community pharmacies) and the not-for-profit sector [religious organisations and non-profit organisations such as non-governmental organisations (NGOs) and PVOs].

Our objectives were: a) to assess the characteristics of the DD system in Switzerland and b) to collect stakeholder and donor views on problematic areas in DD processes including all strategies of donating drugs.

Swiss DD processes

Switzerland, as a industrialised and OECD country, has a long tradition in humanitarian aid, fuelled largely by humanitarian motives and a sound economy. Secular and religious relief organisations were formed in the 19th century [20-22]. The motives of these first-generation relief organisations were to cover, inland or abroad, sudden need (e.g. food, medical aid). After the Second World War, all the sectors involved rethought their activities in humanitarian and development aid under the influence of the Cold War and the conflict in Vietnam [20]. An ongoing discussion about the motives, efficiency and effectiveness of the activities led to the current development policy. People from low-income countries are now viewed as partners and not as helpless people in need. Solidarity and equity have become guiding ideas and development is now understood as a change in the political, social and economic structures in

poor countries. Whatever strategy Swiss stakeholders adopted in DC, health issues have been a major focus of attention. Drugs have been viewed as a significant tool to relieve distress, and DDs considered as a possible strategy to provide these drugs to people in need. As a nation significantly committed to pharmaceutical research, development and production, Switzerland seemed also predestined for involvement in DDs.

The Swiss pharmaceutical sector is based on free market principles. The registration of drugs is carried out by Swissmedic [23]. The drug market is highly regulated with respect to quality standards and a guaranteed and affordable basic drug supply through the mandatory national insurance system. The national law on medicine and medical products, issued in 2002, has no specific article for handling DDs and there are no DD guidelines for Swiss donors. [24]. However, this legislation prohibits the export of drugs to foreign countries if those drugs are unauthorised in the target country or if it is evident that the drugs will be used for illegal purposes. Before 2002, each canton had its own laws and there was no legislation applicable to the entire country. The export of drugs was practically unregulated.

In Switzerland both the public and the private sector are involved in DD processes. Each sector has pursued specific strategies to donate drugs, based on different motives:

Public sector: In the public sector, the main actors are the government as represented by the Swiss Agency for Development and Cooperation (SDC) [25] and the State Secretariat for Economic Affairs (SECO) [26]. The main motive to provide DC and humanitarian aid is one of public concern, that is to ensure an efficient multilateral system among small and larger states. In 2000, Switzerland committed itself to support the Millennium Development Goals (MDGs) in all multilateral activities and to focus on a world without poverty, fear and ecological problems [27, 28]. To reach these goals, SDC seeks collaboration with partners in the form of PPPs [11] . Focusing on the empowerment of the health systems in low-income countries [29], the preferred strategy of SDC is to eliminate causes rather than making donations and covers optimisation of access to essential drugs (MDG 8) [27]. Short-term DDs are considered in emergency assistance. But even then, local procurement of drugs is preferred, circumstances permitting [30].

Less relevant actors work in cantonal administrations and public hospitals, health facilities and pharmacies. Their commitment to DD processes is similar to that of community pharmacies (see under private-for-profit sector).

Not-for-profit sector: It is difficult to gain a comprehensive and clear overview of either religious or secular, private not-for-profit organisations. In 1998 more than 200 organisations from this sector were working in DC [31]:

1. Religious sector: After the Second World War, religious organisations also rethought their approach to development aid. They made a considerable contribution to shaping the debates about north-south conflicts. As a result, they became very welcome partners in DC because of their well-established structures in countries with low income. Two groups have an important impact in health care in DC and DD processes. In the first case, major missionary bodies and faith-based organisations, e.g. Hilfswerk der

Evangelischen Kirchen Schweiz (HEKS) and Caritas, supported the idea that in a partnership, the recipient should cooperate in needs assessment [20]. This view led to a critical appraisal of DDs. To provide donors with a guide, as early as 1988, the Christian Medical Commission (CMC) issued guidelines for DDs, which provided the basis for the WHO's later GDD [32]. However, not all religious organisations followed this change in paradigm, and as the second group, they still base their development activity on missionary goals. Likewise, helping people in need to receive the mercy of God has also been the motive of individuals, smaller missions and small PVOs [20]. DDs are often sent by individuals to mission facilities without prior knowledge, do not cover needs and do not meet the requested standard [13, 33].

2. NGOs and PVOs have existed since the mid-19th century and are private not-for-profit institutions with clearly defined structures, independent of governments but with a wide range of goals. In the face of globalisation, the importance of NGOs in DC has increased, because the complexity of DC requirements challenges governmental structures and resources. NGOs can better mobilise resources directly from people, are often well financed, have approved know-how and are flexible in adapting to local conditions. They are therefore welcome partners for government institution like SDC at the political and operational level. NGOs, however, are not without critics, and have been accused of a lack of transparency, being primarily concerned about their survival or limited in their operational effectiveness by their ideals. [30, 34].

Major NGOs in Switzerland were actively involved in designing the contents of the WHO guidelines for DDs. When we made preliminary inquiries during development of the questionnaire, the national offices of some of these organisations (CARITAS, HEKS; Rotes Kreuz) confirmed that their policy for DDs had changed and that they were strictly observing the guidelines' recommendations. But this provides no guarantee that their regional organisations or other smaller PVOs and individuals handle DDs in an equally rigorous manner. One important NGO in DD processes in 2001 was Medi Swiss (today Inresa Pharma), which was (and is) the only not-for-profit wholesaler in Switzerland providing drugs at cost price to relief organisations [35].

All Swiss NGOs and PVOs that collected, sorted out and shipped unused drugs in a large amount halted this activity after the revision of the WHO guidelines for DDs in 1999 and under the influence of NGOs engaged in development policy [4, 36]. In the early 2000s, the organised collection of unused drugs in pharmacies came to an end.

Private-for-profit sector: Today, public resources in DC are limited and involvement of the private sector is needed. The challenge of this strategy lies in conflicts of interest. Forms of collaboration are PPPs, social investments, corporate social responsibilities and multistakeholder initiatives that incorporate the private not-for-profit sector. The experiences of these rather young strategies are not yet well documented and the potential for sustainable development through these approaches needs to be assessed. Potential problems include: dependency on industry and the market, withdrawal of public responsibility and the establishment of "vertical" programmes [37-39].

One major actor in DD processes, the pharmaceutical companies, are involved in many DC contexts, especially in the field of health optimisation and poverty reduction. Their priorities in research and development, issues of patent law and the above-mentioned involvement in PPPs (which represent three-quarters of all projects), are viewed critically [40-42]. Company representatives have stated that the motives for their engagement in DC have been to promote acceptability and reputation. A positive effect on risk management was assumed: anticipation of future regulations, a good image vis-à-vis customers and attractiveness for personnel [41].

The supply-driven Swiss pharmaceutical sector produces an oversupply of drugs. As a result, some stakeholders in the private-for-profit sector, such as pharmaceutical companies, wholesalers and community pharmacies, might feel obliged to engage in charity and philanthropy and to fill drug supply gaps in the form of DDs [3, 41]. Swiss pharmaceutical companies still pursue all DD strategies: direct in-kind DDs, single-source DDs and DDs as parts of programmes [10, 43-47].

Community pharmacies are the other important players in DD processes in the private-for-profit sector. A service of these pharmacies is the cost-free disposal of unused drugs. A study from 1996 showed that the market value of the disposed drugs was about CHF 200 million per year; more than one-third of the drug boxes were unopened and another third had not expired [48]. For community pharmacies, it was often not understandable that after 2000 NGOs no longer collected these unused drugs for reuse. Such pharmacies often continue to pass on unused drugs, if individuals or organisations ask for them. In such case, the pharmacists are presumably unaware of the Basel Convention, signed by the Swiss government, which prohibits the export of unused drugs to any country other than OECD states [49].

Methods

The same questionnaire developed for analysing the views of Tanzanian stakeholders on DD processes in 2000 was used in a German and a French version [50]. The aim was to gather the Swiss data simultaneously with the data from Tanzania. The questionnaire contained 34 numerical questions (Q) for basic information followed by 13 open questions to further develop the numbered questions. Additionally, it contained a set of 14 open questions to gather perceptions and opinions. The questionnaire was validated with a pilot questionnaire to check form and content. Only minor changes were necessary after the pilot study.

Address lists as complete and updated as possible were collected for all groups that might be involved in DDs in every sector (public, religious, private non-profit and private for-profit) and from the entire country. If an address list exceeded 50 addresses, a random sampling was made.

In May 2001, 1115 questionnaires in German and French were sent out with cover letters and prepaid envelopes for returning questionnaires. Italian-speaking stakeholders received both questionnaires, finances not being available to develop a questionnaire in Italian. Two months later, a reminder was sent out to non-respondents. Data gathering was completed by the end of August 2001.

The questionnaire was designed and processed with the software TELE*form*® Standard Version 7.0 from Cardiff Inc. Data quality assurance was done by a double control of the entire dataset. The data were transferred to a Microsoft® Access database and analysis was performed with Microsoft® Excel.
The discussion of the results follows the same framework for analysis developed for the Tanzanian questionnaire [18]. Qualitative data from the open-ended questions were analysed using content analysis. In this study, the deductive text analysis was based on the concepts of Mayring [51, 52]. Key words used in this analysis were derived from important categories of the DD system as listed in Table 2 and from most-cited terms.

Results

Respondent rates

Of the 1115 postal questionnaires sent out countrywide, 359 were returned (32%) and a total of 279 (25%) were eligible for analysis. Of these, 196 questionnaires were in German and 83 in French. Of the not analysable questionnaires, 2 were duplicates, 14 addresses were no longer valid and 64 respondents returned the questionnaires empty with the comment that they were not involved in the distribution of in-kind DDs.
The response rate to the various questions gave a balanced picture. Out of 31 questions, three-quarters had a "no answer rate" of 5% or less. Only open questions (Q5,6; see Table 3) had a "no answer rate" of 40% or more .Questions on the value of DDs (Q15) and on the essential drug policy of the recipient's country (Q25,26) resulted in more than 50% "I don't know" answers. It was striking that NGOs had only 30% no knowledge about the value of DDs. Questions on the labelling of DDs (Q28), quality certificates of DDs (Q29) and the information policy (Q22) had a rate of more than 20% "I don't know" answers. The answers were internally consistent. A good example are the answers on WHO guidelines for DDs (Q11-13).

Analysis of respondents

Tables 3 and 4 provide a summary of the characteristics of the respondents for each sector. Of all respondents, 39% belonged to the NGO and 37% to the private-for-profit sector. One-third of all respondents were from pharmacies (76 community pharmacies and 21 hospital pharmacies).
Half of all respondents were involved in DDs (Q3), thereof 60% in the religious and private-for-profit sector, 43% in NGOs and PVOs and 26% in the public sector. Of all respondents, 45% reported that drug supply was the main activity of their organisation (Q2): 90% in the private-for-profit sector, 40% in the public sector (pharmacies and pharmaceutical companies) and none in the religious sector. Earmarked donations in cash were given by only 14% (Q4). Sectors with a defined mandate in DC had higher rates for cash earmarked for DDs: 42% in the religious sector and 21% in NGOs.

The perception of DDs for all respondents was assessed with two open questions. Multiple answers were possible (Table 5). Of all respondents, 60% answered Q5: *"In which situation do you consider DDs as useful?"* Of all answers, 20% focused on DDs given either in emergency situations or in DC. The usefulness for DC was linked to clearly defined need or structured DD processes. Economic aspects (15%) and the guarantee of the availability of drugs through DDs (9%) were other important factors.

In Q6 *"There are reasons for and against supporting the drug supply system through in-kind DDs. Suggest some of them"*, 25% respondents perceived economic aspects and a support of poor people as the most important features for the usefulness of DDs. A positive impact of donations of unused drugs was identified by 11% of donors. In 2001, this issue was being debated among pharmacies in Switzerland.

The most frequently mentioned negative aspects of DDs (37%) were issues which burden the health care system of a recipient country: DDs do not respect local circumstances, hamper the building up of local competence, often do not meet local needs and boost corrupt practices. Quality aspects were not at the top of the list (7% of answers).

DD System

Below, we focus on the views and practices of the donors from different sectors. Only in the private-for-profit sector did some differences emerge, between community pharmacies and pharmaceutical companies. Within all other sectors, the results were balanced.

Structure and resources

Characteristics of donor organisations differed from those of all respondents (Tables 6 and 7): in the public and the private-for-profit sectors, only pharmacies and pharmaceutical companies were among donors (Q7). Among the donors, most of the respondents (82%) reported that they were themselves in charge of DDs (Q8)

Religious organisations (25%) and NGOs (29%) purchased most of their donated drugs from not-for-profit wholesalers, e.g. Action Medeor, IDA, Echo (Q10). The other important sources were pharmaceutical companies, NGOs and pharmacies. The public pharmacies took their DDs from unused drugs (23%) and from their own stock (26%). In the private-for-profit sector, community pharmacies procured 58% DDs from unused drugs and 18% from their own stock; for the pharmaceutical companies, the figures were 58% from their own stock and 37% from unused drugs.

For 35% of the donors, the main purpose for donating drugs was primary health care, for 21% a request from individuals, for 10% secondary health care, for 9% refugee camps and war (Q9). For all sectors, these responses were at the top of the list, not always in the same order. It is noTable that for the religious

sector and for NGOs, half of the donated drugs were used for primary health care (50%/46%). Only 5% of all donors were involved in DD programmes and 6% in DDs earmarked for specific diseases.

The WHO guidelines for DDs (Table 8) were known to 31% of donors, better in the public sector and in NGOs (Q11). In the private-for-profit sector, half of the pharmaceutical companies knew the WHO guidelines for DDs, but only one-quarter of the community pharmacies were aware of them. Copies of these guidelines were available in 15% of the donor organisations, again more in the public sector and in NGOs (Q12). These guidelines influenced DD practices of 26% donor organisation (Q13), and 20% had elaborated their own guidelines for DDs, especially in NGOs (25%) and in the private-for-profit-sector (21%) (Q14). Looking at the private-for-profit sector, 12% of community pharmacies and 58% of the pharmaceutical companies had elaborated their own guidelines for DDs.

Only 35% of donors were able to estimate the monetary value (Q15) of their donated drugs (Table 9): NGOs were best able to estimate the monetary value, 62% giving a positive response, followed by the religious sector at 40%; the public and the private-for-profit sector at only 17% each. In the private-for-profit sector, 8% of the community pharmacies and 33% of the pharmaceutical companies were able to estimate the value of DDs. Of all donors, 35% perceived payment by patients for DDs in recipients' countries as justifiable (Q16), with this response higher than the average for religious organisations (47%) and NGOs (51%).

Processes

The highest proportion of DDs was donated to Africa (31%) and Eastern Europe (27%) (Table 10, Q17). An evaluation of DD processes (Q18) was carried out by 21% of the NGOs, 20% of the religious organisations and 27% of the public facilities, but by only 3% of the private-for-profit-sector (only pharmaceutical companies).

Of all donors, an average of 41% had received in 2000 concrete order lists for DDs (Q19): 67% in religious organisations and 60% in NGOs, but only 27% in the public and 24% in the private-for-profit sector. An average of 24% of recipients donated without explicit orders from recipients (private-for-profit sector 53%) (Q20).

Of all donors, 45% always or sometimes informed the recipients about the composition and date of shipment (Q22) prior to sending it out: 27% in the private-for-profit, 36% in the public (16% community pharmacies and 75% pharmaceutical companies), but 73% in the religious sector and 74% in NGOs. A similar picture emerged for invoice documents (Q23).

Two-thirds of donors donated drugs registered in Switzerland (Q24). More than half of donors could not answer the questions on whether DDs were included in the WHO essential drug list or in the essential drug list of the recipients' countries (Q25,26).

Quality of DDs

Questions on quality criteria were based on the minimal requirements of the WHO guidelines for DDs [4], which demand a minimum shelf-life of one year or more (Table 11). This requirement was fulfilled by only 12% of donors (Q27). The shelf-life of six months up to one year was met by 25% donors; 3% donated expired drugs.

Exploring further the quality requirements in the WHO guidelines for DDs, labelling of donated drugs in a local language or at least in a language understood by recipients was given as always or sometimes by 66% of donors (Q28). A quality certificate was always or sometimes included in 15.5% of the shipments. The percentage of "I don't know" answers to these questions was relatively high (14-23%, Q29).

Main problems in the DD system

Problems reported by interviewees in an exploratory study undertaken by us with recipients in Tanzania [18] were presented to donors with the request to rate the various statements (Table 12). Multiple answers were possible. The most frequently mentioned problem (23%) was the fact that the quantity of DDs was not sufficient for long-term treatment with DDs. This problem was followed by: non-relevance for local diseases, shipment and custom fees and no communication between donors and recipients, with an average of 10% responses each.

Looking at the sectors, the perception of the importance of problems varied. For the religious sector and NGOs, shipment and custom fees were the most important problems in DD processes (27/28%). Organisations directly involved in DD processes rated concrete problems higher.

Low ranked were: poor quality of donated drugs (average 6.5%), the importance of guidelines for DDs and other tools for a good donation practice (average 6%) and transparency in DD processes (average 5%).

Optimisation of the DD system

To the open question "*In your opinion, what are the most important actions needed to optimise drug donations?"*, 62.5% of recipients answered, with 148 multiple answers (Figure 2). The proposals do not follow the core principles of the WHO guidelines for DDs (Table 1) The most important aspect given was participatory collaboration during the entire donation process. Other development-specific aspects were at the top and correlate with the view of respondents in Table 6. The quality of donated drugs and transparency again rated low. The use of guidelines or other tools for good donation practice were not an issue.

Discussion and conclusion

This descriptive study gathered for the first time stakeholders' perceptions and knowledge about in-kind DDs donated from Switzerland. ***Their key views can be summarized as follows***: a) sustainability is the major problem in DD processes, b) drug quantities are not sufficient for long-term treatment, c) the

request of the right drugs for recipients required a demand-driven DD process and d) optimisation of DD processes requires improved collaboration among donors and recipients.

This study has ***strengths and limitations***. One important consideration is that it was undertaken as a stakeholder analysis reflecting views for producing knowledge about the position and importance of stakeholders in DD processes [53]. The outcome of DD processes at the patient level was not assessed. Additionally, this approach can only focus on the system as a whole and cannot provide detailed aspects of its inner structure. It is possible to assess differences between sectors, but it is difficult to obtain very detailed insight into single DD processes and to draw distinctions between different strategies for donating drugs. Another limitation was the financial and time constraint of this study. Our studies were focused on DD processes for Tanzania. We did not have the personnel or funds to follow up at the same time non-respondents in Switzerland.

Study sample: The entire range of DD strategies and DDs given from all sectors involved in DD processes (public, private-for-profit and private not-for-profit sectors) was covered. The target, based on a WHO study on experiences with the GDD [15], of one-third eligible questionnaires was not achieved despite sending out a reminder. We thus had a low respondent rate and a high percentage of non-eligible respondents, who sent us back the empty questionnaire with the explicit remark that they did “not donate drugs". This leads us to suggest that for non-donors, DDs may represent a rather marginal issue and the high proportion of 50% donors in this study does not reflect the real situation.

Nevertheless, donors did fill in the questionnaire accurately, the “no answer rate” was low and the answers were concise. Only the open questions yielded a high no-answer rate and it was also difficult to assign the discursive responses to our keywords and characteristics (Table 2).

Perception*:* Both the settings of DDs for emergency situations and DDs for DC had the same relevance in the eyes of stakeholders, both donors and non-donors. Thus the usefulness of in-kind DDs for DC was linked to clearly defined needs and to DDs in specific programmes. The most important positive features of DDs (economic support of the drug supply system and poverty reduction) or negative features of DDs (no respect of local circumstances and hampering the building of local competence) focused on their impact on the recipients' health care system and thus correlated with the strategy of the Swiss government and the major NGOs in Switzerland to support a change in political, social and economic structures in poor countries [28].

Structure, process and quality: The absence of DD sustainability and non-relevance of donated drugs were perceived as major problems in DD processes, followed by a lack of communication between donors and recipients and high shipment and customs fees. In other studies, sustainability, coverage of local needs and communication have also been discussed as major problems for all DD strategies, and only a few specific DD programmes have been described as adequate [1, 5, 7, 12]. The suggestions for optimised DD processes were targeted at better collaboration between donors and recipients. This was the only case in which donor perceptions coincided closely with the core principles in the WHO guidelines

[4]. The quality of DDs and the implementation of DD guidelines were rarely mentioned as either problems in DD processes or as targets for optimisation.

Looking at structural characteristics, the low knowledge about DD guidelines — an average of only one-third of donors claimed such knowledge — is striking. This may explain why quality aspects, requested by the WHO GDDs (shelf-life, labelling, quality certificate) were a minor issue and why DD quality was in general of low importance in this study. Other structural and process characteristics revealed differences between the not-for-profit sector (religious and NGOs) and the for-profit sector, mainly community pharmacies. The not-for-profit sector had better knowledge about DD value, supported better the selling of DDs, had a higher quality of DDs, received more concrete lists of orders and procured DDs mainly from not-for-profit wholesalers and directly from pharmaceutical companies. A major problem for this group were shipment and custom fees. Payment of transport fees by the donor is also required in a paragraph of the WHO guidelines for DDs [4]. NGOs and religious organisations are more aware of the problems of recipients in the setting of poverty.

In the for-profit sector, pharmacies procured more than 50% of their DDs from unused drugs. After NGOs and PVOs stopped collecting unused drugs, pharmacies were overwhelmed with unexpired and complete medication returned from patients [48]. Pharmacists did not understand that "good is not good enough" and took up arguments for reusing these drugs. However, pharmaceutical companies also donated an important proportion — 38% — of unused drugs. Thus, unused drugs demonstrated a comparatively high importance in this study. There is a discrepancy between, on the one hand, the recognition of sustainability as an important issue by all stakeholders and, on the other, the opportunistic procurement of unused drugs by the private-for-profit sector. DDs of unused drugs are completely supply-driven donations. Disposed drugs are a problem in a donor country with a market-driven drug policy. It seems easier to donate these drugs than to solve the problems locally.. Donors do not recognise that these drugs could burden a recipient. Meanwhile campaigns for awareness and education have been launched in Switzerland through PsF and the Swiss society of community pharmacists [54, 55]. Unused drugs are obsolete. A study could follow up practices, views and knowledge of community pharmacists as well as representatives from industrial companies.

We conclude:

- In 2001, views of stakeholders and donors about strategies on DC and DD policy largely complied with the then current policies of the Swiss government and the core principles of the WHO DD guidelines "Maximum benefit to recipients". However, donors in particular showed an important discrepancy between their views and their practices and ignored other core principles of the WHO DD guidelines such as quality requirements (e.g. sufficient shelf-life) and knowledge about the needs and requirements of recipient countries.
- Characteristics of DD practices reported by respondents reflected a strongly supply-driven DD process with insufficient communication between donor and recipient.

- In-kind DDs have to be analysed sector-wise. Each sector has different responsibilities. Pharmaceutical companies are not well represented in this study, but today they have a major impact in DD processes. They should therefore be more fully integrated in future studies.
- Because this study reflects the situation in 2001, directly after NGOs and PVOs stopped collecting unused drugs, a follow-up of this survey could demonstrate if the WHO guidelines are fully accepted today or if there is still a need for awareness-raising campaigns.

Acknowledgements:

We would like to thank all the participants in the questionnaire survey in Switzerland for their excellent cooperation. A special thank you goes to Petra Streit for the translation of the questionnaire into French; to Nora Mariacher and to Jan Sofka for their assistance in analysing the data. These thanks are extended to colleagues at the Swiss Tropical Institute in Basel for their inputs and to Dr. Anne Blonstein for review of the manuscript. Mepha AG, Aesch and Siegfried AG, Zofingen are acknowledged for their financial support.

Figures and tables of the working paper:

Figure 1: Drug Donation System (DD System)

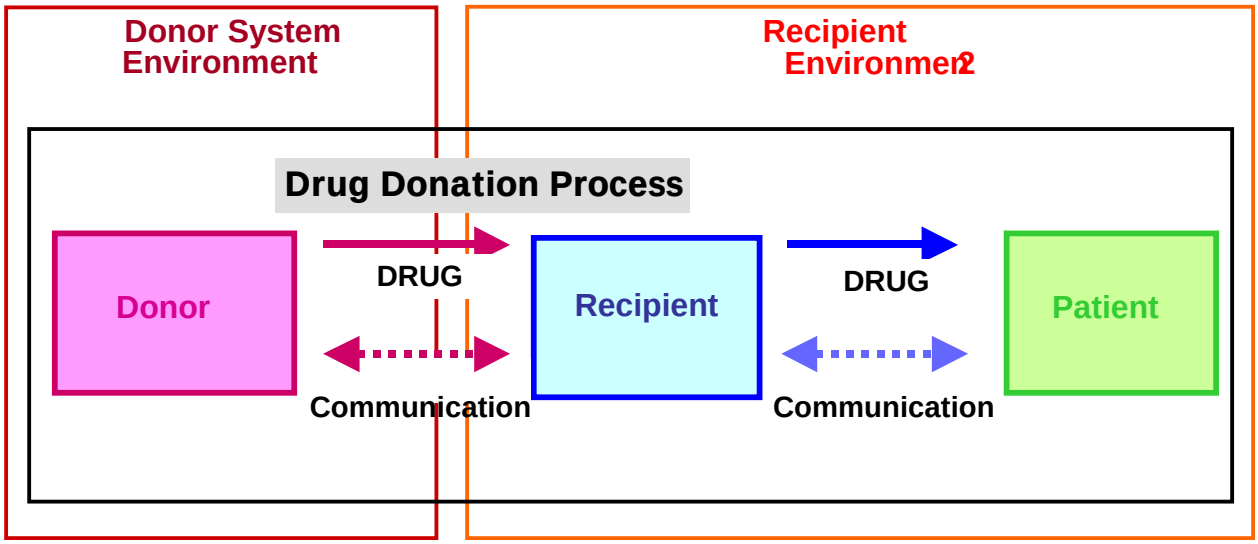


Figure 2: Optimisation of DD processes

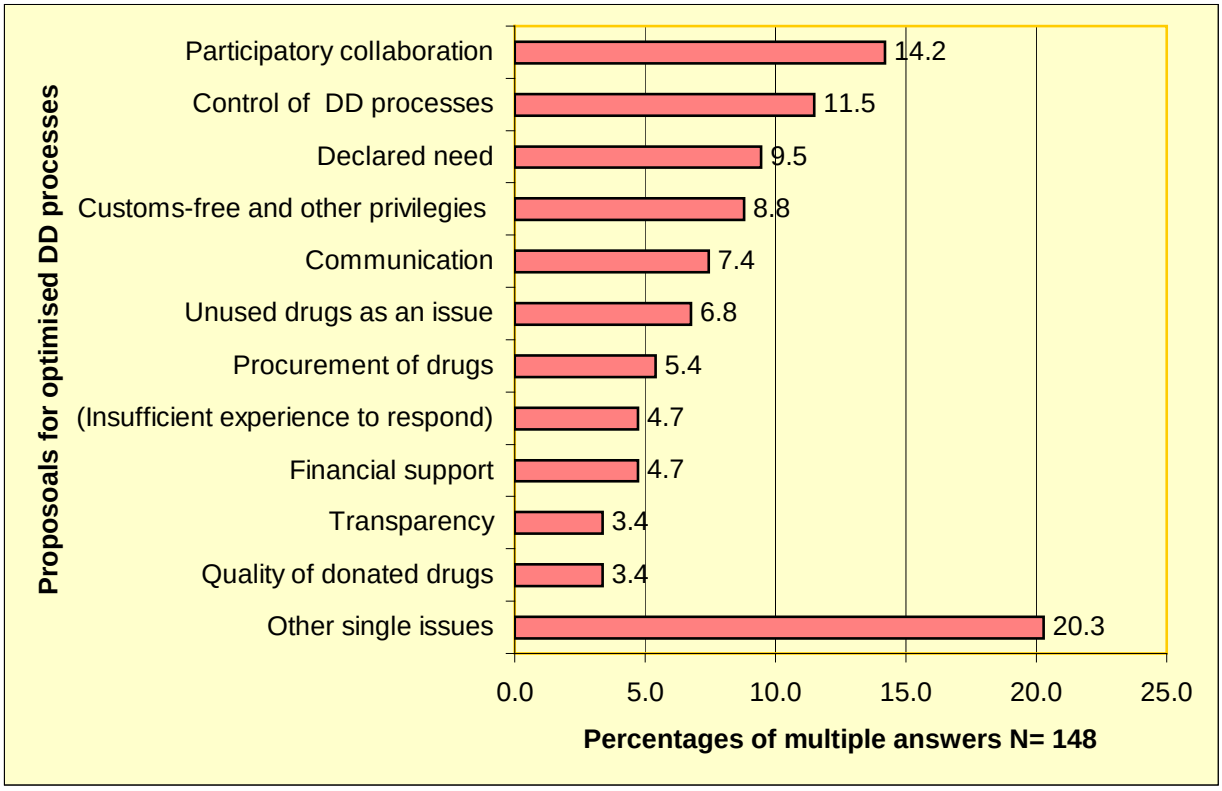


Table 1: Interagency WHO guidelines for drug donations: principles and applications [4]

Core principles	Practical application
❖ Maximum benefit to the recipient	❖ Selection of drugs
❖ Respect for the wishes and authority of the recipient	❖ Quality assurance and shelf-life
❖ No double standard in drug quality	❖ Presentation, packing and labelling
❖ Effective communication between donor and recipient	❖ Information and management

Table 2: Characteristics of the donors' DD system

		WHO Guide-lines for DDs	Questions in table:
Environment			
National Drug Policy	Guidelines for DDs, Essential Drug List (EDL)	2	8
Resources and structures			
Organisations	Characteristics of the organisations		3,4,6,7
	Involvement in DD processes		4,7
Staff competence	Accountability		7
	Knowledge of GDD		10
Document	Quality criteria for DDs		8
	Availability of WHO GDD		8
	Organisation owned GDD		8
Financial Aspects	Value of DDs		9
	Payment for DDs		9
	DDs in cash earmarked for buying drugs		4,7
	Shipment and custom fees	12	30
Processes			
Selection of drugs	Expressed need by recipient	1	10
	DDs part of the EDL of the country or of the WHO	2	10
Management	Procurement of DDs		7
Transparency	Evaluation of DD processes		10
Communication	Information of recipients	10	10
	Collaboration with partner organisations		10
	Mailing of invoice documents	10	10
Quality of the donated drug			
Quality Assurance	Certificate schemes on the quality of DDs	4	11
	Shelf-life	6	11
	Unused drugs	5	7
Presentation	Labelling	7	11
Perception of stakeholders			
Satisfaction of recipients	Long-term treatment, relevance of DDs, shipment and custom fees, transparency in DD processes, communication between donor and recipient, quality of DDs		12
Usefulness of DDs			5

Table 3: Identification of respondents (N=279)

Question	Sector	Description of organisations involved	
1. Which category identifies your organisation best?	**Public Sector N 42**	Hospitals (Admin.)	7
		Hospital pharmacy	21
		Nursing homes	2
		Federal Office of Public Health (FOPH or BAG)	1
		Cantonal Health Department	3
		Cantonal pharmacy administration and agency for therapeutic products	6
		No description	1
	Religious Sector N 24	Interdenominational	3
		Protestant churches	8
		Roman catholic	13
	NGOs N 109	NGO (2 Pharmaciens sans Frontières)	45
		PVO	54
		Foundation	3
		Individuals	6
		No description	1
	Private-for-Profit Sector N 104	Pharmaceutical companies	19
		Wholesalers	3
		Community pharmacies	76
		Private hospitals	5
		No description	1

Table 4: Characteristics of respondents (N=279)

Question	Answer	All Respondents	Public Sector	Religious Sector	NGOs	Private-for-profit Sector
	Single Answers	N 279=100%	N 42=100%	N 24=100%	N 109=100%	**N** 104=100%
2. Is drug supply the main activity of your organisation?	Yes	45.2%	40.5%	0.0%	13.8%	90.4%
	No	54.5%	59.5%	100%	86.2%	8.6%
	No answer	0.4%	0.0%	0.0%	0.0%	0.0%
3. Is your organisation involved in DDs as gifts in-kind?	Yes	48.7%	26. 2%	62.5%	43.1%	60.6%
	No	50.9%	73.8%	37.5%	56.9%	38.4%
	No answer	0.4%	0.0%	0.0%	0.0%	1.0%
4. Has your organisation ever donated earmarked money in cash to recipients for buying needed drugs?	Yes	13.6%	2.4%	41.7%	21.1%	3.8%
	No	66.3%	69.0%	54.2%	55.1%	79.8%
	I don't know	1.8%	7.1%	0.0%	1.8%	0.0%
	No answer	18.3%	21.4%	4.2%	22.0%	16.3%

Table 5: Respondents' perception of DDs

Question	Answer	
5. In which situation do you consider DDs as useful?	**Usefulness of DDs:** **From 168 (60%) respondents, a total of 327 (= 100%) answers were given**	
	Emergency situations such as disasters, refugee camps, epidemic outbreaks.	20.5%
	DDs for development cooperation, especially when need is clearly defined or for programmes (e.g. tuberculosis, HIV/AIDS, chronic diseases, malaria)	19.9%
	Economic aspects, which included mainly fighting against poverty , but also better affordability in general; lack of funds	15.3%
	Guarantee of drug availability	9.2%
	For their own project	5.8%
	When donors can control that DDs go directly from donors to recipients	4.3%
	Other features included: usefulness in any situation, well-trained health staff, guarantee that DDs will arrive at the right place	25%
6. There are reasons for and against supporting the drug supply system through in-kind DDs. Suggest some of them	**Positive features of DDs:** **From 156 (56%) respondents, a total of 202 (=100%) answers were given**	
	Economic aspects such as better affordability of drugs and reductions in costs for purchasing drugs	15.3%
	Support of poor people	11.9%
	Positive aspects of unused drugs	10.9
	Availability of drugs	10.4%
	DDs perceived as positive in any situation	5.9%
	Other features included: supporting local needs, DDs for emergency situations, DDs are a human right, controlled DD processes, DDs free of charge, trust	55.5%
	Negative features of DDs: **From 156 (56%) respondents, a total 162 (=100%) answers were given**	
	DDs do not respect local circumstances and hamper the building of local competence	14.2%
	DDs often do not meet local needs	13.6%
	DDs boost corrupt practices	9.9%
	Weak management of drug supply in recipients' countries	8.0%
	Quality aspects, especially short shelf-life	7.4%
	DDs are not sustainable	6.2%
	Other features included: dependency on donors, transport problems, no control in DD processes.	40.7%

Table 6: Identification of the donors' organisations

Question	Sector	Description of organisations involved	
7. Which category identifies your organisation best?	**Public Sector** **N 11=100%**	Hospital pharmacies No description	10 1
	Religious Sector **N 15=100%**	Interdenominational Protestant churches Roman catholic	2 4 9
	NGOs **N 47=100%**	NGOs PVOs Individuals	17 25 5
	Private for Profit Sector **N 63=100%**	Pharmaceutical companies Pharmacies No description	12 50 1

Table 7: Characteristics of the donors' organisations

Question	Answer	All Donors	Public Sector	Religious Sector	NGOs	Private for-profit Sector
	Single Answers	N 136=100%	N 11=100%	N 15=100%	N 47=100%	**N** 63=100%
8. Are you the person in-charge of DDs in your organisation?	Yes	82.4%	81.8%	66.7%	85.1%	84.1%
	No	15.4%	18.2%	33.3%	12.8%	12.7%
	No answer	2.2%	0.0%	0.0%	2.1%	3.2%
9. For what purposes did you donate drugs?	**Multiple Answers**	N 251=100%	N 20 =100%	N 28 =100%	N 92 =100%	N 111=100%
	For primary healthcare	35.9%	25.0%	50.0%	45.7%	26.1%
	On request of individuals	20.7%	25.0%	17.9%	12.0%	27.9%
	For secondary and tertiary healthcare	9.6%	10.0%	10.7%	13.0%	6.3%
	For refugee camps and during wars	8.8%	5.0%	3.6%	9.8%	9.9%
	For natural disasters	5.6%	5.0%	0.0%	5.4%	7.2%
	As earmarked in-kind DDs for specific diseases	5.6%	5.0%	7.1%	6.5%	4.5%
	As partner of a programme	4.8%	10.0%	7.1%	5.4%	2.7%
	For research activities	0.4%	0.0%	0.0%	0.0%	0.9%
	I don't know	4.0%	5.0%	0.0%	0.0%	8.1%
	Other reasons	4.8%	10.0%	3.6%	2.2%	6.3%
10. Where does your organisation procure the drugs, for donations?	**Multiple Answers**	**N 268** =100%	**N 31** =100%	**N 36** =100%	**N 105** =100%	**N 96** =100%
	Returned sold items (unused drugs)	27.6%	22.6%	13.9%	9.5%	54.2%
	From non-profit wholesalers	16.0%	3.2%	25.0%	28.6%	3.1%
	From the manufacturer	14.9%	22.6%	16.7%	17.1%	9.4%
	Saleable items from own stock	13.8%	25.8%	2.8%	2.9%	26.0%
	From pharmacies	8.6%	3.2%	19.4%	11.4%	3.1%
	From NGOs such as Pharmaciens sans Frontieres	7.8%	3.2%	16.7%	13.3%	0.0%
	From hospitals	4.1%	9.7%	2.8%	6.7%	0.0%
	As extra production for the donation	1.5%	3.2%	0.0%	1.0%	2.1%
	I don't know	0.0%	0.0%	0.0%	0.0%	0.0%
	Other reasons	5.6%	6.5%	2.8%	9.5%	2.1%

Table 8: Policies of the donor's organisations

Question	Answer	All Donors	Public Sector	Religious Sector	NGOs	Private for-profit Sector
	Single Answers	N 136=100%	N 11=100%	N 15=100%	N 47=100%	**N** 63=100%
11. Are you familiar with the WHO Guidelines for DDs?	Yes	30.9%	36.4%	20.0%	36.2%	28.6%
	No	66.9%	54.5%	80.0%	61.7%	69.8%
	No answer	2.2%	9.1%	0.0%	2.1%	1.6%
12. Do you have a copy of the WHO Guidelines for Drug Donations?	Yes	15.4%	18.2%	6.7%	25.5%	9.5%
	No	76.5%	63.6%	73.3%	70.2%	84.1%
	I don't know	5.1%	9.1%	20.0%	2.1%	3.2%
	No answer	2.9%	9.1%	0.0%	2.1%	3.2%
13. Did these guidelines influence practices with regard to drug donations in your organisation?	Yes	26.5%	27.3%	20.0%	31.9%	23.8%
	No	52.2%	36.4%	66.7%	53.2%	50.8%
	I don't know	9.6%	0.0%	6.7%	6.4%	14.3%
	No answer	11.8%	36.4%	6.7%	8.5%	11.1%
14. Has your organisation its own guidelines for drug donations?	Yes	19.9%	9.1%	6.7%	25.5%	20.6%
	No	72.1%	81.8%	80.0%	68.1%	71.4%
	I don't know	5.9%	9.1%	6.7%	4.3%	6.3%
	No answer	2.2%	0.0%	6.7%	2.1%	1.6%

Table 9: Economic aspects of the donor's organisations

Question	Answer	All Donors	Public Sector	Religious Sector	NGOs	Private for-profit Sector
	Single Answers	N 136=100%	N 11=100%	N 15=100%	N 47=100%	**N** 63=100%
15. What is the value of the DDs donated in 2000?	Value known	35.3%	18.2%	40.0%	61.7%	17.5%
	I don't know	58.8%	72.7%	60.0%	29.8%	77.8%
	No answer	5.9%	9.1%	0.0%	8.5%	4.8%
16. Do you think is it justifiable to sell donated drugs?	Yes	35.3%	0.0%	46.7%	51.1%	27.0%
	No	50.7%	63.6%	33.3%	38.3%	61.9%
	No answer	14.0%	36.4%	20.0%	10.6%	11.1%

Tabelle 10: DD processes

Question	Answer	All Donors	Public Sector	Religious Sector	NGOs	Private for-profit Sector
	Multiple answers	N203=100%	N22=100%	N22=100%	N66=100%	N93=100%
17. To which region did your organisation send drug donations?	Asia	12.3%	9.1%	9.1%	15.2%	11.8%
	Africa	30.5%	27.3%	45.5%	40.9%	20.4%
	Eastern Europe	27.1%	22.7%	22.7%	27.3%	29.0%
	South America	12.4%	13.6%	13.6%	12.1%	11.8%
	Other Regions	3.4%	4.5%	9.1%	0.0%	4.3%
	I don't know	9.9%	18.2%	0.0%	0.0%	17.2%
	No donations in 2000	4.4%	4.5%	0.0%	4.5%	5.4%
	Single answers	N 136=100%	N 11=100%	N 15=100%	N 47=100%	**N** 63=100%
18. Has your organisation ever carried out an evaluation of your donation processes?	Yes	13.2%	27.3%	20.0%	21.3%	3.2%
	No	71.3%	63.6%	46.7%	63.8%	84.1%
	I don’t know	12.5%	0.0%	26.7%	12.8%	11.1%
	No answer	2.9%	9.1%	6.6%	2.1%	1.6%
19. Does your organisation base its drug donations on an order list provided by recipients?	Exclusively	22.1%	18.2%	33.3%	44.7%	3.2%
	Partly	47.8%	72.7%	66.7%	44.7%	41.3%
	Never	24.3%	0.0%	0.0%	8.5%	46.0%
	I don't know	5.1%	9.1%	0.0%	2.1%	7.9%
	No answer	0.7%	0.0%	0.0%	0.0%	1.6%
20. Were concrete order lists submitted to you in the year 2000?	Yes	41.2%	27.3%	66.7%	59.6%	23.8%
	No	47.1%	45.5%	13.3%	29.8%	68.3%
	I don’t know	9.6%	18.2%	13.3%	8.5%	7.9%
	No answer	2.2%	9.1%	6.7%	2.1%	0.0%
21. Does your organisation cooperate with partner organisations?	Yes	38.2%	18.2%	20.0%	57.4%	31.7%
	No	47.1%	54.5%	66.7%	34.0%	50.8%
	I don’t know	11.8%	18.2%	0.0%	6.4%	17.5%
	No answer	2.9%	9.1%	13.3%	2.1%	0.0%

Tabelle 10: DD processes (continued)

Question	Answer	All Donors	Public Sector	Religious Sector	NGOs	Private for-profit Sector
	Multiple answers	N203=100%	N22=100%	N22=100%	N66=100%	N93=100%
22. Does your organisation inform the recipients beforehand about the composition and the date of shipment of the donations?	Always	44.9%	27.3%	53.3%	78.7%	20.6%
	Sometimes	8.8%	9.1%	20.0%	8.5%	6.3%
	Never	19.1%	18.2%	6.7%	8.5%	30.2%
	I don't know	24.3%	27.3%	20.0%	4.3%	39.7%
	No answer	2.9%	18.2%	0.0%	0.0%	3.2%
23. Does your organisation add invoice documents to the donated drugs??	Always	38.2%	27.3%	53.3%	61.7%	19.0%
	Sometimes	14.0%	36.4%	26.7%	12.8%	7.9%
	Never	33.8%	18.2%	0.0%	14.9%	58.7%
	I don't know	12.5%	18.2%	20.0%	6.4%	14.3%
	No answer	1.5%	0.0%	0.0%	4.3%	0.0%
24. Does your organisation donated drugs that are registered in Switzerland?	Exclusively	66.2%	81.8%	66.7%	44.7%	79.4%
	Partly	21.3%	18.2%	20.0%	34.0%	12.7%
	No	2.2%	0.0%	0.0%	2.1%	3.2%
	I don't know	10.3%	0.0%	13.3%	19.1%	4.8%
	No answer	0.0%	0.0%	0.0%	0.0%	0.0%
25. Are the drugs donated included in the WHO Essential Drug List?	Exclusively	10.3%	9.1%	13.3%	14.9%	6.3%
	Partly	34.6%	54.5%	6.7%	34.0%	38.1%
	No	1.5%	0.0%	0.0%	2.1%	1.6%
	I don't know	50.7%	36.4%	73.3%	46.8%	50.8%
	No answer	2.9%	0.0%	6.7%	2.1%	3.2%
26. Does you organisation donate drugs that are on the essential drug lists of the recipient countries?	Exclusively	5.1%	0.0%	0.0%	10.6%	3.2%
	Partly	25.0%	36.4%	13.3%	36.2%	17.5%
	No	2.2%	0.0%	0.0%	0.0%	4.8%
	I don't know	61.8%	63.6%	66.7%	48.9%	69.8%
	No answer	5.9%	0.0%	20.0%	4.3%	4.8%

Table 11: Quality of donated drugs

Question	Answer	All Donors	Public Sector	Religious Sector	NGOs	Private for-profit Sector
	Single answers	N 136=100%	N 11=100%	N 15=100%	N 47=100%	**N** 63=100%
27. How long is the average shelf-life of the drugs donated?	Min. 1 year a)	11.8%	9.1%	13.3%	23.4%	3.2%
	6 to 12 months	25.0%	9.1%	40.0%	23.4%	25.4%
	Up to 6 months	41.9%	72.7%	20.0%	31.9%	49.2%
	Expired	2.9%	9.1%	0.0%	2.1%	3.2%
	I don't know	14.0%	0.0%	26.7%	10.6%	15.9%
	No Answer	4.4%	0.0%	0.0%	8.5%	3.2%
28. Are the drug packaging text and package inserts written in a language that will be understood in the recipient country?	Always	25.7%	18.2%	46.7%	38.3%	12.7%
	Sometimes	40.4%	45.5%	20.0%	44.7%	41.3%
	Never	9.6%	9.1%	20.0%	4.3%	11.1%
	I don't know	22.8%	27.3%	13.3%	8.5%	34.9%
	No answer	1.5%	0.0%	0.0%	4.3%	0.0%
29. Does your organisation add a quality certificate to the donated drugs?	Always	3.7%	0.0%	6.7%	6.4%	1.6%
	Sometimes	11.8%	9.1%	13.3%	14.9%	9.5%
	Never	61.8%	63.6%	46.7%	53.2%	71.4%
	I don't know	20.6%	27.3%	33.3%	19.1%	17.5%
	No answer	2.2%	0.0%	0.0%	6.4%	0.0%

Table 12: Main problems with DDs in donor organisations

Question	Answer	All Donors	Public Sector	Religious Sector	NGOs	Private for-profit Sector
	Multiple answers	N 284 =100%	N 22 =100%	N 26 =100%	N 95 =100%	N141 =100%
30. What causes the main problems in the drug donation processes of your organisation?	Quantities are not sufficient for the long-term treatment of patients	22.9%	27.3%	15.4%	22.1%	23.4%
	Not relevant for the diseases of the local population	10.4%	18.2%	0.0%	1.1%	17.0%
	Shipment and customs fee	10.4%	9.1%	26.9%	28.4%	2.8%
	No communication between donor and recipient	10.4%	13.6%	11.5%	6.3%	12.1%
	Insufficient infrastructure	7.5%	4.5%	11.5%	6.3%	7.8%
	Poor quality of the donated drug	6.5%	4.5%	3.8%	2.1%	9.9%
	Guidelines for drug donations or other tools are not implemented	5.7%	0.0%	11.5%	5.3%	5.7%
	Insufficient training	5.7%	4.5%	3.8%	7.4%	5.0%
	No transparency in the donation processes	5.0%	9.1%	0.0%	2.1%	7.1%
	Others	10.4%	4.5%	15.4%	12.6%	4.3%
	None	5.0%	4.5%	0.0%	6.3%	5.0%

References

1. Peters, D.H. and T. Phillips, *Mectizan Donation Program: evaluation of a public-private partnership.* Trop Med Int Health, 2004. **9**(4): p. A4-15.
2. WHO, *World Health Organisation: Health Reform and Drug Financing: Selected Topics.* Ref.no. WHO/DAP/98.3, 1998: p. 44.
3. Reich, M.R., *The global drug gap.* Science, 2000. **287**(5460): p. 1979-81.
4. WHO, *World Health Organisation, Guidelines for Drug Donations, Revised 1999.* WHO/EDM/PAR/99.4, 1999.
5. Shretta, R., et al., *Sustainability, affordability, and equity of corporate drug donations: the case of Malarone.* Lancet, 2000. **355**(9216): p. 1718-20.
6. Berckmans, P., et al., *Inappropriate drug-donation practices in Bosnia and Herzegovina, 1992 to 1996.* N Engl J Med, 1997. **337**(25): p. 1842-5.
7. Snell, B., *Inappropriate drug donations: the need for reforms.* Lancet, 2001. **358**(9281): p. 578-80.
8. Hogerzeil, H.V., M.R. Couper, and R. Gray, *Guidelines for drug donations.* Bmj, 1997. **314**(7082): p. 737-40.
9. Junghanss, T., *Global-national-local.* Trop Med Int Health, 2001. **6:**((1)): p. 1-3.
10. Kale Oladele, O. *Review of disease-specific drug donation programmes for the control of communicable diseases*. in *MSF-WHO Workshop on "Drugs for Communicable Diseases, Stimulating Development and Securing Availability"*. 1999. Paris.
11. Buse, K. and G. Walt, *Global public-private partnerships: Part II--What are the health issues for global governance?* Bull World Health Organ, 2000. **78**(5): p. 699-709.
12. Reich, M.R., *An Assessment of US Pharmaceutical Donations: Players, Processes, and Products,* ed. e. Reich MR. 1999, Boston: Harvard School of Public Health: Reich M.R.
13. Ombaka E. *Drug donations at the recipient end - a perspective from Kenya and Tanzania*. in *European expert seminar on appropriate drug donations.* 1999. Oegstgeest, The Netherlands.
14. Autier, P., et al., *Drug Donations In Post-emergency Situations*. 2002, Washington DC: The International Bank for Restruction and Development/The World Bank.
15. WHO, *World Health Organisation, First years experiences with guidelines for drug donations.* <http://whqlibdoc.who.int/hq/2000/WHO_EDM_PAR_2000.1.pdf>, 2000.
16. Reich, M.R., et al., *Pharmaceutical donations by the USA: an assessment of relevance and time-to-expiry.* Bull World Health Organ, 1999. **77**(8): p. 675-80.
17. Gehler Mariacher, G., et al., *Optimizing in-kind drug donations for Tanzania-a case study.* Int J Health Plann Manage, 2007.
18. Gehler Mariacher G, et al., *In-kind Drug Donations for Tanzania - Stakeholders view - a questionnaire survey.* World Health and Population, http://www.longwoods.com/product.php?productid=18771&cat=469&page=1, 2007.
19. Gehler Mariacher G, et al., *Practical Solutions for Optimised Drug Donation Processes in Tanzania, Recommendations from an Intersectoral Workshop.* Submitted to East African Medical Journal, 2007.
20. Holenstein, R., *Was kümmert uns die dritte Welt, Zur Geschichte der internationalen Solidarität in der Schweiz*. 1998: Chronos Verlag Zürich.
21. Historisches Lexikon der Schweiz, *"Hilfswerke"*. http://hls-dhs-dss.ch/index.php.
22. Paul Jenkins and Historisches Lexikon der Schweiz, *Basler Mission, Missionsarbeit im Wandel (3).* http://hls-dhs-dss.ch/index.php.
23. Swissmedic, http://www.swissmedic.ch/cgi/sitemap/index.asp?lang=2&all=true.
24. BAG Bundesamt für Gesundheit, *Schweiz, Bundesgesetz über Arzneimittel und Medizinprodukte, Heilmittelgesetz HMG.* http://www.admin.ch/ch/d/sr/8/812.21.de.pdf, 2002.
25. Swiss Agency for Development and Cooperation SDC, *http://www.deza.admin.ch/en/Home*.
26. State Secretariat for Economic Affairs SECO, *http://www.seco.admin.ch/index.html?lang=en*.
27. UN Millenium Development Goals, *http://www.un.org/millenniumgoals/*.
28. SDC Strategy 2010, *http://162.23.39.120/dezaweb/ressources/resource_en_23567.pdf*. http://www.deza.admin.ch/en/Home/Activities/Strategic_orientation.

29. SDC Health Policy 2003-2010, *http://162.23.39.120/dezaweb/ressources/resource_en_24123.pdf*. http://www.deza.admin.ch/en/Home/Themes/Health_Human_and_social_development/Health.
30. Swiss Agency for Development and Cooperation SDC, *http://www.deza.admin.ch/en/Home/Countries/Near_Middle_East/Gaza_Westbank*.
31. Direktion für Entwicklung und Zusammenarbeit DEZA and Institut Universitaire d'Etudes du Développement IUED, *Schweizerische Hilfe für Entwicklungsländer und Oststaaten.* 1998.
32. Christian Medical Commission, *Guidelines for Donors and Recipients of Pharmaceutical Donations.* Bulletin Medicus Mundi, 1989. **40**: p. 12-15.
33. Que N. *Donated drugs: the Malawi experience*. in *European expert seminar on appropriate drug donations.* 1999. Oegstgeest, The Netherlands: WEMOS.
34. Degnbol-Martinussen, J. and P. Engbert-Federsen, *Aid, Understanding International Development Cooperation*. 2003: Zed Books Ltd London New York. 350.
35. Medi Swiss, *http://www.usitawi.org/index.cfm?uuid=66D45F5CBCDDC0C4988F9C9E0A085F1F&o_lang_id=1*.
36. Gaby Gehler Mariacher, et al., *Bridging the Gap - Rendering Drug Donations more effective.* European Expert Seminar on appropriate Drug Donation, Amsterdam, the Netherlands, June 11 and 12, 1999.
37. Brigitte Chassot Gétaz and Kathi von Däniken, *Mit der Privatwirtschaft die Milleniums-Entwicklungsziele erreichen?* Dezaweb, http://162.23.39.120/dezaweb/ressources/resource_de_25249.pdf.
38. Catherine Schümperli Younassian and Dommen Eduard, *Oeffentlich-private Partnerschaften: Bedeutung und Herausforderung für die Entwicklungszusammenarbeit.* IUED, http://www.unige.ch/iued/new/information/publications/pdf/ppp_intro-all.pdf.
39. Christian, W., *Private lösen Probleme nicht.* Med in Switzerland, http://www.medicusmundi.ch/mms/services/med, 2005. **Nr. 4**.
40. Widdus, R., *Public-private partnerships for health: their main targets, their diversity, and their future directions.* Bull World Health Organ, 2001. **79**(8): p. 713-20.
41. Erbacher Manuel, *Verhaltensanalyse der Grosskonzerne im Bereich der Orphan Drugs.* Master Thesis, Wirtschaftswissenschaftlicher Fakultät, Institut für Organisation und Unternehmenstheorien, Universität Zürich, 2006: p. 100.
42. Buse, K. and G. Walt, *Global public-private partnerships: Part I--A new development in health?* Bull World Health Organ, 2000. **78**(4): p. 549-61.
43. Guilloux, A. and M. Suerie, *Hidden Price Tags.* Access to Essential Medicines Campaigns, Médecins Sans Frontières, MSF, <http://www.accessmed-msf.org/prod/publications.asp?scntid=492001217138&contenttype=PARA&:>, 2000: p. 27.
44. Roche, *Medicines to treat people in developing countries.* http://www.roche-hiv.com/portal/eipf/pb/hiv/Roche-HIV/medicines_to_treat_people_in_developing_countries.
45. Roche, *Drug Donation Policy.* http://www.roche.com/pages/downloads/sustain/pdf/drug_don_pol.pdf.
46. Novartis, *About the Novartis MDT leprosy donation.* http://www.novartisfoundation.org/page/content/index.asp?MenuID=364&ID=1010&Menu=3&Item=43.2.4.
47. Novartis, *Novartis Foundation's activities in TB and about the Novartis TB drug donation.* http://www.novartisfoundation.org/page/content/index.asp?MenuID=365&ID=1011&Menu=3&Item=43.3.2.
48. Gehler Mariacher G, Rota M, and Hersberger KE, *Rücklauf ungenutzter Medikamente in Apotheken.* Schweiz Rundsch Med Prax., 1998. **87(43)**: p. 1441-3.
49. Basel Convention, *Full text of the Basel Convention, No 97/012.* http://www.basel.int/.
50. Questionnaire, The original copies of the questionnaires "Drug Donations in Tanzania" and "Dodoso: Madawa ya msaada Tanzania", available from Gaby Gehler, Swiss Tropical Institute, Socinstr. 57, 4002 Basel, Switzerland or <www.pharma.unibas.ch/pharmacare/drugdonations.htm>, 2001.
51. Mayring, P., *Qualitative Inhaltsanalyse Grundlagen und Techniken*. 6 ed. 1997, Weinheim und Basel: Beltz Verlag. 135.

52. Flick, U., *Qualitative Sozialforschung: eine Einführung*. Qualitative Sozialforschung: eine Einführung, 5th ed, ed. R.E. 55654. 2000, Hamburg: Rowohlt Taschenbuch Verlag.
53. Brugha, R. and Z. Varvasovszky, *Stakeholder analysis: a review.* Health Policy Plan, 2000. **15**(3): p. 239-46.
54. Apotheker ohne Grenzen, http://www.psf.ch/de/.
55. Gehler Mariacher G, *Gut gemeint ist nicht gut genug.* Schweizerische Apothekerzeitung, 2004. **24**: p. 931-32.

PART 5

GENERAL DISCUSSION AND CONCLUSIONS

9 General discussion and conclusion

The aim of this research project was to gather knowledge about stakeholders' views and practices with regard to in-kind drug donations (DDs) in Tanzania and to develop suggestions for optimised drug donation processes. DDs are an important issue in public health, whose purpose as a part of development cooperation (DC) is to fill the gaps in access to essential drugs in low-income countries. Informal reporting through news and letters regularly mention negative consequences of DDs, although the World Health Organisation (WHO) in cooperation with major international agencies active in humanitarian relief has issued revised guidelines for DDs [WHO, 1999]. However, peer-reviewed literature on the performance of DDs is scarce, especially on the impact of DDs on the drug supply system of a recipient country within the framework of DC. This project, therefore, set out to explore in depth a topic relevant to contemporary DC, and based on its key findings it has been possible to formulate practical solutions for the optimisation of DD processes in Tanzania.

Key findings were that a) in Tanzania, DDs were highly accepted by recipients and stakeholders for overcoming drug supply gaps in the context of poverty, b) DDs often did not cover priority needs, c) clearly defined accountability, availability of data and better communication between donor and recipient could optimise DD processes, d) suggestions of recipients for optimisation of DD processes corresponded fully with the principles of the Tanzanian and the WHO guidelines for DDs and e) Swiss DD practices reflected a mainly supply-driven DD process.

After presenting the strengths and limitations of this study, the discussion continues with the general objectives of the research undertaken and a) provides a characterisation of DD processes in Tanzania, b) explores the similarities and discrepancies in the views of Tanzanian recipients and Swiss donors, c) makes suggestions for optimised drug donation processes and d) discusses the implications for future research and makes recommendations for action.

9.1 Strengths and limitations

The project was carried out from 2000 to 2002 within the healthcare systems of Tanzania and Switzerland. Due to the lack of research in these areas, a stakeholder analysis and a participatory approach were used, which actively involved stakeholders in the design process of this research project. A strength of the stakeholder analysis is that it identifies views, knowledge and openness to change. It tends not to provide facts. Stakeholders in this context were recipients and donors from each sector involved in drug supply and DDs (public, religious, private-non-profit and private-for-profit), covering the entire country in each case, and from each level of decision-making. When employing the general term stakeholder, Tanzanian stakeholders are meant. Swiss stakeholders are defined as such. Both the participatory approach using stakeholders and the involvement of different sectors allowed an appropriate

analysis. The definition of an in-kind DD was comprehensively conceptualised according to the definition of DDs in the Tanzanian guidelines for DDs, which covers all DD strategies [MOH, 1995]. Thus, this approach made it possible to describe the entire DD process for the total range of donation strategies: in-kind DDs given a) in the framework of a programme, b) as single donations from individuals or c) as corporate DDs from pharmaceutical companies. It was beyond the scope of this project to explore the extent to which the results obtained might be representative for other countries and for a different time frame.

This approach focused on the system as a whole. It was possible to assess differences between sectors, but it was difficult to obtain very detailed insight into single DD processes or to distinguish unequivocally between different strategies for donating drugs. The outcome of DD processes at the patient level was not assessed.

By using tools of qualitative research and the triangulation of methods, a more complete picture of the investigated problem was achieved. A stepwise strategy enabled the analysis at the different levels of the DD system: a) literature review and document analysis for description of the context, b) a postal, self-administered, semi-quantitative questionnaire in Tanzania and in Switzerland for defining problems in DD processes, c) key informant interviews in which the interviewees could reflect on the results of the Tanzanian questionnaire survey within the context of public health issues d) a workshop for elaborating practical solutions for the optimisation of DD processes in Tanzania.

Some limitations were encountered when applying these methodological approaches. In Tanzania, relevant documents and grey literature were scarce and little printed material was available. In the questionnaire survey, some respondents might have been biased because they were themselves recipients of DDs. The questionnaire was distributed to the heads of districts, dioceses and facilities who themselves selected the respondents, giving rise to an additional selection confounder. Third, the questionnaire was sent out in Tanzania either in Swahili or in English according to a specific selection procedure (see questionnaire survey in Tanzania [1]). Some respondents did not understand English, but nevertheless filled in the questionnaire. All the key informant interviews were conducted in Tanzania by the author herself, and while this provided consistent data collection, the results might be influenced by her experience and attitudes.
In Switzerland the target, based on a WHO study on experiences with the guidelines for DDs [WHO, 2000c], of one-third eligible questionnaires was not achieved despite sending out a reminder. This leads to the assumption that for non-donors (the majority among the non-returnees), DDs may represent a rather marginal issue.

9.2 Characterisation of DD processes in Tanzania

A discussion about DDs is at the same time a discussion about the health and drug supply system of donor and recipient countries. The questionnaire survey in Tanzania [1] and the subsequent key informant interviews [2] showed that the performance of a health system has a major impact on the quality of DD processes. Accordingly, and in agreement with earlier published studies and reports, the DD system in Tanzania was influenced by major contextual factors: poverty, a resource-constrained economy, donor dependence as well as a weak infrastructure [Reich MR, ed., 1999]. The primary reasons for the acceptance of donated drugs were non-availability and non-affordability of drugs, the root cause of both being poverty [1]. Nevertheless, stakeholders — both local health workers and those at organisational and administrative levels in both the public and the private-for-profit sector — understood the ideological and practical constraints of poverty: it impacts on perception, may hinder a critical view of DDs, creates dependency and restricts free decision-making [2].

The debate about whether or not to accept DDs was a marginal issue in this research project: the focus of the debate was on the strategy for donating drugs. For any DD strategy, the maximum benefit is only achieved by sustainably meeting local needs [2]. Recipients and non-recipients appreciated the support of DDs provided within the framework of DD programmes with a known public health effect. Tanzania benefits from many such programmes. DDs given from a surplus, as gifts from individuals or as single-source DDs, were perceived as problematic. These DDs may ease temporary drug supply gaps. However, they raise an ethical conflict between individuals, who are not able to afford needed drugs, and the vision of the government. Corporate DDs can be helpful as short - or mid-term DDs, where they disburden the annual budget.

Tanzanian context

Tanzania has developed the instruments for an effective regulation of DD processes. This is important for supporting recipients at the end of the supply chain in voicing their specific needs and in refusing poor-quality DDs, especially within the context of poverty. Stakeholders made a strong appeal to donors to respect the essential drug list (NEDLIT). Adherence to the NEDLIT could overcome one of the major problems encountered with DDs, i.e. that they are “not meeting local needs”. Indeed, the Tanzanian NEDLIT is very well elaborated. It corresponds to the prevalent causes of morbidity in the country, it contains drugs that are affordable, it stratifies drugs by facility level and it is adapted to the educational level of the health staff. Nevertheless, the mere existence of NEDLIT does not guarantee its application, and a failure to implement the “guidelines for DDs and other tools for a good donation practice” was revealed by this study as being the second most important problem in the Tanzanian DD process [2]. The claim was confirmed by the questionnaire survey, in which less than half the recipients knew either the Tanzanian or the WHO guidelines for DDs. Compliance either with the WHO and/or the Tanzanian GDD would support an optimal DD process. However, these tools need to be better implemented and enforced

by both recipients and donors. In the Tanzanian DD system, the GDD are in fact distributed to the public and to the religious sector. Furthermore, in the religious sector, this distribution was even connected with continuing education [2], but according to a WHO study, in 2003 this training was still not optimal [Banda M *et al.*, 2006] . However, enforcement of the guidelines remains a global challenge. This problem of disregard or (apparent) ignorance of DD guidelines is not restricted to the Tanzanian DD system, as recently demonstrated by Hechmann [Hechmann R and Bunde-Birouste A, 2007] and Autier [Autier P *et al.*, 2002] for Sri Lanka and Mozambique

Resources and structures

Dispensary staff were not sufficiently trained to handle drugs from abroad and were prone to accept poor-quality in-kind DDs. The issue of human resource constraint ran like a red thread through the entire project. This is a general issue for healthcare systems in sub-Saharan Africa [WHO, 2006b] and is already being addressed in the objectives of the Health Sector Reform (HSR) in Tanzania [Wiedenmayer K and D Mtasiwa, 2000; Bürki O, 2001; Wiedenmayer K, 2004].

The quality of structures must be improved before problems of the DD process can be addressed [Mtasiwa D *et al.*, 2003]. In the eyes of workshop participants, a lack of quantitative data was a major structural failure [3]. This problem was confirmed by the study, where many of those answering the questionnaire could not provide concrete answers on the value of or coverage by DDs [1,2]. Furthermore, only half of the recipients had a list of needed drugs, which hinders efficient communication with donors. Stakeholders assumed that data on needs were not collected because needs assessment had not been systematised [2]. The absence of data on drug needs and on the value of the supply through DDs hampers a discussion of alternatives to DDs. This lack was also perceived as a major drawback for decision making within the strategy of the HSR, such that recipients had no power to take action in the field of DDs [Ministry of Health, 1999a,b; Bürki O, 2001]. In particular, missing data at the local level in combination with inadequately trained staff impeded their ability to refuse unneeded DDs or DDs of questionable quality. A lack of data also posed problems for accountability, not only between donors and recipients but at the local level as well. Another reason for low accountability was that often there was no person in charge of DDs in the various organisations involved [1,2]. Perhaps this is a consequence of the decentralisation of DD processes.

Knowledge of the value of DDs is prerequisite for judging the economic impact of DDs on drug supply, but arriving at reliable estimates of the value of DDs is far from straightforward. Only 27% of recipients were able to estimate the monetary value of DDs, and there was general agreement in the study that establishing the value of DDs given to Tanzania is difficult, except for programmes with a clearly defined budget. The stakeholders asked: How, does one estimate the monetary value of an in-kind DD when, for example, the drug is nearly expired, not well labelled or lacks a quality certificate? The pharmaceutical

quality of a DD should be optimal if it is to be compared with the wholesale price of its generic equivalent in the recipient country, as called for by the WHO guidelines [WHO, 1999]. The Tanzanian GDD do not address the issue of value [MOH, 1995]. When considering value, DD-related costs have to be acknowledged as well. The transaction costs, evoked by transport, shipment fees and taxes for customs clearance, and costs for disposal can be higher than the value of the donated drug.

Process

DDs in the framework of DC should be integrated into a country's drug supply system and must be planned as sustainable support. This is a major task in Tanzania, given that an estimated average of 27% of the recipients' drug supply was covered by DDs. There is no substantive reason to handle a DD and a purchased drug as different kinds of goods [2]. The management cycle of DDs has to follow the same quality standards as the management of purchased drugs. The key informant (KI) study [1,2] found that the procurement of donated drugs, mostly given to primary and secondary healthcare institutions, and in the framework of programmes lacks transparency. Transparency, however, is prerequisite for a stable supply, and its absence undermines the endeavours of recipients to optimise their drug supply system. According to stakeholders, transparency in the procurement of DDs is not only a problem between donors and recipients but also within the local drug supply system. Distribution failures, such as storage and transport problems, reflect problems reported in the literature. Finally, irrational use of drugs is a serious problem in Tanzania [Wiedenmayer K, 2004]. If unknown drugs are given, problems with rational drug use and, possibly, adverse drug reactions are anticipated.

Crucial for an appropriate DD process is the communication between donors and recipients. Without appropriate communication, the supply of requested drugs cannot be improved, local needs are not met and transparency is not guaranteed. Communication is basic for a participatory collaboration of donors and recipients. According to stakeholders' experience, however, donors did not ask what is needed in advance and supported a supply-driven donation process. Stakeholders would prefer a pull approach, in which the recipient has a say in the content of DDs. Important barriers for adequate communication between recipients and donors include cultural differences and the recipients' self-perception that they lack power.

Quality of DDs

In the questionnaire survey [1], drug quality was perceived as a minor problem, which may reflect the pyramid of need and which reveals the daily challenge to the Tanzanian healthcare system to cope with economic constraints and the problems of drug supply sustainability. In contrast, KIs were worried about the poor quality of donated drugs [2]. DD quality should be adapted to the national quality assurance procedures, with more stringent control at customs, and the recent efforts of the government should be

supported. Theoretically, all drugs, including DDs, have to be submitted for registration. This is an official obligation, which in practice is difficult to obtain [MOH, 2000].

Inappropriate DDs create an extra workload in terms of sorting, storage and distribution. They cause costs for disposal and they can easily overstretch human resources. KIs discussed three major DD quality issues: unused drugs or leftovers, the labelling of DDs and the expiry date [2]. Unused drugs boost stockpiling and encourage pilfering and black market sales. Together with mislabelled DDs, they were perceived as another reason for irrational drug use. There was a feeling among many stakeholders that donors sometimes wanted to dispose of leftovers. The donation of unused drugs should definitively come to an end. The donation of expired drugs is simply illegal, not a matter — because of the risks — of conscience or ethics. Expiry dates are important, because weak drug supply systems burdened by storage, transport and climate problems are challenged to maintain the quality of DDs [Ette EI, 2004].

9.3 Similarities and discrepancies between the views of Tanzanian recipients and Swiss donors

This research project confirmed that improved communication between donor and recipient is crucial if DD processes are to be optimised [Hogerzeil HV *et al.*, 1997; Snell B, 2001; Autier P *et al.*, 2002]. The results from the questionnaire survey in Switzerland [3] have given first insights into the donor system and its possible influence on DD processes. Finally, a comparison of the results from similar questionnaire surveys with recipients and donors makes it possible to identify similarities and discrepancies in their views and practices that may act as possible barriers to good communication and, thus, donation practice.

Perception

Swiss stakeholders (once again, both inside and outside the donation system) perceived economic aspects and the support of poor people as the most important features determining DD usefulness. In this case, Tanzanian and Swiss stakeholder views coincided. Nevertheless, as this project highlighted, many problems occur during the DD process that burden the recipient substantially. As revealed by the already mentioned Harvard study [Reich MR, ed., 1999], despite a willingness to improve human welfare by supporting poor people, cultural barriers and power differentials are important barriers in DC. Thus, somewhat in contrast to the recipient perspective, in the eyes of Swiss stakeholders, the most negative aspects of DDs comprise issues which burden the healthcare system of a recipient country: DDs do not respect local circumstances, hamper the building up of local competence, often do not meet local needs and boost corrupt practices.

Both Swiss and Tanzanian stakeholders appraise the issue — “quantity is not enough for long-term treatment” — as the most important problem of all the DD processes. Thus both refer to the problem of sustainability of DD processes. In general, Swiss stakeholder agree with the Tanzanians that only DDs given within the framework of programmes are useful, because there, need is clearly defined.

Swiss context

Switzerland has no specific law or regulation for handling DDs, which might explain why only 30% of Swiss donors knew the WHO guidelines for DDs. This result, however, coincided with that for Tanzanian, where recipients were only better informed about their own guidelines. Switzerland does not practice the essential drug concept. Nevertheless, both Tanzanian recipients and Swiss donors claimed that donated drugs should comply with the WHO or the recipients' country essential drug list. Despite this apparent commitment, only 60% of donated or received DDs were totally or partly included in the WHO essential drug list.

Resources and structure

Comparable with the findings for Tanzanian recipients, two-thirds of Swiss donors were not able to estimate the value of DDs. This result probably reflects the high proportion of donors in the for-profit sector (community pharmacies and pharmaceutical companies), which donated unused drugs and were uninterested in their value. The Tanzanian result, on the other hand, was associated with a lack of data. Another structural problem was the burden of custom fees: In both countries this posed a major problem, especially for organisations from the not-for-profit sector. In Tanzania, these organisations simply cannot afford to pay customs fees. This issue, however, is dealt with clearly in the WHO guidelines for DDs, which state that either donors must bear costs or they should, at least, discuss the responsibility for such costs with recipients before making a donation.

Process

In the DD process, donors play the role of providers, and are thus directly involved in the selection and procurement of the donated drug. Apart from respecting the recipients' essential drug list and import regulations, drugs should ideally only be donated in response to specific requests, but this is not always the protocol followed by Swiss donors and not always reality for Tanzanian recipients. In this context, both agree that better communication is essential. Without appropriate communication between donor and recipient, the supply of requested drugs cannot be improved, local needs are not met and transparency is not guaranteed.

Quality

Rating the main problems of DD processes, both the Swiss and the Tanzanian stakeholders placed quality low on their list. However, donated drugs did not comply with requested standards [WHO, 1999], even less so in Switzerland than in Tanzania.

Because this study reflects the situation in 2001, directly after non-governmental organisations (NGOs) and private voluntary organisations (PVOs) stopped collecting unused drugs, the donation of unused drugs was a major issue. There is a discrepancy between, on the one hand, the recognition of

sustainability as an important issue by all Swiss stakeholders and, on the other, the lack of understanding by the private-for-profit sector that unused drugs should no longer be donated. DDs of unused drugs are completely supply-driven donations and in the eyes of Tanzanian stakeholders absolutely obsolete. Unused drugs are a problem in a donor country with a market-driven drug policy, and it has seemed easier to donate these drugs than to solve the problems locally. Donors have failed to recognise that these drugs can burden a recipient. Meanwhile, campaigns for awareness and education have been launched in Switzerland through Pharmaciens sans Frontières (PSF) and the Swiss Society of Community Pharmacists [Apotheker ohne Grenzen; Gehler Mariacher G, 2004].

9.4 Suggestions for optimised drug donation processes

Suggestions of Tanzanian stakeholders were a logical consequence of the main problems identified [1,2] and were consistent with the core principles of the WHO guidelines for DDs [WHO, 1999]: a) maximum benefit for the recipients (meeting local needs), b) respecting the wishes of the recipient (participatory approach), c) no double standard in quality (quality aspects) and d) effective communication between donor and recipient.

To meet local needs, it is important to instantiate routine data collection. Modern communication technology helps to establish and maintain a continuous exchange of information and a participatory collaboration of donors and recipients. To ensure their better use, implementation of the existing national regulations and guidelines needs monitoring (Workshop [4]). Optimisation of the quality of donated drugs requires a more transparent donation process. Stakeholders' views on barriers for optimising DD processes in Tanzania reflected targets of the Health Sector Reform (HSR) and issues raised by WHO Health Reports: insufficiently trained and poorly informed health workers as well as a lack of accountability and missing data [MOH, 1999; WHO, 2000b]. Results from the Swiss study [3] pinpoint a strong need for awareness raising among donors and improved dissemination of the guidelines.

Stakeholders came up with some significant questions:

a) Instead of DDs, why not donate money to support local activities and the HSR strategy? This would overcome the problem of treating DDs like gifts and the sometimes questionable motivation of donors. DDs in cash are also an expressed request of the Tanzanian GDD in order to support local manufacturers [MOH, 1995]. However, earmarked donations in cash were given to only 16% of the recipients.

b) Why should patients not pay for DDs according to the customary financing schemes? With a revolving drug fund (RDF), based on such payment for drugs coming from DDs, the Christian sector had achieved first positive results, according to stakeholders of the religious sector. The RDF helps the Christian health facilities build up a sound basis for a self-reliant drug supply [Kuper M and EC Njau, 1998] .

9.5 Implications for further research

This research project confirmed that a donated drug is not sustainable in the long-term and addresses symptoms rather than curing underlying problems in a healthcare system. Future research arising from the findings should therefore include appraisals of DDs within the framework of programmes, sustainable provision of needed drugs, the impact of guidelines for DDs and optimisation of communication between donors and recipients.

DDs in the framework of programmes

Donating drugs within the framework of programmes was perceived as the best DD strategy. Tanzania is involved in many DD programmes. A general question could be: are DD programmes evaluated and, if so, by what criteria? A meta-analysis of available reports and evaluations of programmes established in Tanzania could generate knowledge about benefits, drawbacks, differences and synergies between programmes. Such an analysis could also enable mutual learning from experiences. Possible criteria for such an analysis might be: the adoption of Tanzanian standards, such as the guidelines for DDs and NEDLIT; sustainability; accountability; collaboration between sectors and between donors and recipients; value of DDs; costs emerging at the local level. An issue, which is also important in the context of DD programmes, is whether the drug is integrated in basic healthcare or is given only within a strictly vertical programme. A further interesting question in this context is whether the donated drug is later integrated in the NEDLIT. DDs should be coherent with the national drug policy — only this way will access to essential drugs improve [Shretta R *et al.*, 2001]. Furthermore, it would be interesting to compare the strategies of donating money for buying drugs versus DDs given within the framework of a programme (i.e. money versus programme)

Sustainable provision of needed drugs

This study project was carried out within the framework of the Dar es Salaam Urban Health Project (DUHP) and work being undertaken at the Swiss Tropical Institute. The purpose of the DUHP was to promote long-term improvement of health service delivery at district level [Wiedenmayer, 1998]. Thus, one of the DUHP objectives was to assure drug availability and rational drug use in government health facilities in Dar es Salaam, which, since April 1992, have been supplied with essential drugs financed by decreasing contributions from the Swiss government. Today, the Dar es Salaam drug supply is integrated in the government's drug supply system. A case study could describe this positive example of a DD process and analyse the transition from a totally DD-dependent supply to a sustainable drug supply system under local conditions in a low-income country.

Guidelines for DDs

Guidelines for DDs are the global standard for a good DD practice. They were perceived as important and helpful for a good DD process [1]. Differences in distribution, implementation and education are a local

issue. A comparative study could evaluate the application and impact of the guidelines among sectors and gather important information for the outstanding update of the Tanzanian guidelines for DDs [Muhume J, 2007].

As mentioned above, Swiss stakeholders had low awareness of guidelines for DDs and current studies pinpoint an ongoing lack of donor knowledge about good DD practice. A case study analysing a reform process, the implementation of guidelines and the effect of this intervention could raise awareness among donors.

Communication between donors and recipients

Transparency and collaboration are prerequisite for good DD practices, as is effective communication between donor and recipient [1,2,3,4]. Today, instruments of modern technology are globally widespread, and information technologies (IT) are generating major contextual changes. Technically, communication should no longer be a problem, but this is to sketch an ideal scenario, and many questions remain: how are modern technologies used between and among donors and recipients in the DD process, what are possible barriers to the application of this technology and how is communication optimised through IT? Investigating such questions could be based on operational research or action research for education development.

Stakeholders research recommendations:

Stakeholders proposed further research for better understanding of the impact of DDs in the context of drug supply, not only at the local level, but also in the context of DC [2]:

- There needs to be independent research on DD quality.
- More information is needed about the financial value of DDs and their transaction costs.
- There was dissent among KIs about the role of the patient: further studies are needed to elaborate the attitude of patients towards DDs in order to improve rational drug use.
- More and better statistics on drug requirements and on the pharmaceutical market in Tanzania are needed to enable a discussion about alternatives to donations

Validation of these research findings and generating tools for monitoring:

The questions to what extent is this research project applicable to other countries receiving DDs in the framework of DC, stimulate the proposal to elaborate a few relevant indicators (such as a core indicator package) out of this research project. These indicators could provide a simple tool for regularly monitoring DD systems and should be applicable to any DD process. The process of elaborating these indicators helps at the same time to validate this research project.

9.6 The way forward

The following are practical solutions put forward for optimising DD processes in Tanzania [4]:

To recipients:

National Guidelines for DDs:

- Adapt the Tanzanian guidelines for DDs (published in 1995) to current standards, integrate specific recommendations for DDs that are part of private-public partnerships and finalise the current revision.
- Translate the guidelines for DDs into Swahili and add to these guidelines models for needs assessment

Private-public collaboration:

- Strengthen the collaboration and sharing of experiences between the public and the private sectors

Coordination of DD processes

- Establish an autonomous centralised body for coordinating DDs given to the Tanzanian healthcare system. This proposal of workshop participants has to be discussed carefully. In a resource constraint environment, the first recommendation is to use already existing projects and tools.

Support of recently established actions through the Tanzania Food and Drugs Authority (TFDA):

- DDs should undergo the same quality assurance at the entry points as imported drugs [SEAM, 2003].
- Continue a systematic and comprehensive collection of DD data as recently initiated by the TFDA.

To donors:

Participatory collaboration:

- Conduct a preliminary analysis of healthcare system organisation in Tanzania and of existing storage and transport facilities and respect the national drug policy of Tanzania and the guidelines for DDs

Sustainability:

- Consider that DDs should be demand and not supply driven

Respect of local reforms:

Donate money to support local activities and the HSR strategy and as requested in the Tanzanian guidelines for DDs in order to support local manufacturers.

10 References[1]

Anderson S, Huss R, Summers R,Wiedenmayer K (2004). "Managing pharmaceuticals in international health." Birkhäuser Verlag Basel: 256 pages.

Apotheker ohne Grenzen http://www.psf.ch/de/.

Autier, P, Govindaraj, R, Gray, R, Lakshminarayanan, R, Nassery, H,Schmets, G (2002). Drug Donations In Post-emergency Situations. Washington DC, The International Bank for Restruction and Development/The World Bank.

BAG (2002). "Bundesamt für Gesundheit, Schweiz, Bundesgesetz über Arzneimittel und Medizinprodukte, Heilmittelgesetz HMG." http://www.admin.ch/ch/d/sr/8/812.21.de.pdf.

Banda M, Ombaka E, Logez S,Everard M (2006). "Multi-Country Study of Medicine Supply and Distribution Activities of Faith-Based Organizations in Sub-Saharan African Countries." WHO, World Health Organisation and EPN, Ecumenical Pharmaceutical Network

Basel Convention "Full text of the Basel Convention, No 97/012." http://www.basel.int/.

Berckmans, P, Dawans, V, Schmets, G, Vandenbergh, D,Autier, P (1997). "Inappropriate drug-donation practices in Bosnia and Herzegovina, 1992 to 1996." N Engl J Med **337**(25): 1842-5.

Brugha, R,Varvasovszky, Z (2000). "Stakeholder analysis: a review." Health Policy Plan **15**(3): 239-46.

Bürki, O. (2001). "End of Assignment's Report: Sector-wide Approach in Tanzania, The Health Sector Example, The observation from a Bi-Lateral." SDC Swiss Agency for Development and Co-operation, Dar es Salaam, Tanzania.

Buse, K,Walt, G (2000a). "Global public-private partnerships: Part I--A new development in health?" Bull World Health Organ **78**(4): 549-61.

Buse, K,Walt, G (2000b). "Global public-private partnerships: Part II--What are the health issues for global governance?" Bull World Health Organ **78**(5): 699-709.

Denzin, NK (1977). "The Research Act. A Theoretical Instruction to Sociological Methods." 2nd. ed. Mc Graw-Hill, New York.

Dull, HB,Meredith, SE (1998). "The Mectizan Donation Programme--a 10-year report." Ann Trop Med Parasitol **92 Suppl 1**: S69-71.

Ette, EI (2004). "Conscience, the law, and donation of expired drugs." Ann Pharmacother **38**(7-8): 1310-3.

FIP Conference (2002). "Meetings and conferences, Ways of improving access to essential medicines in developing countries." The Pharmaceutical Journal **269**: 372-373.

Flick, U (2000). Qualitative Sozialforschung: eine Einführung. Hamburg, Rowohlt Taschenbuch Verlag.

[1] References of the papers (paper 1-3, working paper) are not included in this chapter

Flick, U (2004). Qualitative Sozialforschung: eine Einführung. Hamburg, Rowohlts Enzyklopädie; 55654, 2nd ed., Rowohlt Taschenbuch Verlag, Reinbek bei Hamburg..

Gehler Mariacher G, Rota M,Hersberger KE (1998). "Rücklauf ungenutzter Medikamente in Apotheken." Schweiz Rundsch Med Prax. **87(43)**: 1441-3.

Gehler Mariacher G (2004). "Gut gemeint ist nicht gut genug." Schweizerische Apothekerzeitung **24**: 931-32

Gehler Mariacher G, Mtasiwa D, Wiedenmayer K, Bruppacher R, Tanner M,Hersberger KE (2007). "In-kind Drug Donations for Tanzania - Stakeholders- view - a questionnaire survey." World Health & Population, March 2007, www.longwoods.com/product.php?productid=18771&cat=469&page=1

Gläser, J,Laudel, G (2004). Experteninterviews und qualitative Inhaltsanalyse. Wiesbaden, VS Verlag für Sozialwissenschaften.

Guilloux, A,Suerie, M (2000). "Hidden Price Tags." Access to Essential Medicines Campaigns, Médecins Sans Frontières, MSF, <http://www.accessmed-msf.org/prod/publications.asp?scntid=492001217138&contenttype=PARA&:>: 27.

Hechmann R,Bunde-Birouste A (2007). "Drug Donations In Emergencies." Journal of Humanitarian Assistance, http://jha.ac.

Hingora, A. (2001). "Personal information from Mr. A. Hingora, Project Coordinator, Health Sector Programme Support Member of Health Sector Reform Secretariat MOH, Dar es Salaam, Tanzania."

Hogerzeil, HV (2006). "Essential medicines and human rights: what can they learn from each other?" Bull World Health Organ **84**(5): 371-5.

Hogerzeil, HV, Couper, MR,Gray, R (1997). "Guidelines for drug donations." Bmj **314**(7082): 737-40.

Holenstein, R. (1998). Was kümmert uns die dritte Welt, Zur Geschichte der internationalen Solidarität in der Schweiz, Chronos Verlag Zürich.

Hutton, G.,Tanner, M. (2004). "The sector-wide approach: a blessing for public health?" Bull World Health Organ **82**(12): 893.

Junghanss, T (2001). "Global-national-local." Trop Med Int Health **6:**((1)): 1-3.

Kale Oladele, O (1999). Review of disease-specific drug donation programmes for the control of communicable diseases. MSF-WHO Workshop on "Drugs for Communicable Diseases, Stimulating Development and Securing Availability", Paris.

KFPE (1998). Schweizerische Kommission für Forschungspartnerschaften mit Entwicklungsländern, Leitfaden für Forschungspartnerschaften mit Entwicklungsländern. <http://www.kfpe.ch/key_activities/publications/guidelines/guidelines_d.php>. Bern.

Kuper, M,Njau, EC (1998). "Guidelines for Managing a Drug Revolving Fund - A Manual for Church Run Hospitals in Tanzania." Christian Social Services Comission CSSC, Church Pharmacy Support Unit CPSU, Tanzania.

Mayring, P (1997). Qualitative Inhaltsanalyse Grundlagen und Techniken. Weinheim und Basel, Beltz Verlag.

Medicus Mundi (1989). "Christian Medical Commission, Guidelines for Donors and Recipients of Pharmaceutical Donations." Bulletin Medicus Mundi **40**: 12-15.

MSH (1997). Managing Drug Supply. West Hartford, Connecticut, USA, Kumarian Press, Inc.

MOH (1995). "Ministry of Health, The United Republic of Tanzania, Guidelines on donations of drugs and medical equipment to the health sector for Tanzania Mainland, Ministry of Health, The United Republic of Tanzania."

MOH (1997a). "Review of the Pharmaceutical Sub-sector including IDA and Danish Support to the Medical Stores Departement." Joint Ministry of Health MOH, United Republic of Tanzania, Danish International Development Agency Danida, Swiss Development Cooperation SDC, World Bank W.B: 105.

MOH (1997b). "Ministry of Health, The United Republic of Tanzania, Standard Treatment Guidelines And The National Essential Drug List For Tanzania."

MOH (1999a). "Ministry of Health, Planning and Policy Department, The United Republic of Tanzania, The Health Sector Reform Programme of Work, July 1999-June 2002." 108.

MOH (1999b). "Ministry of Health, Planning and Policy Department, The United Republic of Tanzania, The Health Sector Reform Plan of Action." 173.

MOH (2000). "Pharmacy Board, Ministry of Health, The United Republic of Tanzania, Guidelines for Importation of Pharmaceuticals."

MOH (2001). "Ministry of Health, The United Republic of Tanzania, National Essential Drug List for Tanzania (NEDLIT). Draft revised document."

MOH (2003). "Ministry of Health, Pharmacy Board, The United Republic of Tanzania, The Tanzania food, drugs and cosmetic act. 2003."

Mtasiwa, D, Siegfried, G, Tanner, M,Pichette, P (2003). "The Dar es Salaam City/Region minimum package of health and related management activities: From managing diseases to managing health systems." Dar es Salaam, City Medical Office of Health.

Muhume, J. (2001). "Personal Information from the Chief Pharmacist, Mr. J. Muhume; MOH, Dar es Salaam, Tanzania."

Muhume, J. (2007). "Personal Information from the Chief Pharmacist, Mr. J. Muhume; MOH, Dar es Salaam, Tanzania."

Ombaka E (1999). Drug donations at the recipient end - a perspective from Kenya and Tanzania. European expert seminar on appropriate drug donations., Oegstgeest, The Netherlands.

Pecoul, B, Chirac, P, Trouiller, P,Pinel, J (1999). "Access to essential drugs in poor countries: a lost battle?" Jama **281**(4): 361-7.

Peters, DH,Phillips, T (2004). "Mectizan Donation Program: evaluation of a public-private partnership." Trop Med Int Health **9**(4): A4-15.

Quick, JD (2003a). "Essential medicines twenty-five years on: closing the access gap." Health Policy Plan **18**(1): 1-3.

Quick, JD (2003b). "Ensuring access to essential medicines in the developing countries: a framework for action." Clin Pharmacol Ther **73**(4): 279-83.

Quick, JD, Hogerzeil, HV, Velasquez, G,Rago, L (2002). "Twenty-five years of essential medicines." Bull World Health Organ **80**(11): 913-4.

Quick, JD, Hogerzeil, HV, Rago, L, Reggi, V,de Joncheere, K (2003). "Ensuring ethical drug promotion-whose responsibility?" Lancet **362**(9385): 747.

Reich, MR (1999). An Assessment of US Pharmaceutical Donations: Players, Processes, and Products. Boston: Harvard School of Public Health, Reich M.R.

Reich, MR, Wagner, AK, McLaughlin, TJ, Dumbaugh, KA,Derai-Cochin, M (1999). "Pharmaceutical donations by the USA: an assessment of relevance and time-to-expiry." Bull World Health Organ **77**(8): 675-80.

Reich, MR (2000). "The global drug gap." Science **287**(5460): 1979-81.

Ruxin, J, Paluzzi, JE, Wilson, PA, Tozan, Y, Kruk, M,Teklehaimanot, A (2005). "Emerging consensus in HIV/AIDS, malaria, tuberculosis, and access to essential medicines." Lancet **365**(9459): 618-21.

Saunders, P (1999). "It's time to call a halt to poor drug donation practice." Scrip Magazine.

SDC "Swiss Agency for Development and Cooperation, http://www.deza.ch/en/Home/Countries/Eastern_Central_Southern_Africa/Tanzania."

SDC "Swiss Agency for Development and Cooperation, http://www.deza.admin.ch/en/Home."

SDC, Strategy 2010 "Swiss Agency for Development and Cooperation, Strategy 2010, http://162.23.39.120/dezaweb/ressources/resource_en_23567.pdf." http://www.deza.admin.ch/en/Home/Activities/Strategic_orientation.

SDC Health Policy 2003-2010 "http://162.23.39.120/dezaweb/ressources/resource_en_24123.pdf." http://www.deza.admin.ch/en/Home/Themes/Health_Human_and_social_development/Health

SECO "State Secretariat for Economic Affairs, http://www.seco.admin.ch/index.html?lang=en."

SEAM (2003). "Strategies for Enhancing Access to Medicines Program, Access to Essential Medicines: Tanzania 2001."

Semali, I. (2003). Understanding Stakeholders' Roles in Health Sector Reform Process in Tanzania: The Case of Decentralizing the Immunization Program. Philosophisch-Naturwissenschaftlichen Fakultät. Basel, Switzerland, University of Basel**:** 198.<http://www.msh.org/seam/reports/CR022304_SEAMWebsite_attach1.pdf>: 124.

Shretta, R, Brugha, R, Robb, A,Snow, RW (2000). "Sustainability, affordability, and equity of corporate drug donations: the case of Malarone." Lancet **355**(9216): 1718-20.

Shretta, R, Walt, G, Brugha, R,Snow, R (2001). "A political analysis of corporate drug donations: the example of Malarone in Kenya." Health Policy Plan **16**(2): 161-70.

Snell, B (2001). "Inappropriate drug donations: the need for reforms." Lancet **358**(9281): 578-80.

UNDP (2002). "Human development reports 2002, United Nations Development Programme." <http://wwwindicator.undp.org/hdr2003//cty_f_TZA.html> **2005**(April).

UN Millennium Development Goals "http://www.un.org/millenniumgoals/."

UN Millennium Development Project (2005). "Working Group on Access to Essential Medicines, Prescription for healthy development on HIV/AIDS, Malaria, TB, and access to medicines." http://www.unmillenniumproject.org/reports/tf5b_e.htm.

Varvasovszky, Z,Brugha, R (2000). "How to do (or not to do). A stakeholder analysis." Health Policy Plan **15**(3): 338-45.

Wehrwein, P (1999). "Pharmacophilanthrophy." Harvard Public Health Review(Summer Issue): 32-39.

Weiss, MG, Isaac, M, Parkar, SR, Chowdhury, AN,Raguram, R (2001). "Global, national, and local approaches to mental health: examples from India." Trop Med Int Health **6**(1): 4-23.

WHO (1978). "Declaration of Alma-Ata
International Conference on Primary Health Care, Alma-Ata, USSR." http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf.

WHO (1998a). "World Health Organisation: Health Reform and Drug Financing: Selected Topics." Ref.no. WHO/DAP/98.3: 44.

WHO (1998b). "The New Emergency Health Kit 98." http://whqlibdoc.who.int/hq/1998/WHO_DAP_98.10.pdf.

WHO (1999). "World Health Organisation, Guidelines for Drug Donations, Revised 1999." WHO/EDM/PAR/99.4.

WHO (2000a). "WHO Medicines Strategy: 2000 - 2003, Framework for Action in Essential Drugs and Medicines Policy." (WHO/EDM/2000.1).

WHO (2000b). The World Health Report 2000: Health Systems: Improving Performance. Geneva.

WHO (2000c). "World Health Organisation, First years experiences with guidelines for drug donations." <http://whqlibdoc.who.int/hq/2000/WHO_EDM_PAR_2000.1.pdf>.

WHO (2004a). "WHO Medicines Strategies 2004-2007, Countries at the Core."

WHO (2004b). "World Health Organization, Equitable access to essential medicines: a framework for collective action." WHO Policy Perspectives on Medicines(8): 6.

WHO (2004c). "World Health Organisation, "The World Medicine Situation"." http://searo.who.int/LinkFiles/Reports_World_Medicines_Situation.pdf.

WHO (2006a). "The Interagency Emergency Health Kit 2006." http://www.who.int/medicines/publications/WEB_IEHK_EN.pdf.

WHO (2006b). The World Health Report 2006: - Working Together for Health. Geneva.

Wiedenmayer, K, Mtasiwa, D (2000). "Transforming drug supply in Dar es Salaam." Essential Drug Monitor. Geneva: WHO **28&29**: 25-27.

Wiedenmayer, K (2004). Access to Medicines, Medicine Supply: Lessons learnt in Tanzania and Mozambique, Swiss Tropical Institute Basel and Swiss Agency for Development and Cooperation Berne, <http://www.sdc-health.ch/priorities_in_health/communicable_diseases/hiv_aids/access_to_drugs>.

Wyss, K., Whiting, D., Kilima, P., McLarty, D. G., Mtasiwa, D., Tanner, M.,Lorenz, N. (1996). "Utilisation of government and private health services in Dar es Salaam." East Afr Med J **73**(6): 357-63

ANNEXES

Je, Madawa kwa matibabu ya mgonjwa huyu yapo?

Is there medicine for the treatment of this patient available?

Ist für die Behandlung des Patienten Medizin vorhanden?.

Annex 1: Questionnaires

Questionnaire - Drug Donations in Tanzania

Dodoso – Madawa ya msaada Tanzania

Fragebogen – Medikamentenspenden aus der Schweiz

Questionnaire – Dons de médicaments en provenance de la Suisse

Swiss Tropical Institute
Institut Tropical Suisse
Schweizerisches Tropeninstitut

Swiss Centre for
International Health

Gaby Gehler Mariacher
Pharmacist

QUESTIONNAIRE

Drug Donations in Tanzania

INTRODUCTION

Aim of the questionnaire

The aim of this survey is to collect as much information as possible about drug donations in Tanzania.

Definitions

1. In this study donated drugs are defined as drugs that pass the border of the recipient country as gifts in kind.
2. Drugs are any chemical compound that is used in the prevention, diagnosis, treatment or cure of disease.
3. Excluded from the study are all medical supplies (e.g. needles, syringes, bandages) as well as consumer goods (e.g. non medicated shampoos, food supplements).
4. For reasons of space "organisation" is need in this questionnaire to cover firms, individuals and institutions of all kinds, including religious ones.

Comments on the handling of the questionnaire

1. Please use a blue or black ballpoint.
2. All entries must be clear and readable. Please use Capital Letters.
3. Please put the cross very exactly in the small box. This is necessary because tha data entry will be computerised.

Right ☒ Wrong ☐ ╳

Your opinion is important

So that the results of this questionnaire study will be as complete and true-to-life as possible, I depend very much on your support.
Thank you very much in advance for your collaboration.

Gaby Gehler Mariacher (E-Mail: Gaby.Gehler@unibas.ch)

Approval of the research clearance in Tanzania: Ref. No. RCA 2000/25

SECTION A: BASIC INFORMATION

1 Which category identifies your organisation best?

Mark the category, which describes your organisation the best

☐ Public sector (e.g. Ministry of Health, hospital, dispensary)
Please specify

_____

☐ Religious organisations (e.g. mission hospital, Muslim organisation, diocese, Indian organisation)
Please specify

_____

☐ Non-governmental and non-profit sector (e.g. private voluntary organisation, nongovernmental organisation, individual)
Please specify

_____

☐ Privat for-profit sector (e.g. pharmaceutical company, private pharmacy)
Please specify

_____

Please. do not fill in Nr. ☐☐☐☐ ID TZ - ☐ - ☐☐

2709

2 Is drug supply a main activity of your organisation?

☐ Yes ☐ No

If **No:** What is the major function of your organisation?

———————————————————————————————————————

———————————————————————————————————————

3 Drug Donations

3.1 Is your organisaton involved in drug donations as gifts in-kind?

☐ Yes ☐ No

If **Yes:** Please identify the function of your organisation in the field of in-kind drug donations

———————————————————————————————————————

———————————————————————————————————————

3.2 Will your organisation be involved in the future in drug donations as gifts in-kind?

☐ Yes ☐ No ☐ I don't know

3.3 Has your organisation ever received donations in cash earmarked for buying drugs in addition to drugs in-kind?

☐ Yes ☐ No ☐ I don't know

If **Yes:** What are the conditions for the earmarked donations in cash?

———————————————————————————————————————

———————————————————————————————————————

3.4 Are you the person in charge of drug donations in your organisation?

☐ Yes ☐ No

If No: Please note the address of the person in charge at the back page of the questionnaire

3.5 In which situations do you consider drug donations are useful?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

3.6 There are reasons for and against supporting of the drug supply system through in-kind drug donations. Suggest some of them.

Please mark reasons "for" with (+) and reasons "against" with (-)

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

If you have answered **No** to question 3.1,

please stop here and go directly to the back page of the questionnaire

SECTOR B: DRUG DONATIONS

4 Which category describes your donors best?

Mark as many as applicable

☐ Public sector (e.g. government)
Please specify

———————————————————————————————————————

☐ Religious organisation (e.g. Muslim organisation, catholic mission, Indian organisation)
Please specify

———————————————————————————————————————

☐ Non-governmental and non-profit sector (e.g. Private volunatary organisation, non-governmental organisation, individual)
Please specify

———————————————————————————————————————

☐ Privat for-profit sector (e.g pharmaceutical companies, private pharmacies)
Please specify

———————————————————————————————————————

5 Origin of donated drugs

5.1 From which regions did your organisation receive drug donations in 2000?

Mark as many as applicable

☐ Asia From which countries? ———————————————————

☐ Africa From which countries? ———————————————————

☐ Europe From which countries? ———————————————————

☐ North America From which countries? ———————————————————

☐ Other regions From which countries? ———————————————————

☐ I don't know

☐ In the year 2000 we did not receive drug donations

5.2 From which regions did your organisation receive drug donations before 2000?

Mark as many as applicable

☐ Asia ☐ Africa ☐ Europe ☐ North America ☐ Other regions ☐ None

If you tick **other regions:** Please specify

———————————————————————————————————————

5.3 Did you receive drug donations from Tanzanian donors in 2000?

☐ Yes ☐ No ☐ I don't know

6 Donations from Switzerland

6.1 Did you receive donations from Switzerland in 2000?

☐ Yes ☐ No ☐ I don't know

If **Yes:** Who are your partners / donors in Switzerland?

Please identify the donors, if possible

———————————————————————————————————————

———————————————————————————————————————

6.2 Did you receive donations from Switzerland before 2000?

☐ Yes ☐ No ☐ I don't know

6.3 Are you in the future expecting drug donations from Switzerland?

☐ Yes ☐ No ☐ I don't know

7 Needed Drugs

7.1 For what purposes did you receive drug donations?

Mark as many as applicable

☐ For primary health care

If **Yes:** Please specify

☐ As kit

☐ For basic needs if required

☐ For secondary and tertiary health care

☐ For natural disasters

☐ For refugee camps and during wars

☐ As a partner of a programme (e.g. for the elimination of Leprosy, TB, Trachoma)

☐ As earmarked in-kind drug donations for specific diseases (e.g Diabetes, HIV)

☐ For research activities

☐ On request of individuals

☐ I don't know

☐ Other reasons

If you mark **other reasons:** please specify

———————————————————————————————————————

7.2 Do you have a list of needed drugs, which you give to the donors?

☐ Yes ☐ No ☐ I don't know

8 What percentage of your drug supply was covered in 2000 by drug donations?

☐ 0-10% ☐ 11-50% ☐ 51-90% ☐ 91-100%

9 Characteristics of the drugs received

9.1 What is the value of the donations received in 2000?

approx ☐☐☐☐☐☐☐☐ US$ ☐ I don't know

9.2 If you know the value, please indicate on what basis this was calculated

☐ Retail price in donor country

☐ Wholesale price in donor country

☐ Ex Factory Price

☐ Price of a non-profit making wholesaler

☐ World market price

☐ I don't know

9.3 Where did the donor procure the drugs donated to your organisation?

———————————————————————————————————————

———————————————————————————————————————

10 Does your organisation cooperate with partner organisations?

☐ Yes ☐ No ☐ I don't know

If **Yes:** Who are the partner organisation in the donors' countries?
If possible, please indicate name and address of the main partners

———————————————————————————————————————

———————————————————————————————————————

If **Yes:** Who are the partner organisation in the recipients' countries?
If possible, please indicate name and address of the main partners

———————————————————————————————————————

———————————————————————————————————————

SECTION C: QUALITY OF DRUG DONATIONS

11 Guidelines for Drug Donations (WHO)

11.1 Are you familiar with the WHO Guidelines for Drug Donations ?

☐ Yes ☐ No

11.2 Do you have a copy of the WHO Guidelines for Drug Donations ?

☐ Yes ☐ No ☐ I don't know

11.3 Did these Guidelines influence practices with regard to drug donations in your organisation?

☐ Yes ☐ No ☐ I don't know

If **Yes:** How?

———————————————————————————————————————

———————————————————————————————————————

12 Tanzanian National Guidelines for Drug Donations

12.1 Are you familiar with the "Guidelines on Donations for Tanzania Mainland" of the MOH?

☐ Yes ☐ No

12.2 Do you have a copy of the "Guidelines on Donations for Tanzania Mainland" of the MOH?

☐ Yes ☐ No ☐ I don't know

13 Expressed Declaration of Needs

13.1 Did you receive in 2000 donations that you specifically asked for?

☐ Exclusively ☐ Partly ☐ No ☐ I don't know

13.2 Did you receive in 2000 donations that you had not asked for?

☐ Exclusively ☐ Partly ☐ No ☐ I don't know

14 Essential Drug List

14.1 Are the drug received included in the National Drug List of Tanzania?

☐ Exclusively ☐ Partly ☐ No ☐ I don't know

14.2 Are the drug received included in the WHO Essential Drug List?

☐ Exclusively ☐ Partly ☐ No ☐ I don't know

15 Quality Standard of your organisation for donated drugs

15.1 What are the quality criteria for donated drugs which are demanded by your organisation?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

15.2 According to you, in what kind of situation is it justifiable to donate expired drugs?

———————————————————————————————————————

———————————————————————————————————————

15.3 How long is the average shelf-life of the drugs received?

Please mark the answer that describes the drugs received best

☐ Minimum 1 year
☐ 6 to 12 months
☐ Up to 6 months
☐ Expired
☐ I don't know

15.4 Are the donations labelled in a local language?

☐ Always ☐ Sometimes ☐ Never ☐ I don't know

15.5 What percentage of the drugs received did your organisation have to dispose of in 2000?

☐ 0-10% ☐ 11-50% ☐ 51-90% ☐ 91-100%

15.6 Does your organisation receive "unused" drugs (drugs returned by patients)?

☐ Exclusively ☐ Partly ☐ No ☐ I don't know

15.7 What does your organisation do with unwanted, unusable drugs or with drugs of poor quality?

With unwanted drugs ———————————————————————————

With unusable drugs ———————————————————————————

With drugs of poor quality ———————————————————————————

16 Shipment of Drug Donations

16.1 Does your organisation receive a quality certificate (e.g. from WHO) with the donated drugs?

☐ Always ☐ Sometimes ☐ Never ☐ I don't know

16.2 Does your organisation receive invoice documents with the donated drugs?

☐ Always ☐ Sometimes ☐ Never ☐ I don't know

16.3 Who pays for the shipment of drug donations?

———————————————————————————————————————

———————————————————————————————————————

16.4 Who pays for the customs clearance of drug donations?

———————————————————————————————————————

———————————————————————————————————————

16.5 Is your organisation informed beforehand about the composition and the date of shipment of the donations?

☐ Always ☐ Sometimes ☐ Never ☐ I don't know

16.6 How does your organisation communicate with the donors (e.g. e-mail, fax)?

———————————————————————————————————————

———————————————————————————————————————

16.7 How would you rate the exchange of information with the donor?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

SECTOR D: DRUG DONATION PROCESSES

The donation process means the whole path taken by donated drugs, from the donor to the recipient and ultimately the patient.

17 What in your opinion are the main problems with drug donation processes?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

18 Do you think that it is justifiable to sell donated drugs?

☐ Yes ☐ No

Please, give reasons for your statement

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

19 Do patients have to pay for donated drugs in your facility?

☐ Always ☐ Sometimes ☐ Never ☐ I don't know

20 Has your organisation ever carried out an evaluation of your donation processes?

☐ Yes ☐ No ☐ I don't know

If **Yes**: what in short were the results?

———————————————————————————————————————

———————————————————————————————————————

21 What, in your opinion, is the function of the pharmacists in donation processes?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

22 What causes the main problems in the drug donation processes of your orgaisation?

Mark as many as applicable

☐ Insufficient infrastructure **(1)**
☐ Poor quality of the donations **(2)**
☐ Insufficient training **(3)**
☐ No transparency in the donation processes (e.g. how it works, who is in charge) **(4)**
☐ Shipment and customs fees **(5)**
☐ No communication between donor and recipient **(6)**
☐ Quantities are not sufficient for the long-term treatment of patients **(7)**
☐ Guidelines for Drug Donations or of other tools for a Good Donation Practice are not implemented **(8)**
☐ Not relevant for the diseases of the local population **(9)**
☐ None **(10)**
☐ Others **(11)**

Which is the most important? Nr. ☐

If you marked **others:** Please specify

———————————————————————————————————————

23 Has your organisation special criteria for deciding to treat a patient with donated drugs?

☐ Yes ☐ No

If **yes:** what are the criteria?

———————————————————————————————————————

———————————————————————————————————————

SECTOR E: YOUR COMMENTS

24 In your opinion, what are the most important actions needed to optimise drug donations?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

25 Was anything not covered in this questionnaire which you feel is important?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

26 Does your professional position give you the possibility of taking action?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

27 What does the expression "double standard of drug donations" mean to you?

———————————————————————————————————————

———————————————————————————————————————

The information on this page will remain confidential and be stored separately.
It is needed in case we need to ask further questions

SECTION F: PERSONAL DATA

Title

_____

Family Name

_____

First Name

_____

Organisation, Institution, Company

_____

Address

_____

_____

_____

_____

Your professional position in your organisation

_____

Your education / your diploma

_____

Phone Number

|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

Fax Number

|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

e-mail

_____

Date

|_|_| . |_|_| . |_|_|

Do you know organisations, institutions, groups or individuals which are involved in drug donations and to which this questionnaire could be distributed as well?

_____

_____

_____

_____

Name and address of the person in charge of drug donations in your organisation

_____

_____

Thank you very much - Ahsante sana!

Swiss Tropical Institute
Institut Tropical Suisse
Schweizerisches Tropeninstitut

Swiss Centre for
International Health

Gaby Gehler Mariacher
Pharmacist

DODOSO

Madawa ya msaada Tanzania

UTANGULIZI

Dhamira ya dodoso hili

Dhumuni la utafiti huu ni kukusanya habari zinazohusu madawa ambayo yanatolewa kama msaada/zawadi kwa Tanzania.

Maana ya maneno

1. Katika utafiti huu, msaada wa madawa ina maana ni zile dawa zinazoingia katika mipaka ya nchi kama zawadi au msaada.
2. Dawa ni kemikali zinazotumika kwa ajili ya kuzuia na kutibu magonjwa mbali mbali.
3. Vifaa vya afya ambavyo havikuhusishwa katika utafiti huu ni kama:(sindano, mabomba ya sindano na bandegi). Pamoja na vitu kama sabuni zisizokuwa za afya, na vyakula.
4. Kwa sababu ya nafasi au mpangilio unahitajika katika dodoso hili, kugusia mashirika, watu binafsi na vituo vya aina zote vikihusika pia vya kidini.

Mikakati ya kujaza dodoso hili

1. Tafadhali tumia pen ya bluu au nyeusi.
2. Andika kwa herufi kubwa, maandishi yanayosomeka.
3. Tafadhali weka alama ya mkasi kwenye kiboksi kidogo. (Hii ni lazima kwani habari hizi zitawekwa kwenye computa).

Km inavyotakiwa ☒ Makosa ☒

Maoni yako ni muhimu san

Ili matokeo ya dodoso la utafiti huu yawe yamekamilika na ya kweli kama itakavyowezekana, nategemea sana msaada na ushirikiano wako.
Natanguliza shukrani zangu.

Gaby Gehler Mariacher (E-Mail: Gaby.Gehler@unibas.ch)

Kibali cha utafiti huu kimetolewa Tanzania: Rejea namba RCA 2000/25

SEHEMU A: HABARI KUHUSU SEHEMU HUSIKA

1 Shirika lako liko chini ya mfumo upi ?

weka alama sehemu inayohusika

☐ Sekta ya serikali (Kama Wizara ya Afya, Hospitali, Zahanati)
Elezea tafadhali

_____

☐ Shirika la dini (kama hospitali ya misheni, shirika la Kiislamu, Dayosisi)
Elezea tafadhali

_____

☐ Sekta isiyo ya kiserikali na ya kujitolea (Kama mashirika binafsi ya kujitolea, mashirika yasiyokuwa ya serikali, mtu)
Elezea tafadhali

_____

☐ Sekta ya binafsi ya kujipatia faida (Kama kiwanda cha madawa, Duka la dawa la binafsi)
Elezea tafadhali

_____

2 Je utoaji wa madawa ndiyo shughuli kuu ya shirika lenu?

☐ Ndiyo ☐ Hapana

Kama jibu ni **hapana**, ni nini shughuli kubwa ya shirika lenu?

———————————————————————————————————————

———————————————————————————————————————

3 Dawa za msaada

3.1 Je shirika lako ninahusika na dawa zinazotolewa kama msaada?

☐ Ndiyo ☐ Hapana

Kama jibu ni **ndiyo** tafadhali eleza shughuli za shirika lako katika madawa yanayotolewa kama msaada.

———————————————————————————————————————

———————————————————————————————————————

3.2 Je shirka lako litajihusisha na madawa yanayotolewa kama msaada hapo baadaye?

☐ Ndiyo ☐ Hapana ☐ Sijui

3.3 Je shirika lako limepata kupokea msaada wa fedha kwa ajili ya kununulia madawa zaidi ya madawa ya msaada?

☐ Ndiyo ☐ Hapana ☐ Sijui

Kama jibu ni **ndiyo**: Masharti ya fedha hizo zilizotolewa ni yapi?

———————————————————————————————————————

———————————————————————————————————————

3.4 Je wewe ni muhusika mkuu wa madawa ya msaada katika shirika lako?

☐ Ndiyo ☐ Hapana

Kama jibu ni **hapana**: Tafadhali andika anuwani ya muhusika mkuu katika ukurasa wa nyuma wa dodoso

3.5 Ni katika hali gani unaona kuwa madawa ya msaada ni muhimu?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

3.6 Kuna sababu za kukubali au kupinga upatikanaji wa madawa kwa njia ya madawa yanayotolewa kama msaada. Eleza baadhi

Tafadhali weka alama (+) kwa sababu za "kukubali"na alama (-) kwa sababu za kupinga.

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

Kama umejibu hapana kwa swali **3.1**,

tafadhal achia hapa na endelea na ukurasa wa mwisho wa dodoso

SEHEMU B: DAWA ZA MSAADA

4 Je shirika lako liko chini ya mfumo gani?

Jaza kila ilivyo sahihi

☐ Sekta ya jamii (k.m serikali)
Tafadhali eleza kwa ufasaha

———————————————————————————————————————

☐ Shirika la dini (k.m Kiislam,Katoliki)
Tafadhali eleza kwa ufasaha

———————————————————————————————————————

☐ Sekta isiyo ya serikali na isiyouza kwa faida (k.m Shirika la binafsi la kujitolea, Shirika lisilo la kiserikali, Binafsi)
Tafadhali eleza kwa ufasaha

———————————————————————————————————————

☐ Sekta ya binafsi inayouza kwa faida (k.m kampuni ya madawa, Maduka ya binafsi ya madawa)
Tafadhali eleza kwa ufasaha

———————————————————————————————————————

5 Dawa za msaada zinakotoka

5.1 Je kutoka maeneo gani shirika lako lilipata dawa za msaada mnamo mwaka 2000?

Taja kila ilipo sahihi

☐ Asia Kutoka nchi gani ? ——————————————————

☐ Afrika Kutoka nchi gani ? ——————————————————

☐ Ulaya Kutoka nchi gani ? ——————————————————

☐ Amerika Kaskazini Kutoka nchi gani ? ——————————————————

☐ Maeneo mengineyo Kutoka nchi gani ? ——————————————————

☐ Sijui

☐ Katika mwaka 2000 hatukupata dawa za msaada

5.2 Je ni kutoka nchi gani shirika lako lilipata dawa za msaada kabla mwaka 2000?

Taja kila ilipo sahihi.

☐ Asia ☐ Afrika ☐ Ulaya ☐ Amerika Kaskazini ☐ Maeneo mengineyo ☐ Hakuna

Kama umetaja **maeneo mengineyo**: Tafadhali eleza kwa ufasaha

———————————————————————————————————————

5.3 Je umepokea madawa ya msaada kutoka kwa wafadhili wa Tanzania mnamo mwaka 2000?

☐ Ndiyo ☐ Hapana ☐ Sijui

6 Misaada kutoka Uswisi

6.1 Je umepokea msaada kutoka Uswisi mnamo mwaka 2000?

☐ Ndiyo ☐ Hapana ☐ Sijui

Kama jibu ni **ndiyo:** Ni nani patina/wafadhili wako kutoka Uswisi?

Tafadhali wataje hao wafadhili ikiwezekana

———————————————————————————————————————

———————————————————————————————————————

6.2 Je ulipokea misaada kutoka Uswisi kabla ya mwaka 2000?

☐ Ndiyo ☐ Hapana ☐ Sijui

6.3 Je unategemea kupata msaada wa madawa kutoka Uswisi hapo baadaye?

☐ Ndiyo ☐ Hapana ☐ Sijui

7 Mahitaji ya madawa

7.1 Ni kwa madhumuni gani mlipokea madawa ya msaada?

Taja kila ilipo sahihi

☐ Kwa ajili ya afya ya msingi

Tafadhali elezea

☐ Kama "Kit"

☐ Kwa mahitaji ya msingi

☐ Afya ya daraja la pili na tatu

☐ Kwa matatizo ya dharura

☐ Kwenye kambi za wakimbizi na wakati wa vita

☐ Kama mshiriki wa programu (kwa kutokomeza Ukoma, Kifua kikuu,ugonjwa wa vikope).

☐ Kama dawa za msaada kwa magonjwa maaluum (Kisukari, Ukimwi)

☐ Kwa shughuli za utafiti

☐ Kwa maombi ya watu waaluum

☐ Sijui

☐ Kwa sababu nyinginezo

Kama umetaja **sababu nyinginezo:** Elezea

_____

7.2 Je unayo orodha ya mahitaji ya madawa ambayo mnawapa wafadhili?

☐ Ndiyo ☐ Hapana ☐ Sijui

8 Katika mwaka 2000 ni asilimia ngapi ya madawa mliyokuwa nayo yalikuwa ni ya msaada?

☐ 0-10% ☐ 11-50% ☐ 51-90% ☐ 91-100%

9 Maelezo kuhusu madawa yaliyopokelewa

9.1 Je ulipokea madawa ya msaada ya gharama gani katika mwaka 2000?

Kama. ☐☐☐☐☐☐☐☐ Dola za Kimarekani ☐ Sijui

9.2 Kama unajua thamani yake tafadhali onyesha ni vipi yalifanyiwa mahesabu

☐ Kulingana na bei ya reja reja katika nchi mfadhili

☐ Bei ya jumla katika nchi mfadhili

☐ Bei ya kiwandani

☐ Bei ya wauzaji wa jumla bila faida

☐ Bei ya soko la dunia

☐ Sijui

9.3 Ni wapi mfadhili anakotoa madawa anayolisaidia shirika lako?

_____

_____

10 Je shirika lako linashirikiana na mashirika washiriki?

☐ Ndiyo ☐ Hapana ☐ Sijui

Kama jibu ni **ndiyo** ni yapi hayo mashirika washirika wenzio katika kutoa msaada?
Ikiwezekana tafadhali andika jina na anuwani ya hayo mashirika

———————————————————————————————————————

———————————————————————————————————————

Kama jibu ni **ndiyo ni**i mashirika gani yanayoshiriki kusaidia wale wanaosaidiwa nchini?
Ikiwezekana tafadhali andika jina na anuwani ya hayo mashirika

———————————————————————————————————————

———————————————————————————————————————

SEHEMU C: UBORA WA MADAWA YA MSAADA

11 Muongozo kuhusu madawa ya msaada (Shirika la Afya ulimwenguni "WHO")

11.1 Je una uzoefu wa muongozo wa shirika la Afya ulimwenguni (WHO) kuhusu madawa ya msaada?

☐ Ndiyo ☐ Hapana

11.2 Je unayo nakala kutoka shirika la Afya ulimwenguni (WHO) inayohusu muongozo wa madawa ya

☐ Ndiyo ☐ Hapana ☐ Sijui

11.3 Je muongozo huo unaathiri utendaji ukizingatia madawa ya msaada katika shirika lako?

☐ Ndiyo ☐ Hapana ☐ Sijui

Kama jibu ni **ndiyo:** Kwa vipi?

———————————————————————————————————————

———————————————————————————————————————

12 Mungozo wa Taifa la Tanzania kwa madawa ya msaada

12.1 Je una uzoefu na muongozo wa dawa za msaada kwa Tanzania bara, ulioandaliwa na wizara ya Afya?

☐ Ndiyo ☐ Hapana

12.2 Je unayo nakala ya muongozo wa madawa ya msaada kwaTanzania bara ulioandaliwa na wizara ya Afya?

☐ Ndiyo ☐ Hapana ☐ Sijui

13 Maelezo kuhusu mahitaji

13.1 Je katika mwaka 2000 ulipokea madawa ya msaada kulingana na maombi yako?

☐ Yote ☐ Baadhi yake ☐ Hapana ☐ Sijui

13.2 Je mnamo mwaka 2000 ulipokea madawa ya msaada ambayo hukuomba?

☐ Yote ☐ Baadhi yake ☐ Hapana ☐ Sijui

14 Orodha ya madawa ya lazima

14.1 Je dawa ulizopokea ni zile ambazo zipo katika orodha ya Taifa ya dawa za lazima?

☐ Zote ☐ Baadhi yake ☐ Hapana ☐ Sijui

14.2 Je dawa ulizopokea ni zile ambazo zipo katika orodha ya madawa ya lazima ya Shirika la Afya ulimwenguni?

☐ Zote ☐ Baadhi yake ☐ Hapana ☐ Sijui

15 Kiwango cha ubora wa madawa ya msaada katika shirika lako

15.1 Ni sifa gani za ubora wa madawa ya msaada unazohitaji katika shirika lako?

_____

_____

_____

_____

15.2 Kwa maoni yako ni katika mazingira gani unaweza kukubali madawa ya msaada yaliyokwisha muda wake?

_____

_____

15.3 Ni wastani wa muda gani uliobakia wa kuweza kuyatumia madawa uliyoyapokea kabla ya kumalizika muda wake?

Tafadhali weka alama kwenye jibu ambalo ni sahihi zaidi

☐ Chini ya mwaka mmoja

☐ Miezi 6 - 12

☐ Hadi miezi 6

☐ Muda wake wa kutumika umemalizika

☐ Sijui

15.4 Je dawa unazopata za msaada zimeandikwa kwa lugha inayoeleweka hapa nchini?

☐ Wakati wote ☐ Mara chache ☐ Hapana ☐ Sijui

15.5 Ni asilimia ngapi ya madawa uliyoyapokea ambayo shirika lako lililazimika kuyatupa mnamo mwaka 2000?

☐ 0-10% ☐ 11-50% ☐ 51-90% ☐ 91-100%

15.6 Je shirika lako linapokea dawa ambazo hazikutumika (Dawa zilizorudishwa na wagonjwa)?

☐ Mara nyingi ☐ Kiasi ☐ Hapana ☐ Sijui

15.7 Je shirika lako linafanyaje kuhusu dawa ambazo hazitakiwi, hazikutumika au dawa ambazo zina kiwango duni?

Kwa dawa zisizotakiwa _____

Kwa dawa zisizotumika _____

Kwa dawa zenye kiwango _____

16 Usafirishaji wa dawa za msaada

16.1 Je shirika lako hupokea cheti cha ubora wa dawa za msaada (k.m. kutoka Shirika la Afya Ulimwenguni "WHO") kikiambatanishwa na hizo dawa

☐ Mara zote ☐ Mara chache ☐ Hapana ☐ Sijui

16.2 Je shirika lako linapokea stakabadhi ya malipo unapopokea dawa za msaada?

☐ Mara zote ☐ Mara chache ☐ Hapana ☐ Sijui

16.3 Ni nani anayelipia gharama ya usafirishaji wa madawa ya msaada?

_____

_____

16.4 Ni nani anayelipia ushuru wa forodha kwa dawa za msaada?

_____

_____

16.5 Je shirika lako hupewa taarifa ya aina za dawa za msaada na tarehe ya kusafirishwa kabla?

☐ Mara zote ☐ Mara chache ☐ Hapana ☐ Sijui

16.6 Je shirika lako linawasiliana vipi na wafadhili (k.m kwa taarifa umeme, Fax)?

———————————————————————————————————————

———————————————————————————————————————

16.7 Je ni kwa kiwango gani mnawasiliana na wafadhili?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

SEHEMU D: UTARATIBU WA MADAWA YA MSAADA

Utaratibu wa kutoa msaada ni hatua ambazo zinafuatwa kwa madawa ya msaada, kuanzia kwa mfadhili, mpokeaji hadi kwa mgonjwa.

17 Je una maoni gani: Ni nini hasa tatizo katika utaratibu wa kutoa dawa za msaada?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

18 Je unafikiri ni halali kuuza madawa yaliyotolewa kama msaada?

☐ Ndiyo ☐ Hapana

Tafadhali toa sababu kwa maoni yako

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

19 Je wagonjwa hutakiwa kulipia dawa zilizotolewa kama msaada katika kituo chako?

☐ Mara zote ☐ Mara chache ☐ Hapana ☐ Sijui

20 Je shirika lako liliwahi kufanya tathmini ya utaratibu wa kutoa misaada?

☐ Ndiyo ☐ Hapana ☐ Sijui

Kama jibu ni **ndiyo** ni nini matokeo yake kwa kifupi?

———————————————————————————————————————

———————————————————————————————————————

21 Ni nini maoni yako, kuhusu kazi ya mfamasia katika utaratibu wa kutoa misaada?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

22 Ni nini kinachosababisha matatizo katika utaratibu wa madawa ya msaada katika shirika lako?

Chagua mengi kama itakavyowezekana

☐ Muundo hafifu **(1)**

☐ Kiwango duni **(2)**

☐ Mafunzo hafifu **(3)**

☐ Hakuna uwazi katika utaratibu wa kutoa misaada (k.m. unafanya kazi vipi, nani anasimamia) **(4)**

☐ Gharama ya usafirishaji na ushuru wa forodha **(5)**

☐ Hakuna mawasiliano kati ya mfadhili na mfadhiliwa **(6)**

☐ Kiwango cha madawa hakitoshelezi matibabu ya muda mrefu ya wagonjwa **(7)**

☐ Utaratibu wa madawa ya msaada au njia za utoaji mzuri wa misaada bado havijatekelezwa **(8)**

☐ Hazilingani na magonjwa yanayopatikana katika jamii ya hapa **(9)**

☐ Hakuna **(10)**

☐ Mengineyo **(11)**

Ni ipi ya muhimu zaidi? namba ☐

Kama jibu ni **mengineyo** tafadhali fafanua

_____

23 Je shirika lako lina utaratibu maalum wa kufuatwa kwa kumtibu mgonjwa kwa madawa ya msaada?

☐ Ndiyo ☐ Hapana

Kama jibu ni **ndiyo** ni utaratibu gani

_____

_____

SEHEMU E: MAONI YAKO

24 Kwa maoni yako ni hatua gani zinazohitajika kuchukuliwa ili kuongeza ubora wa madawa ya msaada?

_____

_____

_____

_____

25 Je kuna lolote ambalo halikuongelewa katika dodoso hili ambalo unafikiri ni muhimu?

_____

_____

_____

26 Je wadhifa wako unakuruhusu kuchukua hatua?

_____

_____

_____

27 Je unaelewaje kuhusu viwango hafifu vya dawa zinazotolewa kama msaada kulinganisha na nyinginezo

_____

_____

Taarifa katika ukurasa huu zitahifadhiwa kama siri na zitahitajika iwapo tutahitaji kuuliza zaidi.

SEHEMU F: TAARIFA BINAFSI

Cheo

_____

Jina la ukoo

_____

Jina la kwanza

_____

Shirika, Kampuni, Kiwanda

_____

Anwani

_____

_____

_____

_____

Wadhifa wako katika shirika

_____

Kiwango cha elimu/Shahada ya juu

_____

Namba ya simu

|_|_|_|_|_|_|_|_|_|_|_|_|_|

Namba ya Fax

|_|_|_|_|_|_|_|_|_|_|_|_|_|

Anuwani ya taarifa umeme

_____

Tarehe

|_|_|.|_|_|.|_|_|

Je unafahamu shirika lolote, Kiwanda cha dawa au mtu binafsi wanaojishughulisha na madawa ya msaada ambao unafikiri tunaweza kuwapa dodoso hili kujaza?

_____

_____

_____

_____

Jina na anuwani ya msimamizi wa madawa ya msaada katika shirika lako

_____

_____

AHSANTE SANA

FRAGEBOGEN

Medikamentenspenden aus der Schweiz

Swiss Tropical Institute
Institut Tropical Suisse
Schweizerisches Tropeninstitut

Swiss Centre for
International Health

Gaby Gehler Mariacher
Apothekerin

EINLEITUNG

Ziel des Fragebogens

Mit dieser Umfrage soll soviel Information wie möglich über Medikamentenspenden aus der Schweiz gesammelt werden. Details finden Sie in der beiliegenden Zusammenfassung des Studienkonzeptes.

Definitionen

1. In dieser Studie ist ein gespendetes Medikament als Medikament definiert, das in Form von Ware die Grenze des Empfängerlandes passiert.
2. Medikamente sind Zubereitungen von Arzneistoffen, die zur Vorbeugung, Heilung oder Erkennung von Erkrankungen dienen.
3. Nicht erfasst werden in dieser Studie medizinische Hilfsgüter (z.B. Spritzen, Nadeln, Verbandsstoffe) sowie Konsumartikel (z.B. Nahrungsergänzungsmittel, Shampoos).
4. Aus Platzgründen werden unter dem Begriff Organisation auch Firmen, kirchliche Einrichtungen, Institutionen und Einzelpersonen geführt.

Hinweise zum Ausfüllen des Fragebogens

1. Bitte schreiben Sie mit einem blauen, schwarzen oder dunklen Kugelschreiber.
2. Alle Angaben müssen klar und leserlich sein. Benützen Sie bitte Blockschrift.
3. Bitte setzen Sie die Kreuze so exakt wie möglich in die Kästchen. Dies ist notwendig, da die Datenauswertung elektronisch erfolgt.

Richtig ☒ Falsch ☐ ~~X~~

Jede Meinung zählt

Damit die Resultate aus der Umfrage möglichst umfassend und exakt sind, bin ich auf Ihre Mitarbeit angewiesen. Ich danke Ihnen im Voraus dafür.

Gaby Gehler Mariacher (E-Mail: Gaby.Gehler@unibas.ch)

TEIL A: ALLGEMEINE FRAGEN

1 Welche Zuordnung passt am besten zu Ihrer Organisation?

Bitte kreuzen Sie die Antwort an, die am ehesten auf Ihre Organisation zutrifft

☐ Öffentlicher Sektor (z.B. Regierungsorganisation, Kant. Heilmittelkontrolle, öffentliches Spital)
Bitte beschreiben Sie näher

_____

☐ Kirchliche Einrichtung (z.B. Mission, Pfarrei)
Bitte beschreiben Sie näher

_____

☐ Nichtstaatlich nicht gewinnorientiert (z.B. Freiwilligenorganisation, Nichtregierungsorganisation, Einzelperson)
Bitte beschreiben Sie näher

_____

☐ Privat gewinnorientiert (z.B. Offizinapotheke, Pharmaindustrie)
Bitte beschreiben Sie näher

_____

Bitte leer lassen

Lauf Nr. ☐☐☐☐ ID CH - ☐ - ☐☐

62564

2 Ist Ihre Organisation vor allem im Bereich der Medikamentenversorgung tätig?

☐ Ja ☐ Nein

Wenn **Nein:** Was ist die Haupttätigkeit Ihrer Organisation?

———————————————————————————————————————

———————————————————————————————————————

3 Medikamentenspenden

3.1 Ist Ihre Organisation an Medikamentenspenden in Form einer Sachspende beteiligt?

☐ Ja ☐ Nein

Wenn **Ja:** Bitte beschreiben Sie genau, in welcher Form Ihre Organisation an Medikamentenspenden beteiligt ist.

———————————————————————————————————————

———————————————————————————————————————

3.2 Wird Ihre Organisation auch in Zukunft an Medikamentenspenden beteiligt sein?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

3.3 Spendet Ihre Organisation zusätzlich zweckgebundenes Geld, damit der Empfänger benötigte Medikamente selbst einkaufen kann?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

Wenn **Ja:** An welche Bedingungen sind die Geldspenden geknüpft?

———————————————————————————————————————

———————————————————————————————————————

3.4 Sind Sie in Ihrer Organisation Entscheidungsträger im Bereich von Medikamentenspenden?

☐ Ja ☐ Nein

*Wenn **Nein**: Notieren Sie bitte die Adresse des Entscheidungsträgers auf der letzten Seite des Fragebogens.*

3.5 In welchen Situationen sind Ihrer Ansicht nach Medikamentenspenden nützlich?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

3.6 Es gibt Gründe für oder gegen eine Unterstützung der Medikamentenversorgung durch Spenden. Welche Gründe stehen für Sie im Vordergrund?

Bitte bewerten Sie die Gründe mit Plus- oder Minuszeichen

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

Falls Sie die Frage 3.1 mit **Nein** beantwortet haben,

gehen Sie bitte direkt zur letzten Seite des Fragebogens

TEIL B: MEDIKAMENTENSPENDEN

4 Welche Zuordnung passt am besten zu den Empfängern der Spenden aus Ihrer Organisation?

Es sind mehrere Antworten möglich

☐ Öffentlicher Sektor (z.B. Gesundheitsministerium, Spital, Dispensarien)
Bitte beschreiben Sie näher

———————————————————————————————————————

☐ Kirchliche Einrichtung (z.B. Missionsspital, Diözese)
Bitte beschreiben Sie näher

———————————————————————————————————————

☐ Nichtstaatlich nicht profitorientiert (z.B. Freiwilligenorganisation, Nichtregierungsorganisation, Einzelperson)
Bitte beschreiben Sie näher

———————————————————————————————————————

☐ Privat profitorientiert (z.B. Private Apotheke, Pharmaindustrie)
Bitte beschreiben Sie näher

———————————————————————————————————————

5 Regionen, in die Ihre Organisation Medikamente spendet

5.1 In welche Regionen hat Ihre Organisation im Jahre 2000 Medikamente gespendet?

Es sind mehrere Antworten möglich

☐ Asien In welche Länder? ——————————————————

☐ Afrika In welche Länder? ——————————————————

☐ Osteuropa In welche Länder? ——————————————————

☐ Mittel- und Südamerika In welche Länder? ——————————————————

☐ Andere Regionen In welche Länder? ——————————————————

☐ Ich weiss es nicht

☐ Im Jahre 2000 hat unsere Organisation keine Medikamente gespendet

5.2 In welche Regionen hat Ihre Organisation vor dem Jahre 2000 Medikamente gespendet?

Es sind mehrere Antworten möglich

☐ Asien ☐ Afrika ☐ Osteuropa ☐ Mittel- und Südamerika ☐ Andere Regionen

Falls Sie **Andere Regionen** ankreuzen: Bitte beschreiben Sie näher

———————————————————————————————————————

6 Spenden nach Tansania

6.1 Hat Ihre Organisation im Jahre 2000 Medikamente nach Tansania gespendet?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

Wenn **Ja:** Wer sind die Partnerorganisationen / Empfänger in Tansania?

Falls möglich, geben Sie bitte Namen und Adressen an

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

6.2 Hat Ihre Organisation vor dem Jahre 2000 Medikamente nach Tansania gespendet?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

6.3 Wird Ihre Organisation in Zukunft Medikamente nach Tansania spenden?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

7 Für welchen Zweck spendet Ihre Organisation Medikamente ?

Es sind mehrere Antworten möglich

☐ Für die primäre Gesundheitsversorgung (Basisversorgung)

Wenn **Ja:** Spezifizieren Sie bitte

☐ Als Kit

☐ Je nach Bedarf

☐ Für die sekundäre und tertiäre Gesundheitsversorgung

☐ Bei Naturkatastrophen

☐ Für Flüchtlingslager und Kriegssituationen

☐ Als Partner von gezielten Programmen (z.B. für die Elimination von Lepra, TB, Trachoma)

☐ Als zweckgebundene Sachspenden für bestimmte Krankheiten (z.B. Diabetes, Aids)

☐ Für Forschungszwecke

☐ Auf Anfrage von Einzelpersonen

☐ Ich weiss es nicht

☐ Andere

Falls Sie **Andere** ankreuzen: Bitte beschreiben Sie näher

_____

8 Woher beschafft sich Ihre Organisation die Medikamente, die sie spendet?

Es sind mehrere Antworten möglich

☐ Aus der Verkaufsware des eigenen Lagerbestandes

☐ Aus einer Extraproduktion für die Spende

☐ Aus Retouren bereits verkaufter Ware (ungenutzte Medikamente)

☐ Beim Hersteller

☐ Gekauft

☐ Gratis erhalten

☐ Von Nonprofit-Grossisten

☐ Gekauft

☐ Gratis erhalten

☐ Von Apotheken

☐ Gekauft

☐ Gratis erhalten

☐ Von Spitälern

☐ Gekauft

☐ Gratis erhalten

☐ Bei Nichtregierungsorganisationen (z.B. Pharmaciens sans Frontières)

☐ Gekauft

☐ Gratis erhalten

☐ Ich weiss es nicht

☐ Andere

Falls Sie **Andere** ankreuzen: Bitte beschreiben Sie näher

_____

9 Arbeitet Ihre Organisation im Spendenbereich mit Partnerorganisationen zusammen?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

Wenn **Ja:** Wer sind Ihre Partnerorganisationen im Spenderland?

Falls möglich, geben Sie bitte Namen und Adressen der wichtigsten Partner an

———————————————————————————————————————

———————————————————————————————————————

Wenn **Ja:** Wer sind Ihre Partnerorganisationen im Empfängerland?

Falls möglich, geben Sie bitte Namen und Adressen der wichtigsten Partner an

———————————————————————————————————————

———————————————————————————————————————

10 Wert der Spenden

10.1 Wie hoch war der Wert der Medikamentenspenden im Jahre 2000?

ca. ☐☐☐☐☐☐☐☐ CHF ☐ Ich weiss es nicht

10.2 Auf welcher Kostenbasis berechnen Sie den Wert Ihrer Spenden?

Es sind mehrere Antworten möglich

☐ Verkaufspreis im Spenderland

☐ Grossistenpreis im Spenderland

☐ Ex Factory Preis

☐ Preis eines Nonprofit Grossisten

☐ Zum Weltmarktpreis

☐ Ich weiss es nicht

TEIL C: QUALITÄT VON MEDIKAMENTENSPENDEN

11 Leitlinien für Medikamentenspenden (WHO)

11.1 Kennen Sie die WHO Leitlinien für Medikamentenspenden?

☐ Ja ☐ Nein

11.2 Sind Sie im Besitz dieser Leitlinien?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

11.3 Haben diese Leitlinien Ihre Spendentätigkeit beeinflusst?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

Wenn **Ja:** Wie?

———————————————————————————————————————

———————————————————————————————————————

12 Hat Ihre Organisation eigene Leitlinien für Medikamentenspenden?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

Wenn **Ja:** Bitte senden Sie, falls möglich, ein Exemplar mit diesem Fragebogen mit.

13 Bedarf des Empfängers

13.1 Stellt Ihre Organisation Medikamentenspenden aufgrund einer Bestell-Liste des Empfängers zusammen?

☐ Ausschliesslich ☐ Teilweise ☐ Nie ☐ Ich weiss es nicht

13.2 Lagen im Jahre 2000 konkrete Bestell-Listen vor?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

14 Registrierung der Medikamente

14.1 Spendet Ihre Organisation Medikamente, die in der Schweiz registriert sind?

☐ Ausschliesslich ☐ Teilweise ☐ Nie ☐ Ich weiss es nicht

14.2 Spendet Ihre Organisation Medikamente, die in der Liste der essentiellen Medikamente der WHO aufgeführt sind?

☐ Ausschliesslich ☐ Teilweise ☐ Nie ☐ Ich weiss es nicht

14.3 Spendet Ihre Organisation Medikamente, die in der Liste der essentiellen Medikamente des Empfängerlandes enthalten sind?

☐ Ausschliesslich ☐ Teilweise ☐ Nie ☐ Ich weiss es nicht

15 Qualitätsanforderungen Ihrer Organisation an gespendete Medikamente

15.1 Auf welche Qualitätskriterien achtet Ihre Organisation beim Spenden von Medikamenten?

_____

_____

_____

_____

15.2 In welcher Situation ist es Ihrer Ansicht nach gerechtfertigt, verfallene Medikamente zu spenden?

_____

_____

15.3 Wie lange sind die von Ihrer Organisation gespendeten Medikamente haltbar?

Es ist nur eine Antwort möglich

☐ Mehr als 1 Jahr

☐ Mindestens 1 Jahr

☐ Mindestens 6 Monate

☐ Verfallen

☐ Ich weiss es nicht

15.4 Sind die Medikamentenpackung und die Packungsbeilage Ihrer Spenden in einer Sprache beschriftet, die im Empfängerland verstanden wird?

☐ Immer ☐ Manchmal ☐ Nie ☐ Ich weiss es nicht

16 Versand der Medikamente

16.1 Fügt Ihre Organisation der Medikamentenspende ein Qualitätszertifikat (z.B. WHO) bei?

☐ Immer ☐ Bei Bedarf ☐ Nie ☐ Ich weiss es nicht

16.2 Fügt Ihre Organisation der Spende einen Lieferschein bei?

☐ Immer ☐ Manchmal ☐ Nie ☐ Ich weiss es nicht

16.3 Wie werden die Versandkosten zwischen Ihrer Organisation und den Empfängern aufgeteilt?

_____

_____

16.4 Wie werden die Zollkosten zwischen Ihrer Organisation und den Empfängern aufgeteilt?

_____

_____

16.5 Werden die Empfänger über die Zusammensetzung und das Versanddatum der Spende im Voraus informiert?

☐ Immer ☐ Manchmal ☐ Nie ☐ Ich weiss es nicht

16.6 In welcher Form kommuniziert Ihre Organisation mit den Empfängern der Spenden (z.B. E-Mail, Fax)?

———————————————————————————————————————

———————————————————————————————————————

16.7 Wie stufen Sie den Informationsaustausch mit den Empfängern ein?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

TEIL D: SPENDENPROZESSE

Als Spendenprozess wird der ganze Weg, den die Spenden vom Spender bis hin zum Empfänger und zum Patienten durchlaufen, definiert.

17 Was sind Ihrer Meinung nach heute die Hauptprobleme in Spendenprozessen?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

18 Ist Ihrer Meinung nach der Verkauf von gespendeten Medikamenten durch die Empfängerorganisationen gerechtfertigt?

☐ Ja ☐ Nein

Bitte begründen Sie Ihre Aussage

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

19 Wurde von den Spendentätigkeiten Ihrer Organisation je eine Evaluation durchgeführt?

☐ Ja ☐ Nein ☐ Ich weiss es nicht

Wenn **Ja**: Bitte beschreiben Sie kurz die Resultate

———————————————————————————————————————

———————————————————————————————————————

20 Welche Funktion haben Ihrer Meinung nach Apothekerinnen und Apotheker in Spendenprozessen?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

21 Was sind die wichtigsten Probleme in den Spendenprozessen Ihrer Organisation?

Es sind mehrere Antworten möglich

☐ Fehlende Infrastruktur **(1)**
☐ Ungenügende Qualität der Spenden **(2)**
☐ Mangelnde Ausbildung der Mitarbeiter in Spendenprozessen **(3)**
☐ Mangelnde Transparenz in Spendenprozessen (z.B. wer ist verantwortlich, wie ist das Vorgehen, etc.) **(4)**
☐ Zoll- und Versandkosten **(5)**
☐ Mangelnde Kommunikation zwischen Spender und Empfänger **(6)**
☐ Nicht adäquate Mengen an Medikamenten für eine längerfristige Versorgung der Patienten **(7)**
☐ Einführung von Leitlinien oder anderen Qualitätsstandards **(8)**
☐ Medikamente nicht relevant für die Krankheiten der Bevölkerung **(9)**
☐ Keine **(10)**
☐ Andere **(11)**

Welches ist das wichtigste Problem? Nr. ☐

Falls Sie **Andere** ankreuzen: Bitte beschreiben Sie näher

———————————————————————————————————————

TEIL E: IHR KOMMENTAR

22 Wie kann man Ihrer Meinung nach Spendenprozesse verbessern?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

23 Wurde ein wichtiges Thema in diesem Fragebogen nicht behandelt?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

24 Welche Möglichkeit haben Sie in Ihrer Position, um etwas zur Verbesserung der Qualität von Medikamentenspenden beizutragen?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

25 Was verstehen Sie unter dem Begriff "doppelter Standard von Medikamentenspenden"?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

Die Angaben auf dieser Seite werden vertraulich behandelt und separat aufbewahrt
Sie dienen für allfällige Rückfragen

TEIL F: PERSÖNLICHE ANGABEN

Anrede, Titel

_____

Name

_____

Vorname

_____

Organisation, Institution, Firma

_____

Adresse

_____

_____

_____

_____

Ihre Position in Ihrer Organisation

_____

Ihre Ausbildung / Ihr Diplom

_____

Telefon Nummer

|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

Fax Nummer

|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

E-Mail

_____

Datum

|_|_|.|_|_|_|.|_|_|_|

Tag Monat Jahr

Kennen Sie Organisationen, Institutionen, Personen oder Gruppen, die sich auch mit Medikamentenspenden beschäftigen und denen dieser Fragebogen ebenfalls gesendet werden kann?

_____

_____

_____

_____

Name und Adresse des Entscheidungsträgers in Ihrer Organisation

_____

_____

Herzlichen Dank für Ihre Mitarbeit

QUESTIONNAIRE

Dons de médicaments en provenance de la Suisse

Swiss Tropical Institute
Institut Tropical Suisse
Schweizerisches Tropeninstitut

Swiss Centre for
International Health

Gaby Gehler Mariacher
Pharmacienne

INTRODUCTION

But du questionnaire

Le but du présent questionnaire est de récolter le plus d'informations possibles sur le don de médicaments en provenance de la Suisse. Vous trouverez plus de details dans le résumé du projet d'étude.

Définitions

1. Dans l'étude présente, un médicament donné est défini comme étant un médicament passant, sous forme de marchandise, la frontière du pays destinataire.
2. Dans l'étude présente, un médicament est défini comme étant une substance ou un mélange de substances destinés à diagnostiquer, prévenir ou à traiter les maladies.
3. Sont exclus de l'étude présente, les dispositifs médicaux (seringues, aiguilles, matériel de pansement, etc.) ainsi que les biens de consommation (shampooings, compléments alimentaires, etc.)
4. Pour des raisons pratiques, le terme " organisation " comprend également des entreprises, des institutions, des institutions religieuses et des particuliers.

Instructions pour remplir le questionnaire

1. Merci d'écrire avec un stylo à bille bleu, noir ou foncé.
2. Toutes les réponses doivent être claires et lisibles. Merci d'utiliser les caractères d'imprimerie.
3. Merci de cocher les cases d'une manière aussi exacte que possible, car le questionnaire sera scanné afin de pouvoir l'analyser.

Juste ☒ Faux ☒

Chaque opinion compte

Votre coopération est importante afin que l'étude du questionnaire soit aussi complète et exacte que possible et je tiens à vous en remercier d'avance.

Gaby Gehler Mariacher (E-Mail: Gaby.Gehler@unibas.ch)

PARTIE A: QUESTIONS GÉNÉRALES

1 Quelle description correspond au mieux à votre organisation?

Cocher la réponse correspondant au mieux

☐ Secteur public (par exemple organisation gouvernementale, Office cantonal de contrôle des médicaments, hôpital public)
Merci de préciser

———————————————————————————————————————

☐ Institution religieuse (par exemple mission, paroisse)
Merci de préciser

———————————————————————————————————————

☐ Organisation non publique à but non lucratif (par exemple organisation privée à titre bénévole, organisation non gouvernementale, particulier)
Merci de préciser

———————————————————————————————————————

☐ Organisation privée à but lucratif (par exemple officine, industrie pharmaceutique)
Merci de préciser

———————————————————————————————————————

A laisser libre

ID ☐☐☐☐ CH - ☐ - ☐☐

23295

2 Votre organisation, travaille-t-elle surtout dans le domaine de la approvisionnement de médicaments?

☐ Oui ☐ Non

Si **Non**, quelle est l'activité principale de votre organisation?

———————————————————————————————————————

———————————————————————————————————————

3 Dons de médicaments

3.1 Votre organisation est-elle impliquée dans le don de médicaments sous forme de don en nature?

☐ Oui ☐ Non

Si **Oui**, merci de préciser sous quelle forme votre organisation est impliquée dans le don de médicaments.

———————————————————————————————————————

———————————————————————————————————————

3.2 A l'avenir votre organisation sera-t-elle toujours impliquée dans le don de médicaments?

☐ Oui ☐ Non ☐ Je ne sais pas

3.3 Votre organisation donne-t-elle en plus de l'argent pour que le destinataire puisse s'acheter lui-même des médicaments dont il a besoin ?

☐ Oui ☐ Non ☐ Je ne sais pas

Si **Oui**, à quelles conditions le don d'argent est-il soumis?

———————————————————————————————————————

———————————————————————————————————————

3.4 Dans votre organisation occupez-vous une position de responsable concernant une activité de don?

☐ Oui ☐ Non

Si **Non**, merci d'indiquer l'adresse de la personne responsable à la dernière page du questionnaire

3.5 Dans quelles situations les dons de médicaments sont-ils utiles?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

3.6 Il existe des raisons pour et contre le soutien de l'approvisionnement de médicaments à l'aide de dons. Quelles sont, selon vous, les raisons les plus importantes?
Merci d'évaluer les raisons avec plus et avec minus

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

Si vous avez répondu **Non** à la question 3.1,

merci de continuer le questionnaire à la dernière page

PARTIE B: DONS DE MÉDICAMENTS

4 Quelle description correspond le mieux aux destinataires de vos dons de médicaments?

Plusieurs réponses sont possibles

☐ Secteur public (par exemple ministère de la santé, hôpital)

Merci de préciser

———————————————————————————————————————

☐ Institution religieuse (par exemple hôpital de mission, diocèse)

Merci de préciser

———————————————————————————————————————

☐ Organisation non publique à but non lucratif (par exemple organisation privée à titre bénévole, organisation non gouvernementale, particulier)

Merci de préciser

———————————————————————————————————————

☐ Organisation privée à but lucratif (par exemple pharmacie, industrie pharmaceutique)

Merci de préciser

———————————————————————————————————————

5 Les régions dans lesquelles votre organisation fait des dons de médicaments

5.1 Dans quelles régions votre organisation a-t-elle fait des dons de médicaments en l'an 2000?

Plusieurs réponses sont possibles

☐ Asie Dans quels pays? ——————————————————

☐ Afrique Dans quels pays? ——————————————————

☐ Europe de l'Est Dans quels pays? ——————————————————

☐ Amérique centrale et Amérique du Sud Dans quels pays? ——————————————————

☐ Autres régions Dans quels pays? ——————————————————

☐ Je ne sais pas

☐ En l'an 2000 nous n'avons pas fait de dons de médicaments

5.2 Dans quelles régions votre organisation a-t-elle fait des dons de médicaments avant l'an 2000?

Plusieurs réponses sont possibles

☐ Asie ☐ Afrique ☐ Europe de l'Est ☐ Amérique centrale et Amérique du Sud ☐ Autres régions

Si vous avez répondu **Autres régions**, merci de préciser

———————————————————————————————————————

6 Dons en Tanzanie

6.1 Votre organisation a-t-elle fait des dons de médicaments en Tanzanie en l'an 2000?

☐ Oui ☐ Non ☐ Je ne sais pas

Si **Oui,** quels sont les partenaires/ destinataires en Tanzanie?

Merci d'indiquer, si possible, leur nom et adresse

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

6.2 Votre organisation a-t-elle fait des dons de médicaments en Tanzanie avant l'an 2000?

☐ Oui ☐ Non ☐ Je ne sais pas

6.3 A l'avenir votre organisation continuera-t-elle à faire des dons de médicaments en Tanzanie?

☐ Oui ☐ Non ☐ Je ne sais pas

7 Dans quel but votre organisation donne-t-elle des médicaments?

Plusieurs réponses sont possibles

☐ Pour les soins de santé primaires (médicaments de base)

Si **Oui**, merci de préciser

☐ Comme kit

☐ Selon les besoins

☐ Pour les soins de santé secondaires et tertiaires

☐ En cas de catastrophes naturelles

☐ Pour des camps de réfugiés et en situation de guerre

☐ Comme partenaire d'un programme déterminé (par exemple pour l'éradication de la lèpre, du trachome)

☐ Pour le traitement de certaines maladies (par exemple le diabète, le sida)

☐ Pour la recherche

☐ Suite à une demande de particulier

☐ Je ne sais pas

☐ Autres

Si vous avez répondu **Autres**, merci de préciser

———————————————————————————————————————

8 Votre organisation, où se procure-t-elle les médicaments donnés?

Plusieurs réponses sont possibles

☐ Marchandise de vos propres stocks destinée à la vente

☐ Production spécifique pour le don

☐ En provenance de retours de marchandises ayant déjà été vendues une fois (médicaments non utilisés)

☐ Chez un fabricant

☐ Achetés

☐ Reçus gratuitement

☐ Chez des grossistes à but non lucratif

☐ Achetés

☐ Reçus gratuitement

☐ Chez des pharmacies

☐ Achetés

☐ Reçus gratuitement

☐ Chez des hôpitaux

☐ Achetés

☐ Reçus gratuitement

☐ Chez des organisations non gouvernementales (par exemple Pharmaciens sans Frontières)

☐ Achetés

☐ Reçus gratuitement

☐ Je ne sais pas

☐ Autres

Si vous avez répondu **Autres**, merci de préciser

———————————————————————————————————————

9 Dans le domaine des dons de médicaments votre organisation coopère-t-elle avec des partenaires?

☐ Oui ☐ Non ☐ Je ne sais pas

Si **Oui**, quels sont vos partenaires dans le pays donataire?

Merci d'indiquer, si possible, le nom et l'adresse des partenaires les plus importants

———————————————————————————————————————

———————————————————————————————————————

Si **Oui**, quels sont vos partenaires dans le pays destinataire?

Merci d'indiquer, si possible, le nom et l'adresse des partenaires les plus importants

———————————————————————————————————————

———————————————————————————————————————

10 Valeur des dons

10.1 Quelle était la valeur des dons de votre organisation en l'an 2000?

Env. | | | | | | | | | CHF ☐ Je ne sais pas

10.2 Sur quelle base calculez-vous la valeur de vos dons?

Plusieurs réponses sont possibles

☐ Prix de vente dans le pays donataire

☐ Prix de grossiste dans le pays donataire

☐ Prix ex factory

☐ Prix de vente d'un distributeur à but non lucratif

☐ Prix sur le marché mondial

☐ Je ne sais pas

PARTIE C: QUALITÉ DES DONS DE MÉDICAMENTS

11 Principes directeurs de l'OMS applicables aux dons de médicaments

11.1 Connaissez-vous les principes directeurs de l'OMS pour le don de médicaments?

☐ Oui ☐ Non

11.2 Possédez-vous ces principes directeurs?

☐ Oui ☐ Non ☐ Je ne sais pas

11.3 Ces principes directeurs ont-ils influencé votre activité de donation?

☐ Oui ☐ Non ☐ Je ne sais pas

Si **Oui**, comment?

———————————————————————————————————————

———————————————————————————————————————

12 Votre organisation possède-t-elle ses propres directives concernant le don de médicaments?

☐ Oui ☐ Non ☐ Je ne sais pas

Si **Oui,** merci de joindre un exemplaire en annexe

13 Besoins du destinataire

13.1 Votre organisation fait-elle des dons de médicaments sur la base d'une commande écrite du destinataire?

☐ Exclusivement ☐ En partie ☐ Jamais ☐ Je ne sais pas

13.2 En l'an 2000, y avait-il des commandes écrites?

☐ Oui ☐ Non ☐ Je ne sais pas

14 Enregistrement des médicaments

14.1 Votre organisation donne-t-elle des médicaments enregistrés en Suisse ?

☐ Exclusivement ☐ En partie ☐ Jamais ☐ Je ne sais pas

14.2 Votre organisation donne-t-elle des médicaments se trouvant dans la liste des médicaments essentiels de l'OMS?

☐ Exclusivement ☐ En partie ☐ Jamais ☐ Je ne sais pas

14.3 Votre organisation donne-t-elle des médicaments se trouvant dans la liste des médicaments essentiels du pays destinataire?

☐ Exclusivement ☐ En partie ☐ Jamais ☐ Je ne sais pas

15 Critères de qualité de votre organisation pour les médicaments donnés

15.1 Sur quels critères de qualité les dons de médicaments de votre organisation sont-ils basés?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

15.2 Selon vous dans quelles circonstances le don de médicaments échus est-il justifié?

———————————————————————————————————————

———————————————————————————————————————

15.3 Durant combien de temps les médicaments donnés peuvent-ils encore être utilisés?

Une seule réponse est possible

☐ Plus d'une année

☐ Au moins 1 année

☐ Au moins 6 mois

☐ Périmés

☐ Je ne sais pas

15.4 L'emballage et la notice d'emballage portent-ils des inscriptions dans une langue couramment utilisée dans le pays destinataire?

☐ Toujours ☐ Quelquefois ☐ Jamais ☐ Je ne sais pas

16 Envoi des médicaments

16.1 Votre organisation joint-elle un certificat de qualité (par exemple de l'OMS) avec l'envoi des médicaments?

☐ Toujours ☐ En cas de besoin ☐ Jamais ☐ Je ne sais pas

16.2 Votre organisation joint-elle un bulletin de livraison?

☐ Toujours ☐ Quelquefois ☐ Jamais ☐ Je ne sais pas

16.3 Comment les frais d'envoi sont-ils partagés entre votre organisation et les destinataires?

———————————————————————————————————————

———————————————————————————————————————

16.4 Comment les frais de douane sont-ils partagés entre votre organisation et les destinataires?

———————————————————————————————————————

———————————————————————————————————————

16.5 Les destinataires sont-ils préalablement mis au courant de la composition et de la date d'envoi des médicaments?

☐ Toujours ☐ Quelquefois ☐ Jamais ☐ Je ne sais pas

16.6 Comment votre organisation communique-t-elle avec les destinataires des dons (par exemple E-Mail, fax)?

———————————————————————————————————————

———————————————————————————————————————

16.7 Comment décririez-vous la qualité de l'échange d'information avec les destinataires des dons?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

PARTIE D: PROCESSUS DE DON

On entend par processus de don tout le chemin parcouru de l'envoi.

17 Selon vous, quels sont les problèmes majeurs dans les processus de don?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

18 Selon vous, la vente de médicaments donnés par les organisations destinataires est-elle justifiée?

☐ Oui ☐ Non

Merci de justifier votre réponse

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

19 Votre activité de donation a-t-elle déjà été sujette à une évaluation?

☐ Oui ☐ Non ☐ Je ne sais pas

Si **Oui**, merci de décrire brièvement les résultats

———————————————————————————————————————

———————————————————————————————————————

20 Selon vous, quelle fonction les pharmaciennes et pharmaciens occupent-ils dans les processus de don?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

21 Quels sont les problèmes majeurs dans les processus de don de votre organisation?

Plusieurs réponses sont possibles

☐ Infrastructure insuffisante **(1)**
☐ Qualité insuffisante des médicaments **(2)**
☐ Formation insuffisante des coopérateurs dans les processus de don **(3)**
☐ Mauvaise transparence dans les processus de don (qui est responsable, quelle est la démarche etc.) **(4)**
☐ Frais d'envoi et de douane **(5)**
☐ Mauvaise communication entre donataire et destinataire **(6)**
☐ Quantités de médicaments inadéquates pour un traitement des patients à long terme **(7)**
☐ L'introduction de directives ou d'autres garanties de qualité dans les processus de don **(8)**
☐ Pas significatif pour les maladies de la population **(9)**
☐ Aucun **(10)**
☐ Autres **(11)**

Quel est le problème le plus important? N° ☐

Si vous avez répondu **Autres**, merci de préciser

———————————————————————————————————————

PARTIE E: VOTRE COMMENTAIRE

22 Selon vous comment peut-on améliorer les processus de don?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

23 Y a-t-il un sujet important qui n'a pas été traité dans ce questionnaire?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

24 Quelles possibilités avez-vous dans votre position de contribuer à l'amélioration de la qualité des dons de médicaments?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

25 Qu'entendez-vous par le terme "double standard de dons de médicaments"?

———————————————————————————————————————

———————————————————————————————————————

———————————————————————————————————————

Les données figurant sur cette page sont confidentielles et elles seront gardées séparément. Elles sont importantes pour d'éventuelles questions ultérieures

PARTIE F: DONNÉES PERSONELLES

Titre

_____

Nom

_____

Prénom

_____

Organisation/Institution/Entreprise

_____

Adresse

_____

_____

_____

_____

Position dans votre organisation

_____

Formation/Diplômes

_____

Téléphone

|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

Fax

|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

E-Mail

_____

Date

|_|_| . |_|_| . |_|_|

Jour Mois Année

Connaissez-vous des organisations, des institutions, des particuliers ou des groupes de personnes qui s'occupent également de dons de médicaments et à qui ce questionnaire pourrait également être envoyé?

_____

_____

_____

_____

Nom et adresse de la personne responsable d'une activité de don dans votre organisation

_____

_____

Merci beaucoup pour votre coopération

Annex 2: Question Guide

Key Informant Interview: “Drug Donations – Is the Patient in Focus?”

Key Informant Interview: "Drug Donation - Is the Patient in Focus?"

Date:…..…..… Interview partner:……

Goal of the key informant interview

The goal of the key informant interviews is to deepen the information obtained by the „Drug Donations" survey (May – August 2001, in Tanzania and in Switzerland) and to discuss the preliminary results.

Concept of the study

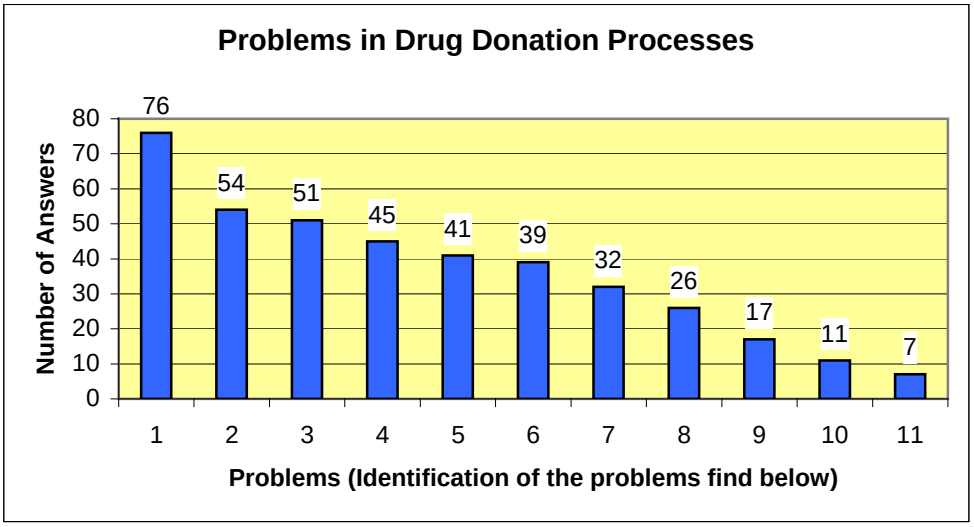
The overall goal of the study is to analyse structures and process cycles of relevant drug donations. The advantages and disadvantages of different donation processes will be examined and main determinants for good patient-oriented donation processes will be ascertained. Based on these results, models for optimised donation processes will be developed. Results of this study will be discussed with reference to the Tanzanian drug and health care systems.

List of questions

We have done a short analysis from the first 230 returned questionnaires (approx. 20% of the sent questionnaires) from Tanzania. We have found the following preliminary results:

A: Identification of main problems

1 On the question: „What causes the main problems in the drug donation processes of your organisation?", problems mentioned are listed in the figure below.
How would you interpret this ranking according to your experiences?

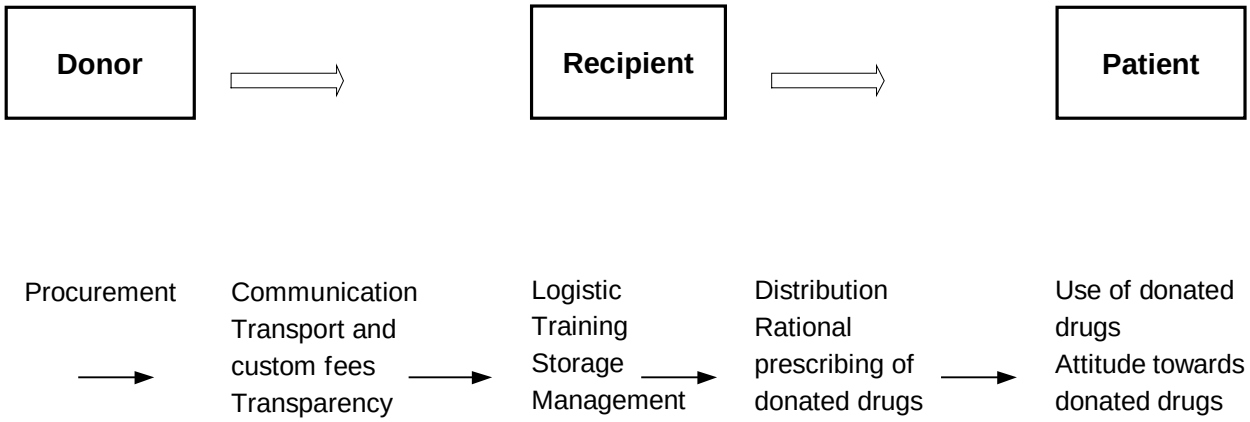


The respondents pointed out as many problems as observed in their health facilities. Facilities that do not receive donations, did mostly not answer this question in general. Please note that the data presented above are compiled from preliminary results and are not definitive.

Identification of the Numbers of Problems according to the number of answers

1	Quantities are not sufficient for long-term treatment of patients	6	No communication between donor and recipient
2	Guidelines for Drug Donations or other tools are not implemented	7	Insufficient infrastructures
3	Shipment and custom fees	8	Insufficient training
4	No transparency in the donation processes	9	Poor quality of drugs
5	Not relevant for the diseases of the local population	10	Others
		11	None

2 The following flow-chart reproduces a simplified donation process.
What are the 3 strongest and 3 weakest features of donation processes according to your experiences?



Other areas: ……..

B: Suggestions for optimising drug donation processes

To the open question: „In your opinion, what are the most important actions needed to optimise drug donation processes?“, the five top answers were:

1. **To improve the communication between recipients and donors**
2. **To assure the quality of donated drugs**
3. **To support participatory collaboration in the donation process**
4. **To meet local needs by donations**
5. **To comply with national regulations of the recipients country and to follow and distribute “Guidelines for Drug Donations”**

Do you think that these proposed actions would be effective or do you suggest other solutions for optimising donation processes?

C: Particular questions

1 Very often respondents noted (with the exemption of donation programmes) that drug donations cover up to 10% of their annual drug supply. On the other hand, it is discussed that drug donations are very important for the drug supply system in Tanzania.

   a. How is the remaining 90% of the drug supply covered?
   b. Why do you think that also a 10% coverage by drug donations is important for the drug supply system in Tanzania?

2 To the question „What is the value of the donations received in 2000?“ we did not get many answers. How do you interpret this result?

- The numbers are too sensitive to be published
- Donations are perceived as gifts and not as commercial goods
- It is difficult to estimate the value of donations
- Other reasons

D: Final remarks by the respondent

Curriculum Vitae

Name	**Gabriela Gehler Mariacher**
Place of Origin	Walenstadt and Rorschacherberg (SG, Switzerland)
Date and place of birth	2nd of August 1953, Zurich
E-mail	gema@bluewin.ch
Languages	German, English, French, Italian

Education and Training

2000-2007	PhD in Epidemiology at the Swiss Tropical Institute in Basel, Switzerland Supervisors of the PhD. PD Dr. Kurt Hersberger and Prof. Dr. Marcel Tanner Co-referee: Prof. Dr. Rudolf Bruppacher Experts: Dr. Deo Mtasiwa and Dr. Karin Wiedenmayer Attended lectures given by. K. Hersberger, C.Lengeler, B. Obrist, D. de Savigny, T. Smith, P. Vounatsou, M. Weiss, N. Weiss, K. Wiedenmayer, J. Zinsstag
November 2003	Training course: Rational Drug Management in International Health
October 2001	Training course: WHO/UNICEF Technical Briefing Seminar on Essential Medicines Policies
1995-1997	Postgraduate diploma (FPH Offizinapotheker): “Specialisation in Community Pharmacy Practice”
1995	Course in Marketing for Non-profit Organisations, Berufsschule für Weiterbildung, Zürich
1994	Course in PR-work for Non-profit Organisations, Berufsschule für Weiterbildung, Zürich
1979	Masters Degree, Msc Pharm, (Staatsexamen für Apotheker), Swiss Polytechnic University ETH, Zurich, Switzerland
1973-1979	Studies in pharmaceutical sciences at the Swiss Polytechnic University ETH in Zurich Switzerland
1973	Matura Typ B
1967-1973	Gymnasium Typ B, Theresianum in Ingenbohl SZ, Switzerland
1960-1967	Primary and Secondary School in Ebnat-Kappel SG, Switzerland

Professional Experience

Since 1999	Employed part-time as pharmacist in the pharmacy at the main station "Bahnhofapotheke", Zurich
1987-1998	Employed part-time as pharmacist and as assistant manager in the "Neumarktapotheke", Zurich
1986-2000	Foundation and management of the Private Voluntary Organisation MEDI HELP DIRECT, Zurich (together with Dr. Jeannette Goette)
1980-1987	Pharmacy manager of the "Rigiapotheke", Zurich
1979-1980	Pharmacy manager of the "Apotheke Schlieren", Schlieren

Scientific Publications/Posters/Articles

Gehler Mariacher G, Mtasiwa D, Wiedenmayer K, Tanner M, Hersberger KE, *Practical Solutions for Optimised Drug Donation Processes in Tanzania, Recommendations from an Intersectoral Workshop*, submitted to East African Medical Journal, 2007

Gehler Mariacher G, Mtasiwa D, Wiedenmayer K, Bruppacher R, Tanner M, Hersberger KE, *Optimizing In-kind Drug Donations for Tanzania – a Case Study*, International Journal of Health Policy and Management, 6 September 2007

Gehler Mariacher G, Mtasiwa D, Wiedenmayer K, Bruppacher R, Tanner M, Hersberger KE, *In-kind Drug Donations for Tanzania – Stakeholders' View – a Questionnaire Survey*, World Health & Population, March 2007, www.longwoods.com/product.php?productid=18771&cat=469&page=1

Gehler Mariacher G, *Gut gemeint ist nicht gut genug*, Schweizerische Apothekerzeitung 24: 931-32, 2004

Gehler Mariacher G, Wiedenmayer K, Mtasiwa D, Tanner M, Hersberger KE, *Optimisation of Drug Donation Processes in Tanzania*, Poster presented at the SEAM Conference in Dar es Salaam, December 2003

Gehler Mariacher G, Wiedenmayer K, Tanner M, Hersberger KE, *Bridging the Gap, Rendering Drug Donations more effective*, European Expert Seminar on appropriate Drug Donations, Amsterdam, the Netherlands, June 11-12. 1999

Gehler Mariacher G, Rota M, Hersberger KE, *Rücklauf ungenutzter Medikamente in Apotheken*, Schweiz Rundsch Med Prax 1998 Okt. 21 87(43): 1441-43

Gehler Mariacher G, Rota M, Hersberger KE, *Rücklauf ungenutzter Medikamente in Apotheken*, Jahreskongress der Deutschen Pharmazeutischen Gesellschaft und der Schweizerischen Gesellschaft für pharmazeutische Wissenschaften (Poster P34), Zürich, 3.-5. Oktober 1997