Financing Reproductive and Child Health Services at the Local Government Level in Tanzania

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Abstract

The paper analyzes the financial resources for reproductive and child health related interventions in Tanzania. It shows that the government and its partners are committed to improve reproductive and child health services as articulated in various government policies and strategies. However, despite these commitments, there is considerable financing gap. Estimates show that only 23% of the national budget was allocated to reproductive health interventions in 2009/10 which is short of what is stipulated in the health sector strategic plan III (34%). Shortfall of resources puts households at risk of financial catastrophe as portrayed by out of pocket payment for accessing reproductive health services (47% in 2009/10). Inadequate resources to address supply side factors of the health system coupled with socio-economic conditions of households have resulted to poor maternal health outcomes as portrayed by high maternal mortality ratio (454 deaths per 100,000 live births) and a significant proportion of rural households which do not have access to assisted birth (60%). The paper argues for considerable additional funding and tapping innovative approaches needed to achieve universal coverage of the full package of interventions.

Key words: comprehensive council health plans, financial resources, reproductive and child health.

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1.0 Introduction

The 1990s onwards has been, for Tanzania, a period of re-examination of approaches towards the health sector development. This led to the formulation and implementation of Health Sector Reforms which aimed at addressing the structural problems within the health system (United Republic of Tanzania (URT, 2003). The reforms have been conducted simultaneously with other reforms such as Public Sector Reform Program, Local Government Reform Program and Public Financial Management Reform Program. Overall the intention has been to ensure that the public sector becomes more responsive to needs and delivers public goods and services more effectively, efficiently and equitably.

The local government reforms are aimed at increasing accountability and efficiency and effectiveness in the use of public resources at the local authority level. Embedded in these reforms is decentralization of fiscal powers responsibilities to local authorities and giving more discretionary fiscal powers to the sub-national governments councils (Gilson et al., 1994; URT, 2008a). In this respect, councils are mandated to levy local taxes within the defined categories and rates established by the central government, while the central government provides block grants for recurrent expenditure to the local authorities. Fiscal decentralization allows councils to pass their own budget reflecting their own priorities, as well as mandatory expenditure required for the attainment of development goals based on national policies and strategies.

As the decentralization process unfolds, councils have embarked on preparation of District Comprehensive Plans that consolidate activities to be done by different sectors in order to achieve certain stipulated sector goals and objectives that are aligned to national policies and strategies. The Council Comprehensive Health Plans (CCHPs) for the health sector interventions at the local level have been initiated within this context. In the CCHP guidelines of 2007, Reproductive and Child Health (RCH) issues are treated as the first of the six priority areas derived from the Essential Health Package (URT, 2000; URT, 2007a)**.** Councils are normally expected to plan activities in line with this package, but at the same time are required to consider and ensure that interventions selected correspond to the local needs of the district and population.

Monitoring financial resource flows for maternal and child health is a central part of the One Plan for Maternal Newborn and Child Health in Tanzania (URT, 2008b) and the global *Countdown* initiative (Greco et al., 2008; WHO and UNICEF, 2010). This involves, determining the funding gap between resources currently available and the actual investments required to reach national and Millennium Development Goals (MDG) targets and holding governments and the international community to account for investing adequately in the health of women and children. Policy makers need financial information to make informed decisions on how to best allocate resources among competing needs, set priorities and ensure sustainable funding for programs.

Monitoring of resources to fund various interventions stipulated in the national strategies for poverty reduction has been underscored in the public financial management reforms. Monitoring of resources has been done through National Accounts, annual Public Expenditure Reviews

(PER) and more intermittent Public Expenditure Tracking Surveys (PETS) which are mainly conducted by civil society organization.

The Health Sector PER for financial year 2008 and the National Health Accounts (NHA) for financial year 2009/10 provide some details on expenditures on Reproductive and Child Health (RCH). However, both reports provide very limited details about allocation of resources into RCH components at the central and local level (URT, 2009a; URT, 2012). Against this backdrop, this paper analyzes the extent to which RCH interventions have been integrated into the health sector budgeting and expenditure processes especially at the local government level. Specifically, the paper:

a) Describes the sources of funds for implementing CCHPs.
b) Assesses how much resources have been allocated to RCH interventions.
c) Links the RCH expenditure with RCH outcomes.
d) Assesses the adequacy of the RCH allocations.

2.0 Situation of Reproductive and Child Health in Tanzania

2.1 Policy Landscape

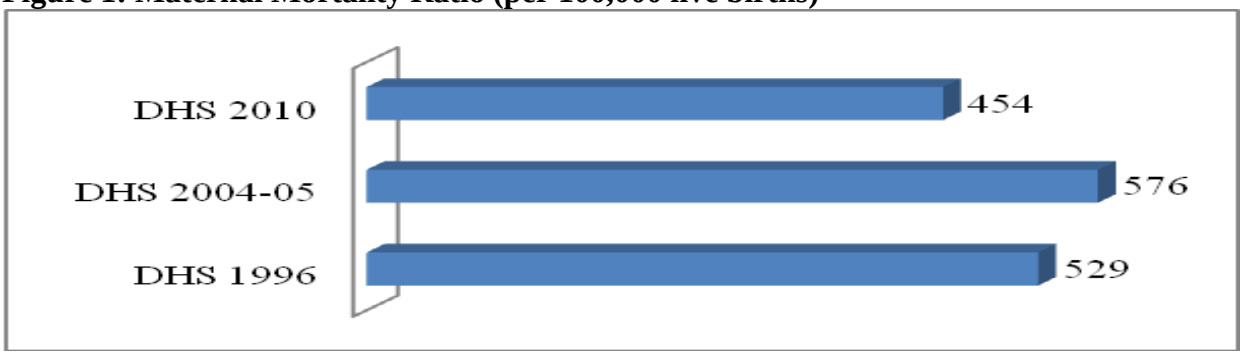
Improvement of reproductive health has been on top agenda of Tanzania since independence. Since 1994 the government has put increasing emphasis on the importance of reproductive health within primary health care, and instituted policies and strategies to that effect. It was one of the first countries in sub-Saharan Africa to adopt the Safe Motherhood Initiative (Magoma et al., 2013). The Reproductive and Child Health Strategy proposes strategies to improve maternal and child health (URT, 1997). Maternal and child health targets have also featured prominently in the National Strategy for Growth and Reduction of Poverty (NSGRP) known by the Kiswahili acronym MKUKUTA (URT, 2005; URT, 2010). Both MKUKUTA I and II underscore the importance of improved health and well-being of all Tanzanians with special emphasis to children, and women, and especially vulnerable groups through reducing infant, child and maternal mortality, morbidity, and malnutrition and increased prevention and treatment of HIV & AIDS.

Other important policy guiding documents include the National Package of Essential Health Interventions (URT, 2000) and exempting pregnant women from paying fees at government health facilities, for antenatal, delivery, emergency obstetric, newborn, postpartum, family planning, and post abortion care (URT, 2009b). Additional prioritization is evidenced by the National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania that provides a detailed overview of the government's plan from 2008-2015 to reduce maternal, neonatal and child mortality, in line with targets for MDGs 4 and 5 (URT, 2008b). Furthermore, the Primary Health Services Development Program (MMAM) 2007 – 2017 sets out national plans for 40% of health centers to be upgraded to Comprehensive Emergency Obstetric and Newborn Care (CEmONC) compliant by 2017 (URT, 2007b).

Despite these commitments and the change in policy environment and development of reproductive health programs, maternal health is still a challenge in Tanzania. The target/outcome in relation to maternal health of reducing maternal mortality by half from 529 per

100,000 live births in 1996 to 265 per 100,000 by 2010 has not been realized. The latest Tanzania Demographic and Health Survey estimates the Maternal Mortality Ratio (MMR) at 454 deaths per 100,000 live births (Figure 1). The 2013 "State of the World's Mothers Report" ranks Tanzania as the 135th worst country for mothers globally, and places it in the leading ten countries for the most number of newborn deaths and most first-day deaths (Save the Children, 2013). This means that concerted efforts are needed to translate policies and strategies into actions by allocating requisite resources for their implementation.

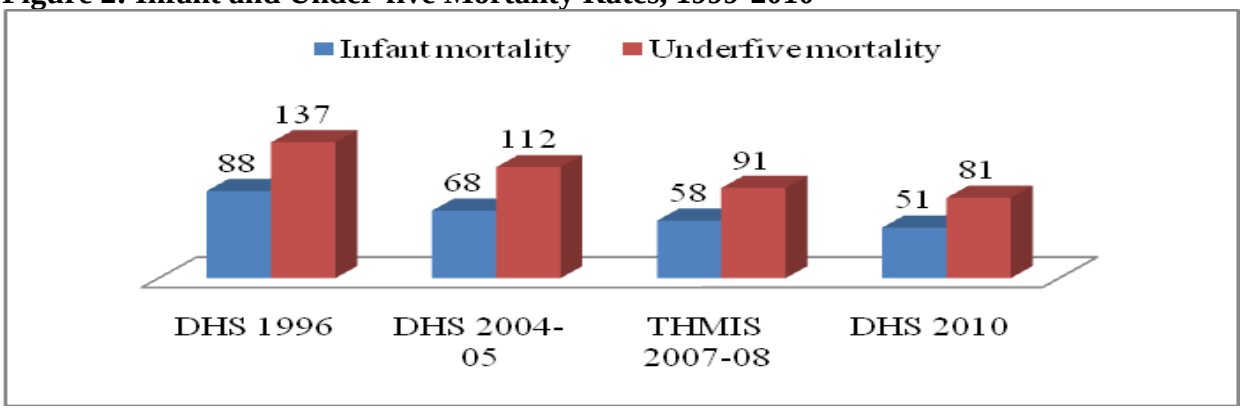
Figure 1: Maternal Mortality Ratio (per 100,000 live births)



Source: NBS and ICF Macro (2011).
Note: DHS stands for Demographic and Health Survey

Progress has been made in reducing under-five mortality. Data from the Tanzania Demographic and Health Survey (TDHS) 2010 show continuing declines in infant and under-five mortality over the past 10 years. Comparison of data across surveys corroborates the enormous decline in infant and under five mortality rates (Figure 2).

Figure 2: Infant and Under-five Mortality Rates, 1999-2010



Source: NBS and ICF Macro (2011).
Note: THMIS stands for Tanzania HIV/AIDS and Malaria Indicator Survey

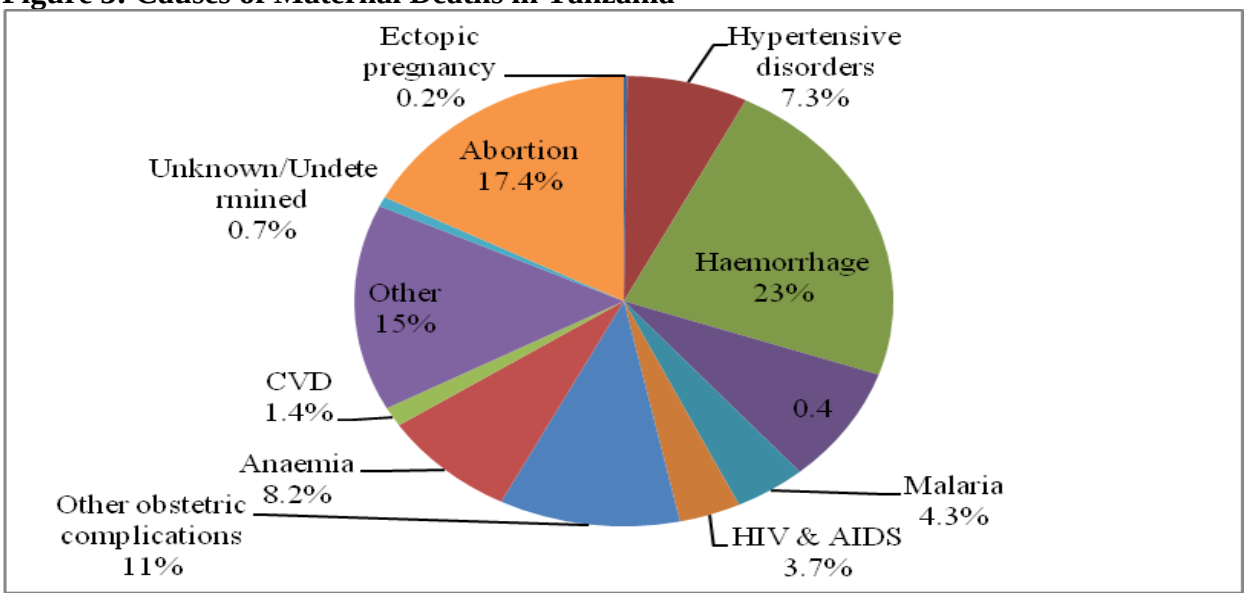
2.2 Factors Associated with High Maternal Mortality Ratios

The high Maternal Mortality Ratio (MMR) in Tanzania is attributed to both macro economic conditions of the country where 28% of the population lives below the basic needs poverty line (URT, 2013), overall inadequate funding for the health sector (URT et al., 2013) and structures and processes in the delivery of health care. The structures and processes of delivering health care are defined in the supply-demand context of health care. While there are various hindrances at health facility level, reasons for the uneven distribution of maternal morbidity and mortality in Tanzania could also be attributed to socio cultural beliefs and practices of different society in the country and socio economic status.

2.2.1 Supply Side Factors

While underscoring the fact that the major cause of maternal death are related to delivery complications (Figure 3), other causes of maternal deaths that remain unattended including abortions, Female Genital Mutilation (FGM), Vesico Vaginal Fistulae (VVF) are acknowledged. FGM stood at 20% in Tanzania (UNFPA, 2002). VVF is common in poor rural communities where there is limited access to reproductive health information and services including referral services. VVF repairs are common with some hospitals performing between 10-20 VVF repairs every year (UNFPA, 2002; Women's Dignity, 2003). Malaria and anemia also contribute significantly to maternal deaths (Figure 3).

Figure 3: Causes of Maternal Deaths in Tanzania



Source: NBS and ICF Macro (2011).

Inadequate provision of maternal and newborn health care, combined with minimal implementation of laws and policies, low capacity of health services, weak infrastructure and a weak human resource base are key factors contributing to the consistently high number of maternal deaths in Tanzania over time (Shija et al., 2011; Manzi et al., 2012). Lack of basic infrastructure and ancillary services are other factors that diminish the capacity to provide safe

maternal health services. Inadequate water and sanitation facilities, electricity and transport in the event of emergency referral are other supply side factors (NBS and Macro International, 2007; Pembe et al., 2010).

Shortages and stock-outs of maternal health equipment, supplies and commodities pose a significant challenge to maternal health service delivery in Tanzania (Plotkin et al., 2011). Women frequently encounter economic barriers in preparing for, accessing, and using facility-based services, including regularly being directed by health workers to purchase and bring essential medical supplies (Perkins et al., 2009).

2.2.2 Demand Side Factors

Major causes of maternal mortality and morbidity are attributed to the delays that occur at household level due to poor health seeking behavior coupled with lack of taking quick and prompt decisions mainly due to ignorance of danger signs that occur during pregnancy labor and post delivery period. A study by Mbaruku et al. (2009) revealed that there was an overall lack of knowledge of the major obstetric risks factors especially for community members. In the same study it was found that the lack of knowledge became more evident when community members were asked about action to be taken during life threatening conditions which need emergency referral. Delay in seeking help was the most common problem that led to maternal deaths as reported in another study conducted in Northern Tanzania (Evjen-Olsen et al., 2009). Community health education has been recommended as an appropriate intervention to curtail the mentioned knowledge gap. An evaluation conducted by Mswia et al. (2003) on community based monitoring of safe motherhood showed clearly that an intervention of educating the household heads on the danger signs of pregnancy, labor and post delivery period was associated with a 62% lower maternal death rate in that particular community.

Maternal morbidity and mortality is also characterized by delaying to reach the referral site due to long distance, lack of transport and cost involved to reach at the site of referral. Many studies have shown that the distance to referral site that is associated with inadequate transport and lack of money has contributed to maternal morbidity and mortality (URT, 2004; Mbuyita and Mayombana, 2006). Basic emergency obstetric care are usually not available at primary level of referral therefore women happen to have obstetric complications need to travel a long distance to get such services.

Socio-economic inequalities in health facility births are substantial: About half of all women (55%) in Tanzania gave birth in a health facility in 2010. These figures hide substantial within country variation, however, with urban women having much better access to delivery care than rural women. More than 80% of urban women deliver in a health facility, compared to less than half in rural areas, and there is no evidence of any improvements over time. In urban areas, most women who give birth in a health facility do so in a hospital. In rural areas, 17% of women give birth in a hospital, while 10% and 18% respectively give birth in a health centre and dispensary (Afnan-Holmes et al., 2013). The proportion of births in dispensaries is surprisingly low given the much greater geographical access to dispensaries in rural areas. Only one third (33%) of the poorest women gave birth in a health facility in 2010, compared to 90% of the richest (NBS and

ICF Macro, 2011). Geographical differences are equally large: In Dar-es-Salaam and the Kilimanjaro region, more than 90% of births take place in a health facility, compared to only one in three births in Mara, Rukwa or Kigoma regions (Ibid).

The statistics presented in this sub-section show the magnitude of the problem and the need to intervene by allocating adequate resources to address the demand side factors and the supply side factors in terms of provision of community health education in order to curtail the knowledge gap on danger signs and thus reduce the delays in seeking delivery care.

2.3 Planning and Budgeting for Reproductive and Child Health

Reproductive and child health issues are clearly detailed in chapter five (priority area one) of the Comprehensive Council Health Plans (CCHPs). These priorities are obtained from the Essential Health Package (EHP) given the need to plan alongside EHP which provides main diseases and health conditions responsible for ill health of Tanzanian population (Box 1). Although the councils are expected to plan activities in line with this package, the interventions are supposed to be selected based on the local needs of the district and population.

Box 1: Major RCH Components

- Antenatal care
- Care during childbirth
- Care of obstetric emergencies
- Newborn care
- Postpartum care
- Post abortion care
- Family planning
- Diagnosis and management of HIV & AIDS including Prevention of Mother to Child Transmission (PMTCT), other sexually transmitted infections and reproductive tract infections
- Prevention and management of infertility
- Prevention and management of cancer
- Prevention and management of childhood illnesses
- Prevention and management of immunizable diseases, and
- Nutrition care

Source: URT (2008b)

Some of these elements are operationalized through specific programs such as:

- Integrated Management of Childhood Illnesses (IMCI)
- Expanded Program on Immunization (EPI)
- Safe motherhood Initiative (SMI) which include interventions on antenatal care (such as Focused Antenatal Care—FANC), care during childbirth (Emergency Obstetric Care—EmOC), postpartum care (postnatal care), and Post Abortion Care (PAC)
- Adolescent health programs

- Community Based Care including Community Based Distributors (CBD)
- School health programs, and
- Information, Education and Communication (IEC) for RCH

3.0 Study Methodology

3.1 Desk review

The study was mainly desk review of CCHPs (Comprehensive Council Health Plans) from the six sampled Councils which are Dodoma Municipal Council (MC), Kondoa District Council (DC), Kongwa DC, Bahi DC, Mpwapwa DC, and Chamwino DC all in Dodoma Region and the national documents. Dodoma region was selected because of availability of all CCHPs under one roof at Prime Minister's Office, Regional Administration and Local Government (PMO-RALG) and the request by UNFPA given that this is an intervention area for One UN. Major documents reviewed include;

- The Comprehensive Council Health Planning Guidelines (2007)
- The 2008 National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn, and Child Deaths in Tanzania 2008-2015.
- Ministry of Health and Social Welfare (MoHSW) MTEF (2007/08-2009/10)
- The FY08 Health Sector Public Expenditure Review
- The Tanzania National Health Accounts for FY 2009/10
- The Councils Performance Report (2009)
- Other documents as indicated in specific sections of this paper.

The desk review involved trend analysis of RCH allocations per council for the past five years (whenever data could allow) through the review of CCHPs. The following CCHPs were reviewed.

- Dodoma MC: FY 2006/07, FY 2007/08, FY 2008/09 and FY 2009/10
- Kondoa DC: FY 2007/08, FY 2008/09, and FY 2009/10
- Kongwa DC: FY 2005/06, FY 2006/07, FY 2007/08, FY 2008/09 and FY 2009/10
- Mpwapwa DC: FY 2007/08, FY 2008/09 and FY 2009/10
- Bahi DC: FY 2007/08, FY 2008/09, and FY 2009/10
- Chamwino DC: FY 2007/08 and FY 2008/09

3.2 Themes for Review

- **Sources of funds for implementing CCHPs**: Under this theme sources of funds for implementing the CCHPs are identified and the challenges in the flow process.

- **Resource allocation for RCH at the central government level**: Information from health sector PER, MTEFs and NHA on financial resources available for delivery of RCH services is reviewed.

- **Resource allocation for RCH at the local council level**: The financial resources available for delivery of RCH services as allocated through CCHPs are assessed (trend on

RCH resource allocation in nominal terms and proportion of total council health budget that goes to RCH interventions).

- **Linking expenditures with RCH outcomes**: Assessment is done (at least qualitatively) on the linkage between the budget allocations and the performance of the council RCH indicators as presented in the CCHP and as monitored by the Health Management Information System (HMIS).

3.3 Interviews

Interviews with key stakeholders at both central and local government levels were held before and after the desk review. The essence of the pre-desk review interviews was mainly to get information on RCH components and policies and strategies in place to improve the RCH outcomes. Post desk review interviews were meant to get the stakeholders perceptions on the RCH allocations in particular on adequacy of allocated funds.

4.0 Results

National Health Accounts Overview of RCH Expenditure

The National Health Accounts (NHA) estimates the total RH expenditure of TZS 105,802m (US$100m) in FY 2002/03 which increased to TZS 415,874m (US$ 313) in FY 2009/10 an increase of 293% (Table 1). These amounts represent 14% and 11% of total health expenditures in FY 2002/03 and FY 2009/10 respectively. Most of the resources in both years have been allocated to inpatient and outpatient curative services.

In terms of funding sources, a significant proportion of the RH expenditures (about 40%) were borne by households during 2002/03. The situation is however reversed in FY 2005/06 when the government became the main funding source for RH services (44.2%), partly reflecting government enhanced commitment to increase resources for maternal and child health, and due to exemption of pregnant women from paying for health care. Nevertheless, this commitment didn't last and the financing burden was borne by households in 2009/10 period (47%). Donor contribution stayed around one fifth in 2002/03 and 2005/06 and increased to one third in 2009/10. A major decline in resources for family planning services, from amongst maternal health interventions is however discernible and could be partly attributed to cut-backs in USAID resources for this intervention.

Table 1: Summary of RH Expenditure Variables: 2002/03, 2005/06 and 2009/10

Variables	FY 2002/03	FY 2005/06	FY 2009/10
Total RH Expenditures (Million TZS)	105,802	191,236	415,874
Total RH Expenditures (Million US$)	100	155	313
RH expenditure as a % of GDP	0.7%	0.8%	1.5%
RH expenditure as % of overall health spending	13.7%	10.7%	17.9%
Financing Sources for RH (%)			
Public (including parastatals)	34.5%	44.2%	21.2%
Private including households	43.9%	34.2%	48.4%
Donors	21.6%	21.6%	30.4%
Functions for RH Expenditure (%)[13]			
Inpatient curative care	21.2%	24.2%	36.6%
Outpatient curative care	20.6%	25.9%	51.5%
Prevention and public health programs	20.1%	25.4%	7.5%
Pharmaceuticals	18.3%	13.4%	0.0%
Health administration and health insurance	11.6%	4.2%	0.2%
Capital formation	0.0%	5.1%	4.6%
Other	8.2%	1.7%	0.0%

Source: URT (2012).

Regarding child health, the 2009/10 NHA does not show the trend based on the previous NHAs because of data weaknesses inherent in the FY 2002/03 and FY 2005/06 NHA figures. Thus, only single figure in time is provided. The total child health expenditure in 2009/10 was estimated to be TZS 218,741m (US$164m). This is equivalent to 0.8% of the GDP and 9.4% of the total health expenditure. On a per capita basis, this amounted to US$22 per child under five years of age. Inpatient and outpatient curative services were the major functions of child health expenditure in FY 2009/10 (38% and 51% respectively). In terms of funding sources, similar to RH services, households covered the bulk of the cost during 2009/10 (56%), followed by the public (28%%) and donors and NGOs (13%).

It is worth noting however that although an attempt has been made to capture information comprehensively, the picture of finances to RCH presented here does not give a full account of resources that may be indirectly contributing to these objectives. This is because there are a lot of other interventions which are not categorized as RCH interventions but are contributing greatly to the achievement of the RCH objectives.

Analysis of Allocations in the Medium Term Expenditure Framework

Allocation of resources as presented in Medium Term Expenditure Frameworks (MTEFs) is tied to MoHSW strategic objectives and the targets to be achieved and as detailed in the Health Sector Strategic Plans. Analysis of the information in the FY 2007/08-2009/10 MTEF reveals that the Department of Preventive Services (DPS) is the major custodian of RCH interventions. Allocations related to RCH are mainly on reducing maternal mortality and infant and child

[13] A "function" is the actual health care service or good provided. Examples of functions include inpatient and outpatient curative care, procurement of drugs etc.

mortality, and nutrition services aimed at prevention of stunting, wasting and underweight in children. The specific areas of spending include for example: training of trainers on life skills and adolescent friendly reproductive health; refresher training on IMCI; development of IMCI guidelines; procurement of vaccines, procurement of family planning drugs, capacity building to implement the maternal and child health road map etc.

As Table 2 below shows, 50% of the DPS budget was allocated to RCH in FY 2007/08 but the funding declined to 40% in FY 2009/10 which is a concern. In terms of the total MoHSW recurrent budget, RCH interventions were allocated about 19% of the total recurrent budget and this remained constant during the period under review. Including the development budget, RCH received 18% of the total budget and this increased to 22.7% in FY 2009/10. Huge resources are channeled through EPI and are mainly used for procurement of vaccines and these are indicated in both recurrent and development budget.

As noted above, there are other interventions that are contributing directly or indirectly to RCH and which may not have been captured in this analysis because in the MTEF they are not categorized as RCH expenditures. Examples include social welfare services, water and sanitation, malaria interventions etc. Thus it is imperative to focus interventions in such a way that they facilitate integration and strengthens the health system to deliver more effectively.

Table 2: Allocations to RCH, FY 2007/08-2009/10 (TShs '000)

RCH component	FY 2007/08	FY 2008/09	FY 2009/10
Maternal health	4,930,000	8,383,057	8,941,141
IMCI	150,000	232,934	249,871
EPI	16,042,579	20,060,933	21,907,962
Nutrition	1,524,071	2,079,583	
Total RCH allocation (sub-vote 3001)	**21,122,579**	**28,676,923**	**31,098,974**
Total 3001 sub-vote	**45,162,137**	**75,041,679**	**83,459,111**
% share of the total sub-vote budget to RCH	50%	40%	41%
% share of the total MoHSW recurrent budget to RCH	18.8%	19.5%	19.1%
% share of the total MoHSW recurrent and development budget to RCH	18.2%	24.8%	22.7%

Sources of Funds for Implementing CCHPs

Block grant from the government for Personal Emoluments (PE) and Other Charges (OC) is the major source of finance for implementation of CCHPs (54%). This is followed by the "Other Sources" of funds which include money from National Health Insurance Fund (NHIF), Community Health Fund (CHF), Local Council Development Grant, UN grants, and grants from Non-Governmental Organizations such as Family Health International and the Global Fund (Tables 3 and 4). Some of these funds are collected and used at the local level but some are also channeled from the central level but not necessary through the ex-chequer system. Basket Fund resources also contributes a significant share to the council health resources (12.3%). Over the three years under review (2007/08-2009/10), there was a notable increase in budget allocation in particular arising from increase in allocations of health basket funds (increase of 169%), block

grants (increase of 85%), and other funds. Cost sharing resources however declined in nominal terms by about 32% over the review period.

This increase notwithstanding, there are two critical challenges in the process of effecting release of the funds to the Local Government Authorities (LGAs) to facilitate execution of activities. There are: incompleteness of releases—disbursement of funds from the central level which is short of what was budgeted, and delayed and/or erratic disbursement of the funds. Delays in disbursement in the first quarter are also quite common with the first tranche arriving in October. However, particularly disturbing is the fact that monies are not disbursed as planned for each quarter, thus causing delays in execution of activities. In the worse cases scenarios, some activities are not executed at all due to lack of resources in the course of the year. This situation does not augur well in terms of addressing the supply side factors described above.

Table 3: Funding by Source, FY 2007/08 - FY 2009/10 (Million TShs)

Sources of Funds	Kondoa DC	Bahi DC	Kongwa DC	Dodoma MC	Mpwapwa DC	Chamwino DC	% Share
Health Basket	1,760	808	1,009	1,342	1,081	662	12.3
Block Grant	5,607	4,831	5,400	5,679	4,838	2,940	54.3
Cost Sharing	309	84	80	249	239	52	1.9
Receipt in Kind[14]	1,496	601	738	881	1,013	609	9.9
Council Own resources	32	98	15	587	21	10	1.4
Other Sources	3,019	1,325	1,623	857	2,416	1,629	20.2
Total	**12,223**	**7,746**	**8,865**	**9,595**	**9,606**	**5,901**	**100**

Table 4: Share of Funding by Source, FY 2007/08 - 2009/10 (%)

Sources of Fund	Kondoa DC	Bahi DC	Kongwa DC	Mpwapwa DC	Dodoma MC	Chamwino DC
Health Basket	14.4%	10.4%	11.4%	12.7%	13.0%	14.2%
Block Grant	45.9%	62.4%	60.9%	47.2%	64.6%	45.4%
Cost Sharing	2.5%	1.1%	0.9%	2.6%	3.7%	0.0%
Receipt in kind	12.2%	7.8%	8.3%	7.1%	10.9%	12.1%
Council own resources	0.3%	1.3%	0.2%	0.3%	0.2%	0.1%
Other Sources	24.7%	17.1%	18.3%	30.1%	7.6%	28.2%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Resource Allocation for RCH at the Council Level

Reverting to the sub-national government levels, due to the importance attached to maternal and child health in the Health Sector Strategic Plan III (HSSP III) (URT, 2009c), it has become a custom to report average budget allocation to RCH interventions per region and as summarized from the CCHPs. The 2007 CCHP guideline document is explicit about Priority Areas to which funds at council level should be allocated, which makes tracing resources relatively easier. RCH is a Priority Area 1 as per CCHP guideline and all councils sampled observed this. Resources for nutritional programs are allocated under Priority Area 2 (non-communicable diseases) and HIV & AIDS related resources are allocated through Priority Area 3 (communicable diseases such as HIV &AIDS, Sexually Transmitted Infections (STI), Tuberculosis (TB) and leprosy).[15] In all the

[14] One has to embark on primary data collection study at each district if one wants to know how much of the receipt in kind was family planning or other RCH related commodities

[15] HIV & AIDS is an important area that is addressed under both Priority Areas 1 and 2 but it is not the focus of this paper.

five councils of Dodoma covered in this study, there has been a growth of resources allocated to RCH between 2008/09 and 2009/10 albeit with varying degrees (Table 5).

Table 5: Proportion of Health Budget to RCH Interventions

District	2007/08	2008/09	2009/10
1.Kondoa DC	4.1%	5%	7%
2.Dodoma MC	4.8%	4.1%	9.1%
3.Chamwino DC	7%	8%	-
4.Bahi DC	2%	2.8%	-
5.Mpwapwa DC	4%	4%	22%

The pattern of allocation to sub-components is quite diverse across the districts (Table 6). Some districts observe the guidelines (example Kondoa DC, Dodoma MC, and Mpwapwa DC) by allocating funds consistently to majority of the components, yet others lack any consistent pattern in resource allocation to these areas (Bahi DC and Chamwino DC). The CCHPs from Bahi and Chamwino districts show only lumpsum allocation to obstetric care/EmOC and IMCI only.

A problem that is notable in most of the councils however is that crucial maternal related interventions which include infertility management, cancers and female genital mutilation go mostly without funding. Yet, these are important areas which have gendered implications. Also it could be noted that, except for Dodoma MC and for the FY 2009/10, no funds were allocated to the category "gynecology/STD/HIV." Similarly, little or no allocation has been made to "early childhood development" because of lack of clarity of what this entails.

Table 6: Allocations to RCH Interventions (% share)

Intervention	Kondoa DC	Dodoma MC	Mpwapwa DC
Safe Motherhood Initiative (SMI)	-	25%	2%
ANC	7%	3%	2%
Obstetric care/EmOC	11%	24%	6%
Gynecology/STD/HIV	0%	3%	0%
Post natal care	1%	1%	0%
Post abortal care	0.4%	0%	0%
Family Planning	5%	4%	0%
IMCI	34%	5%	5%
Maternal and perinatal care	11%	3%	21%
Immunization	12%	19%	55%
Nutritional deficiencies	4%	3%	9%
Breast feeding support	0%	2%	0%
Micronutrient supplementation	5%	0%	0%
Dewoming	2%	0%	0%
Care of newborn	8%	0%	0%
Adolescent sexual reproductive health	0%	1%	0%
Care for most vulnerable children	0%	4%	0%
Early childhood development	0%	1%	0%
Anemia/nutritional disorders	1%	0%	0%
Other maternal conditions	0%	0%	1%
RCH Total	**100%**	**100%**	**100%**

Linking Expenditures with RCH Outcomes

Taking 2005 as a base year, there is an improvement in the proportion of clients attending for purpose of ANC, delivery and post natal care for all districts, and post delivery complications for Dodoma MC. Proportion of clients receiving family planning in general has increased very slightly and with slow pace over the period although Kondoa DC observed a decline in family planning acceptors. The most preferred methods are pills and injection.

The proportion of women of child bearing age attending for the purpose of immunization (TT) has also increased (except for Kondoa DC which has missing data) which correlates to the increase in ANC attendances. Improvement on nutrition indicators measured as the proportion of children under five years with body weight under 60% is also observed (where data are available). The proportion of children immunized against three diseases is also high; above 90% for all the years except Kondoa DC for DPT3 in 2007.

With respect to proportion of people reported to have died of HIV & AIDS and proportion of population infected by STD, although there is indication of improvement in most of the districts, the reliability of data might be questionable. This is due to difficult of ascertaining cause of death in the case of HIV & AIDS and possible measurement errors in the case of STDs. At the same

time, one needs to note that factors other than allocations to RHC also contribute to the achievement of RCH outcome indicators. Thus, in absence of mathematical modeling, it may not be possible to establish the robustness of the relationship between RCH allocations and the RCH outcome indicators. The Table in Appendix 1 provides details on RCH output indicators per district based on the information from the reviewed CCHPs.

Adequacy of the RCH Allocations

In order to assess the adequacy of the resources to RCH, costing studies are needed. The HSSP III and the National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Health in Tanzania for the period 2008-2015 (One Plan) are two major documents with costs on implementation of maternal and child health interventions. At the local level, costing is supposedly guided by the District Health Accounts Tool. HSSP III presents two major strategies to achieve MNCH outcomes based on the One Plan; increase access to MNCH services; and strengthening the health systems to provide quality MNCH and nutrition services. HSSP III costed the financial resources needed for maternal health based on physical quantities needed for training service providers in maternal and child health, antenatal care, malaria prevention within ANC, delivery care, PMTCT, and immunization. Based on these inputs, a total of US$194,083,333 (TShs 252bn) was needed in FY 2009/10 if the envisaged maternal health outcomes were to be achieved. This is equivalent to 60% of the MoHSW budget and 34% of the total health budget. Crude estimations show the RCH as proportion of total MoHSW budget to be 23% in FY 2009/10. Discussion with national level stakeholders point out the fact that more than 40% of the health services provided at health facilities are on maternal and child health. Thus, it makes sense to allocate at least 30% of the total health sector budget on maternal and child health interventions.

As shown above, various health systems and population-based problems affect maternal, new born and child health situation in Tanzania. Poor health infrastructure, shortages of skilled personnel, poor referral network, lack of equipment and supplies, and poor coordination with the private sector have been identified as some of the problems contributing to the low uptake of services, and the worsening of maternal, newborn and child health situation in the country. It is important to underscore the fact that most of these problems are not just RCH related but are in fact health systems' related. Thus, integration of services is important. Analysis of progress made in addressing reproductive and child health situation in Tanzania needs to take into account expenditure trends on personnel, infrastructure, etc. The results matrix to the MNCH road map identified performance targets for MNCH around:

- Government spending on health increases to 15%
- Budget for MNCH including family planning and nutrition increases by 50% by 2015
- Number of skilled workers increased to 100% by 2015

5.0 Discussion and Conclusion

The paper has provided an analysis of financial allocation to RCH at national and LGA levels. At the national level, substantial allocations have been made through the Department of Preventive Services. Based on the HSSP III costing, 34% of the health sector budget should have been

allocated to RCH interventions in 2009/10 if the envisaged outcomes are to be achieved. The actual allocation for this intervention in 2009/10 was however only 23% of the MoHSW budget.

Although the country has ratified the Abuja declaration pledging to spend 15% of the national budget on the health sector (OAU, 2001) and remains fully committed to achieving the MDGs, which are part of the National Strategy for Growth and Reduction of Poverty (MKUKUTA), government health expenditure data show that investments in the sector have stalled in the last several years. The share of health spending in relation to total national budget has remained around 12% during 2008-2012 (URT et al., 2013). This stall in health budget has repercussions on expenditures on reproductive health. Given the decline on public expenditure on RH, households payments through out of pocket expenditures has increased. As shown above, out of pocket expenditure for RH increased from 40% in 2002/03 to 47% in 2009/10 (URT, 2012). The high proportion of health service costs paid out of pocket in nearly all *Countdown* countries (including Tanzania) puts households at risk of financial catastrophe (WHO and UNICEF, 2010). Making services free at the point of delivery helps increase utilization. Financing mechanisms such as prepayment and risk pooling can help make health services available and affordable for all.

Lack of adequate financial resources do not only limit upgrading and manning of human resources with requisite skills but it also prevents acting upon maternal deaths. For instance, lack of funds has been found to be one of the factors for failure to conduct Maternal Death Reviews (MDR) in Tanzania (Nyamtema et al., 2010; van Hamersveld et al., 2012; Magoma et al., 2013). Yet, conducting MDRs is essential in addressing the causes of maternal deaths.

The comparison of the proportion of births attended by a doctor, nurse or midwife in Tanzania with the median of 10 sub-regional countries (Burundi, Democratic Republic of Congo, Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Uganda, Zambia, Zimbabwe) of which eight border Tanzania shows that Tanzania has made much slower progress than the median of the group where Skilled Birth Attendance (SBA) coverage increased from 43% to 59% during 2005–10. Tanzania dropped from the 5th to the 8th place among the 11 countries. The main difference is in the rural trends: while Tanzania increased its SBA coverage from 35 to 40% during 2005–10, the median of the group of 10 countries increased from 33% to 55% during the same period. Among the 10 sub-regional countries with economic data, Tanzania has the third highest GDP per capita after Kenya and Zambia, but higher than Rwanda and Uganda. Its child mortality rate is what one would expect on the basis of its level of economic development.

Studies have shown that allocation of resources to some key interventions in RCH decreases annual additional deaths. Curative at birth interventions can contribute to about 40% of additional deaths prevented each year. Treatment for moderate acute malnutrition have very large impact on preventing deaths. Other interventions include case management of neonatal infections and Oral Rehydration Solution (ORS) for treatment of diarrhea. Preventive interventions account for almost 20% of additional deaths prevented, with the use of Insecticide Treated Nets (ITN) contributing to more than 60% (URT et al., 2013). Most of these interventions are not at 100% coverage at LGAs and are not allocated adequate budget in

CCHPs. Scaling up of these interventions to full coverage could produce better impact on health of women and children.

The 2007 CCHP guideline is clear on RCH components and which should be considered in resource allocations at the council level. However, some RCH components have been neglected in the sense that no financial resources have been allocated to them over time. These include; adolescent sexual reproductive health, care for most vulnerable children, early childhood development, peri-natal care, and family planning.

Failure to allocate adequate funds on family planning has made the country to make only gradual progress towards its fertility and family planning targets. Contraceptive use increased by one-third to 27% during 2005–10, and more women were demanding modern family planning. The fertility rates declined modestly to 5.4 children per woman. The current decline is entirely due to rural women, and there was no progress among urban women (where fertility is much lower). There are however still large gaps within mainland Tanzania between urban and rural women, between the poorest and best off households, and between regions/zones. These gaps reduced slightly, but remain large. There is some evidence that contraceptive availability has declined between 2008–09 and 2012 (URT et al., 2013). Allocation of funds to family planning interventions will not only improve maternal and child health outcomes but the performance of the economy at large in terms of poverty reduction (Otieno and Amani, 2014). Allocation of resources to gender sensitive interventions such as infertility management and female genital mutilation is also important given their gendered implications.

There is considerable financing gap in RCH interventions. Thus, considerable additional funding and greater political commitment to RCH are needed to achieve universal coverage of the full package of interventions. Increased funding for reproductive and child health through innovative mechanisms and ensuring that funding is predictable, consistent and responsive to national needs and plans is imperative. These initiatives need to be assessed for impact and for the feasibility of being scaled up. For example, Ghana has recorded a rapid increase in facility births linked to the introduction of a national insurance scheme and new policies guaranteeing free care at birth (Witter et al., 2009). Rwanda's "Paying for Performance" strategy increased institutional deliveries by providing financial incentives to providers to increase the use and quality of care (Basinga, 2010).

Lastly, poor health outcomes in RCH appear to be largely health system related. Thus it is imperative to focus interventions in such a way that they facilitate additionality/integration and strengthens the health system to deliver more effectively.

References

Afnan-Holmes, H., M. Magoma, C. Armstrong, C. Ferla, and C. Ronsmans (2013), "Twenty Years of the Millennium Development Goals in Tanzania: Where and How are Women Delivering?" Unpublished Paper," Evidence for Action (E4A) Program: Dar es Salaam.

Basinga, P., P.J. Gertler, A. Binagwaho, A.L. Soucat, J. R. Sturdy and C.M. Vermeersch (2010), "Paying Primary Health Care Centers for Performance in Rwanda" Policy Research Working Paper 5190, World Bank: Washington, D.C.

Evjen-Olsen, B., Ø.E. Olsen and G. Kvåle (2009), "Achieving Progress in Maternal and Neonatal Health through Integrated and Comprehensive Healthcare Services–Experiences from a Program in Northern Tanzania," *International Journal for Equity in Health 8:27.*

Gilson, L., P. Kilima, and M. Tanner (1994), "Local Government Decentralization and the Health Sector in Tanzania," *Public Administration and Development*, Vol. 14, 451-477 (1994)

Greco G., T. Powell-Jackson, J. Borghi, and A. Mills (2008), "Countdown to 2015: Assessment of Donor Assistance to Maternal, Newborn, and Child Health between 2003 and 2006," *Lancet* 371 (9620):1268–1275.

Magoma, M., C. Ferla, C. Armstrong, H. Afnan-Holmes, S. Bandali, J. Wigle, L. Hulton, J. Innes, and C. Ronsmans (2013), "Tanzania Country Strategy Narrative," E4A Program: Dar es Salaam.

Manzi, F., J. A. Schellenberg, G. Hutton, K. Wyss, C. Mbuya, K. Shirima, H. Mshinda, M. Tanner, and D. Schellenberg (2012), "Human Resources for Health Care Delivery in Tanzania: A Multifaceted Problem," *Human Resources for Health*, 2012, 10:3

Mbaruku, G., J. van Roosmalen, I. Kimondo, F. Bilango, and S. Bergström (2009), "Averting Maternal Death and Disability: Perinatal Audit Using the 3-Delays Model in Western Tanzania," *International Journal of Gynecology and Obstetrics*, 106 (2009) 85–88.

Mbuyita S, and C. Mayombana (2006), "Desk Review Report on Maternal and Newborn Care at Community Level –Tanzania," Ifakara Health Research and Development Centre and WHO – AFRO: Dar es Salaam.

Mswia, R., M. Lewanga, C. Moshiro, D. Whiting, L. Wolfson, Y. Hemed, K.G.M.M. Alberti, H. Kitange, D. Mtasiwa and P. Sete (2003), "Community-based Monitoring of Safe Motherhood in the United Republic of Tanzania," *Bulletin of the World Health Organization* 2003, 81 (2).

National Bureau of Statistics (NBS) and Macro international Inc. (2007), "Tanzania Service Provision Assessment Survey 2006," NBS & Macro International Inc.: Dar es Salaam.

NBS and ICF Macro (2011), "Tanzania Demographic and Health Survey 2010," NBS and ICF Macro: Dar es Salaam.

Nyamtema, A. S., D.P. Urassa**,** A.B. Pembe**,** F. Kisanga **and** J. van Roosmalen (2010), "Factors for Change in Maternal and Perinatal Audit Systems in Dar es Salaam Kospitals, Tanzania," *BMC Pregnancy and Childbirth*, 2010. 10: p. 29

OAU (2001), "Abuja Declaration on HIV & AIDS, TB and Other Related Infectious Diseases," April, 2001, OAU: Addis Ababa, Ethiopia.

Otieno, A.A and H.K.R Amani (2014), "Population Growth, Structure and Momentum in Tanzania," Background Paper for the Tanzania Human Development Report, Economic and Social Research Foundation: Dar es Salaam.

Pembe**, A.B.,** A. Carlstedt**,** D.P. Urassa**,** G. Lindmark**,** L. Nyström **and** E. Darj (2010), "Effectiveness of Maternal Referral System in a Rural Setting: A Case Study from Rufiji District, Tanzania," *BMC Health Services Research*, 2010, 10:326

Perkins, M., E. Brazier, E. Themmen, B. Bassane, D. Diallo, A. Mutunga, T. Mwakajonga, and O. Ngobola (2009), "Out-of-pocket Costs for Facility-based Maternity Care in Three African Countries," *Health Policy and Planning* 24(4):289

Plotkin, M. and other(2011), "Quality of Care for Prevention and Management of Common Maternal and Newborn Complications: A Study of 12 Regions in Tanzania, Report 2: Findings on Labor, Delivery and Newborn Care, Maternal and Child Health Integrated Program (MCHIP)," JHPIEGO: Washington DC.

Save the Children (2013), "Surviving the First Day: State of the World's Mothers 2013," Save the Children: UK.

Shija, A.E., J. Msovela, and L.E. Mboera (2011), "Maternal Health in Fifty Years of Tanzania Independence: Challenges and Opportunities of Reducing Maternal Mortality," *Tanzania Journal of Health Research*, 2011. 13 Suppl 1(5)

UNFPA (2002), "Country Population Assessment," UNFPA: Dar es Salaam.

URT (1997), "Child and Reproductive Health Strategy," Ministry of Health: Dar es Salaam.

URT (2000a), "National Package of Essential Health Interventions in Tanzania," Ministry of Health: Dar es Salaam.

URT (2003), "Second Health Sector Strategic Plan (HSSP) July 2003 – June 2008: Reforms Towards Delivering Quality Health Services and Clients Satisfaction," Ministry of Health: Dar es Salaam.

URT (2004), "Vulnerability and Resilience to Poverty in Tanzania: Causes, Consequences and Policy Implications, Tanzania Participatory Poverty Assessment (TzPPA) Main Report," Vice President's Office: Dar es Salaam.

URT (2005), "National Strategy for Growth and Reduction of Poverty," Vice President's Office: Dar es Salaam.

URT (2007a), "Comprehensive Council Health Planning Guidelines," MoHSW and Prime Minister's Office-Regional Administration and Local Government (PMO-RALG): Dar es Salaam.

URT (2007b), "Primary Health Services Development Program (PHSDP) 2007 - 2017," MoHSW: Dar es Salaam.

URT (2008a), "The Status of Implementation of Decentralization by Devolution on Mainland Tanzania and the Way Forward," PMO-RALG: Dar es Salaam.

URT (2008b), "The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn, and Child Deaths in Tanzania 2008-2015," MoHSW: Dar es Salaam.

URT (2009a), "Health Sector Public Expenditure Review, 2008/09," MoHSW: Dar es salaam.

URT (2009b), "Health Sector Strategic Plan III – July 2009- June 2015," MoHSW: Dar es Salaam.

URT (2009c), "Health Sector Strategic Plan III – July 2009- June 2015," MoHSW: Dar es Salaam.

URT (2010), "The National Strategy for Growth and Reduction of Poverty," Ministry of Finance and Economic Affairs: Dar es Salaam.

URT (2012), "Tanzania National Health Accounts Year 2009-10 with Sub-Accounts for HIV and AIDS, Malaria, Reproductive, and Child Health," MoHSW: Dar es Salaam.

URT (2013), "Household Budget Survey 2012, Press Release," NBS: Dar es Salaam.

URT, Ifakara Health Institute, National Institute of Medical Research and World Health Organization (2013), "Midterm Analytical Review of Performance of Health Sector Strategic Plan III 2009-2015, Dar es Salaam.

van Hamersveld, K.T., E. den Bakker, A.S. Nyamtema, T. van den Akker, E.H. Mfinanga, M. van Elteren, J. van Roosmalen (2012), "Barriers to Conducting Effective Obstetric Audit in Ifakara: A Qualitative Assessment in an Under-resourced Setting in Tanzania," *Tropical Medicine and International Health,* 2012. 17(5): p. 652-657

WHO and UNICEF (2010), "Countdown to 2015, Decade Report (2000–2010): Taking Stock of Maternal, Newborn and Child Survival," WHO and UNICEF: Washington DC.

Witter S., S. Adjei, M. Armar-Klemsesu, and W. Graham (2009), "Providing Free Maternal Health Care: Ten Lessons from an Evaluation of the National Delivery Exemption Policy in Ghana" *Global Health Action* 2.

Women's Dignity (2003), "Faces of Dignity: Seven Stories of Girls and Women with Fistula," Women's Dignity Project: Dar es Salaam.

Appendix 1: Councils' Maternal and Child Health Performance Indicators (%)

MPWAPWA District Council	2005	2006	2007	2008
1. Proportion of clients attending for purpose of				
ANC	80	95	97	95
Delivery	61	67	52.6	66
Post delivery complication	1.3	0.9	1	0.9
Post natal care	35	45.3	91.8	50
2. Proportion of clients receiving family planning by methods	47.5	46.4	48	47
Pills	22.5	80.3	32	20
IUCD	1	0.02	1	3
Injection	25	33	63	33
Condoms	2.4	2.4	2.4	5
Natural	-	-	-	1
3**. Proportion of women of child bearing age attending for the purpose of immunization (TT)**	11	30.9	66.5	31
4. Proportion of children under five years with body weight under 60%	2.8	2.4	3	2
5. Proportion immunized against				
Measles	93.6	97	-	-
Polio 3	100.3	97	-	-
BCG	90	99	-	-
DPT3	98.6	98	-	-
5. Proportion of population infected by STD	2.3	2.3	-	2.3
6. Proportion of people reported to have died on HIV & AIDS	27	27	10.5	25

DODOMA Municipal Council	**2005**	**2006**	**2007**	**2008**
1. Proportion of clients attending for purpose of				
ANC	-	93	95	-
Delivery	-	75	89	76
Post delivery complication	-	0.4	0.3	30
Post natal care	-	48	62	62
2. Proportion of clients receiving family planning by methods				
Pills	-	50	60	52
IUCD	-	-	0.3	1
Injection	-	20	33	30
Condoms	-	8	31	8
Natural	-	-	-	1
3. Proportion of women of child bearing age attending for the purpose of immunization (TT)	-	-	71	81
4. Proportion of children under five years with body weight under 60%	-	-	3	
5. Proportion immunized against				
Measles	-	95	96	91
Polio 3	-	94	96	86
BCG	-	96	97	100
DPT3	-	94	96	86
5. Proportion of population infected by STD	-	2.4	0.8	0.6
6. Proportion of people reported to have died on HIV & AIDS	-	23	-	6.7

BAHI District Council	**2005**	**2006**	**2007**	**2008**
1. Proportion of clients attending for purpose of				
ANC	-	97.9	99	99.6
Delivery	-	77	75	85
Post delivery complication	-	-	-	-
Post natal care				
2. Proportion of clients receiving family planning by methods	-	51.5	40.5	55
Pills	-	-	-	-
IUCD	-	-	-	-
Injection	-	-	-	-
Condoms	-	-	-	-
Natural	-	-	-	-
3. Proportion of women of child bearing age attending for the purpose of immunization (TT)	-	98	99	98
4. Proportion of children under five years with body weight under 60%	-	-	-	-
5. Proportion immunized against				
Measles	-	97.5	97	98.6
Polio 3	-	97.5	97	98
BCG	-	99.5	99.5	99.5
DPT3	-	97.5	98	99.3
5. Proportion of population infected by STD				
6. Proportion of people reported to have died on HIV & AIDS	-	-	-	-

KONDOA District Council	2005	2006	2007	2008
1. Proportion of clients attending for purpose of				
ANC	-	92	86	97
Delivery	-	64	46	53
Post delivery complication	-	0.06	0.06	0.08
Post natal care	-	88	89	90
2. Proportion of clients receiving family planning by methods	-	86	-	69
Pills	-	8	87	17
IUCD	-	5	0.07	0.003
Injection	-	0.01	12	14
Condoms	-	0.4	42	39
Natural	-	0.2	0	0
3. Proportion of women of child bearing age attending for the purpose of immunization (TT)	-	-	-	-
4. Proportion of children under five years with body weight under 60%	-	2	1.4	1.4
5. Proportion immunized against				
Measles	-	93		92
Polio 3	-	93	93	92
BCG	-	95	91	97
DPT3	-	95	88	92
5. Proportion of population infected by STD	-	1	1.2	15
6. Proportion of people reported to have died on HIV & AIDS	-	-	-	-