

IMPLICATIONS OF HEALTH SECTOR REFORMS IN TANZANIA: POLICIES, INDICATORS AND ACCESSIBILITY TO HEALTH SERVICES

By: Prof. Phares G.M. Mujinja and Dr. Tausi M. Kida

THDR 2014: Background Paper No. 8
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I. Introduction

Immediately after independence, 1961, the Government aimed at building her human capital by isolating factors that were christened as “major enemies of development”: ignorance, diseases, and poverty. Disease as an enemy was fought by a massive increase in health facilities and low primary health care training institutions, most of them owned by the government. Alongside the public sector existed the non-for-profit health facilities, mostly owned by Faith-based Organizations. Tanzania went through a severe economic crisis in the 1980s, which adversely affected the management and financing of basic social services including health care services (Wangwe et al. 1998). The health care sector faced severe underfunding that affected the quality and provision of health care services. Underfunding of the health care delivery system at all levels led to, among others: shortage of drugs, equipment and medical supplies; overall deterioration of the physical health infrastructure including electricity supply, water and sanitation at the health care facilities; poor management and regulatory framework; and very low wages and other incentives for health care workers, which resulted in low staff morale. During this period, the Government was the key provider of free health care services whereas private health care provisions were nearly nonexistent except for a few faith-based health care facilities (COWI et al. 2007).

In addressing these problems, the primary objective of the government since early-1990s has been to address the problem of severe underfunding and a weak management system by implementing Health Sector Reforms (HSRs), thus improving provision and access to health care services. As part of these ongoing reforms, in 1991, the importance of the private sector in health care delivery was recognized where an amendment to the Private Hospitals (Regulatory) Act, 1977 was done, resulting into the establishment of the Private Hospitals (Regulation) (Amendment) Act, 1991. Following this act, qualified medical practitioners and dentists could manage private – health facilities, with the approval of the Ministry of Health. Consequently, the health sector was appraised to assess its performance and find strategies that would be employed to improve its functioning.

Improvement of access to health services requires good health system with implementable policies that address equity values, social justice and the right to health and health information. The appraisal therefore recommended “Proposals for Health Reforms, Ministry of Health, 1994 (HSR)”. The document suggested the reforms to be carried in the following dimensions: managerial reforms or decentralization of health services; financial reforms (such as introduction of user-charges in public facilities, introduction of health insurance and community health funds); public/private mix reforms (such as encouragement of private sector to complement public health services); organizational reforms (integration of vertical health programmes into the general health services); health research reforms (establishment of a health research users fund and propagation of demand oriented researches in the health sector) (MOH, 1994). In the process of implementing the HSR proposals, a number of policies, guidelines, Acts and programmes have been developed and implemented in Tanzania. All these were and are aimed at improving the quality and quantity of health services and increase in equity in health accessibility and utilization (MoH, 1993).

The implementation of the HSR proposals has also involved substantive deregulation and liberalization in access and provision of health care services. These changes have brought about a

number of positive and negative outcomes including, but not limited to, biased financing on the vertical programmes, *commercialization* of the health sector through increased involvement of private health providers, and the introduction of a basically fee-based structure in public health care facilities. These changes have brought about a segmented health care market that caters differently for the better off and the poor segment of the society (Tibandebage et al 2001, Kida 2009, /COWI et al 2007; Save the Children, 2005).

Overall, the Tanzanian health system is still constrained, most of the problems that were appraised before the HSR strategies were put in place, still surface although to a little bit lesser extent. Most primary health care facilities are still characterized by inadequately trained staff, experiencing frequent shortages of drugs and supplies and being poorly equipped (Tibandebage et al 2013, Mackintosh et al 2013, Kida 2009. Furthermore, there is still a problem of inadequacy/underutilization of skilled human resources in the health sector and subsequently the quality of health care delivered, and also the failure to effectively implement the exemption and waiver system, thereby excluding the very poor and vulnerable groups from effectively accessing health services as reported by the Ministry of Health and other researchers still pronounced (MOHSW, 2005; Mliga and Mwakilasa, 2005, Kiwara, Mujinja and Chitama, 2005).

We find positive results that have come during the implementation era of the HSR proposals including improvement in some crucial health indicators, child mortality rate, infant mortality rate, and reduction in HIV/AIDS and Malaria prevalence and incidence (MoHSW, 2009, MoHSW, 2013). These results cannot be easily positively correlated with the HSR implementation since health indicators have also been found to be influenced by socio-economic determinants, income and wealth distribution, decline in diseases death rates, improvement of health seeking behavior; and improvement in health system (Mahdavi et al, 2013). In this report we analyse one of these correlates-accessibility- as a proxy of utilization, and we find a mismatch between health indicators and quality and accessibility of health services. We observe a positive trend on the most important burden of diseases indicators, but a negative relationship with the accessibility variables. Furthermore, despite the improvement of some targeted indicators there are still existing challenges on accessibility, quality, quantity and equity in health care delivery. We therefore suggest need for research to inform the relationship between the accessibility variables, socio-economic determinants, income and wealth distribution and health indicators to confirm the nature of the relationship between the HSR and the health indicators.

1.1 Objective of the Study

This paper analyzes the extent to which *health* care reforms have been implemented in the last two decades, and the consequences of its strategies, guidelines and policies by linking them to their effects on health status indicators and accessibility of quality health care services. We argue that the positive gains of the HSR have been biased to vertical programmes and foreign financed health services, and the poor and most rural communities have remained with poor access to health services provided in both public and private sector.

1.2 Scope of the Research

In the light of the overall objective stated above, this study shall address the following specific objectives:

- (a) To identify the major policy decisions made on the health sector over the past two decades in Tanzania and establish their implications on the quality of health services provided.
- (b) In relation to policy decisions made (section (a) above), to identify gaps between policy intentions and actual implementation; as well as their effect.
- (c) To establish the effect of a health delivery system on accessibility of health care services, given the enhanced participation of private services and introduction of fee-based public health services.
- (d) To establish the effectiveness of governance systems in the management and provision of healthcare services in Tanzania, especially the role played by the regulatory framework.
- (e) To assess adequacy of human and financial resources in the provision of healthcare services in Tanzania
- (f) Describe and appraise the development of Public Private Partnership/collaboration between private and public health care providers
- (g) Determine the consequences of the Health Sector Reforms: accessibility - acceptability, affordability, availability, quality and quantity of health services as some of the determinants of the health status indicators

1.3 Methodology

Different data collection methods have been employed to gather ideas, information (both primary and secondary) for this task.

Desk review of published and grey literature of research reports and other secondary evidence from national research institutions and medical schools; civil society, health workers, national and regional state actors were also conducted.

- Documentary review of national, Ministry of Health and other stakeholders' policies and guidelines was carried out. These documents included, The National Strategy for Growth and Poverty Reduction (NSGRP) also abbreviated in Swahili as MKUKUTA and National Health Policy. Other documents reviewed were those related to Sector Wide Approach policy (SWAP); Health Financing Mechanisms (National Health Insurance Fund, Community Health Fund, User charges - out of pocket); Regulatory framework (regulating the health sector) and quality assurance; Basket funding; Traditional Medicine Act - Licensing of Traditional Medicine; Primary Health Services Development Programme; Public Private Partnership (PPP); Regulating the health sector (Tanzania Food and Drug Administration); Accredited Drug Dispensing Outlets (ADDO) etc.
- In depth interviews with researchers, academics and other stakeholders from the demand side to gather the voice of the people. In addition, the authors have interrogated information on positive and negative health care examples and concrete case studies, evidence and data, experiences and voices from Civil Society Organizations (CSO), stories from communities, ministers and Community Based Organizations involved in any types of health services.
- Review of research work including online academic publications: Health information system by the Non Government Organizations (NGOs), academic researchers and other sources were also gathered, synthesized and analyzed together with policy and programme documents.

- Key informant interviews on the supply side were also organized, specifically national and sub national key informants including some senior people from the Ministry of Health and Social Welfare

1.4 Limitations

This study is not without limitations. The paper depended more on published and grey literature, which may have some limitations that would be inherent in some of the analysis made in this paper. The results of scientific studies are a result of specific research questions, objectives, and methodologies hence results should be focused on what the research problem that the study was supposed to address and therefore it may not necessarily be useful to addressing a problem of this paper.

2. Analysis of Health Sector Reforms Implementation and Supply Side Policy Interventions in Tanzania

2.1 The Context of the Health Sector Reforms in Tanzania

H *Health Sector Reforms, policies, guidelines, plans and strategies:* Tanzania went through a severe economic crisis in the 1980s, which adversely affected the management and financing of basic social services including health care services (Wangwe et al. 1998). That situation, amongst others, spurred the World Bank Economists to advocate for the need to liberalize the social sectors and introduce fees in these sectors. For the health sector which faced severe underfunding that affected the quality and provision of health care services, The World Bank produced documents such as ***Financing for Health Services in Developing Countries (1989) and Investing in Health*** (1993). These documents called for liberalization of the health sector and urging for investing in cost effective interventions.

They emphasized the generation of resources from the health sector for improving the quality and quantity of health services and investment in interventions that would give the value for money in terms of reducing the burden of diseases greatly. For Tanzania, the resource constraints had resulted in shortages of medicines, equipment, medical supplies and low staff morale. During this period, the Government was the key provider of free health care services whereas private health care provisions were nearly nonexistent except for a few faith-based health care facilities (MOH, 1994; COWI et al. 2007).

In addressing these problems, the health sector was appraised in 1993 (Health Sector Strategy Note, 1993), and in 1994 Health Sector Reforms (HSRs) proposals (MoH, 1994). The HRS document defined the health sector reform as a sustained, purposeful change to improve the efficiency, equity and effectiveness of the health sector. The HSR proposals therefore aimed at creating an efficient, cost effective, gender sensitive, equitable and decentralized health system. Specifically, the proposals aimed to improve the functioning and performance of the health system and, consequently improve the quality and quantity of health services together with fostering equity by improving accessibility to health care services especially among the poor. The proposal suggested comprehensive reform interventions that would be implemented in tandem with the broad economic, social and political reforms that were on-going in the country.

For implementation of the proposals that were either partly or wholly financed by development partners, an agreement with the government to establish a new planning and implementation framework, the Sector Wide Approach (SWAP) was drawn. By 1994 the health sector reforms started in the process that resulted in the first Health Sector Strategic Plan (HSSP1) and the Health Sector Programme of Work (POW) 1999-2004 was funded through the SWAP arrangement (See Table 1). These reforms also emphasized the role and development of the private sector as emphasized in the National Health Policy of 1990, from which the private for profit health care services were re-enacted in 1991. The reforms have continued to be implemented through Health Sector Strategic Plans (HSSP) (HSSP I 1999-2004, HSSP II 2005-2009, and HSSP III 2009-2015)

Table 1: Health sector reforms: Summary of major developments in the health sector

1990 - The First National Health Policy
1991 - The Liberalization of Private Health Care Provision
1993 - Government/Development Partners Appraisal Mission on the Health Sector
1994 - Proposal for Health Sector Reform Agreement to Enter a SWAP programme in Health
1998 - Agreement to enter a SWAP programme in Health
1999 - Poverty Reduction Strategy (PRS) identifies health as a priority
1999 - Health Sector Reform Program of Work (1999 – 2002)
1999 - Comprehensive Community Health Plans (CHP) Introduced
1999 - Health Basket Fund Introduced
2000 - National Package of Essential Health Interventions Approved
2002 - National Health Insurance Fund (NHIF) Established
2003 - Health Sector Strategic Plan 2 (HSSP2)
2004 - Emergency Infrastructure Rehabilitation Programme
2005 - Tanzania Essential Health Intervention Project (TEHIP) tool rolled out
2006 - Joint Assistance Strategy for Tanzania
2007 - The National Health Policy 2007
2008 - Human Resources Strategic Plan
2009 - Health Sector Strategic Plan III (HSSP III)

Source: COWI et al. 2007; MOHSW/HSSP, 2009-2015

There are a number of operational guides, policies, strategies, action plans and manuals that focus on general and disease-specific quality improvement that have been developed by the MOHSW. For example in implementing HSSP III the MOHSW has developed and implemented - compliant Standard Operating Procedures and accreditation mechanisms to ensure consistent quality within all PHC facilities. Documents are important to guide implementers, however due to lack of funds; most of the training and use of these documents have remained in high level health facilities, especially in urban areas.

Introduction of Payments and Liberalization Policies: The health sector reform proposals accelerated the liberalization of private health care provisions that was allowed in 1991. The Tanzanian Government banned private for profit clinical practice in 1977¹. Before the re-introduction of the private for profit practices the government played a central role in provision and regulation of health care services and activities in the country. The outcome of liberalization of private health care services led to a rapid increase in private health care facilities in the country. The private sector is supposed to complement the public sector by, among other things, increasing accessibility of the population to health services.

Apart from the NGOs and other FBOs-subsidized health facilities, the non-subsidized private sector has also grown considerably, predominantly in the urban areas. All these private organizations provide health care in hospitals, health centres and dispensaries. It is estimated that voluntary agencies run about 40 per cent of all health facilities and provide 40 per cent of hospital beds. It

¹ However, clever providers covered themselves under the umbrella of FBOs and Charity organizations that were not banned from providing clinical services

was estimated that by 2001, 21 per cent of registered dispensaries were in the private for profit sector, and this is likely an underestimate (Tibandebage et al. 2001). Furthermore, by 2006 the country had an extensive network of an estimated 5,728 health care facilities: 4940 dispensaries, 565 health centres and 225 hospitals (URT – MoHSW 2008). Of these 5,728, sixty (60) per cent are owned by the government and the remaining ones by voluntary, parastatal and the private sector.

The liberalization of the health care sector was also associated with the introduction of user fees in the public health care provision. The intention of introducing user fees was to generate additional revenue to facilitate improvement in availability and provision of quality health care services (URT – MoH 1994).. The introduction of a user fee came in phases and this move entailed the beginning of *commercialized* public health care provision. The *Commercialization* of health care therefore refers here to health care provision and access through a fee based market system in both public and private sectors². In 1993/94, the user fee introduced at the referral, regional, district hospitals, and by 2004, was eventually rolled out to primary health care facilities, public dispensaries and health care centres. By mid-2000s, almost all consultations and treatments, at all levels from both public and private facilities required, payment mainly through out of pocket payment system.

In order to promote equity in accessing health services, following the introduction of the user fee, equity-seeking mechanisms were introduced to protect the poor and other vulnerable groups who are unable to pay the fees; it was also meant to cushion the loss of income and wealth due to large unexpected medical expenditures amongst other groups. In other words, these mechanisms aim at avoiding exclusion and enhancing equity in accessing health care services (Mamdani and Bangser, 2004). These initiatives include the establishment of a public exemption and waiver system, introduction of Community Health Fund (CHF) and establishment of a National Health Insurance Fund (NHIF). However, the literature documents that, these measures are not functioning adequately to achieve these intended objectives (URT-MoH 2005, MoHSW 2012). Apart from the ineffectiveness of the exemption and waiver system, the cost sharing system has been shown to have had limited success in achieving its stated goals of raising additional revenue for health care, improving the quality of services and improving the operation of the referral system (COWI, 2007; Hussein and Mujinja, 1997).. Furthermore, there are also problems associated with the functioning of the CHF and NHIF including weak management and very limited coverage of these initiatives (COWI et al. 2007; Chomi et al, 2013; Anaeli et al, 2013).. On the other hand the private sector has increased provision and use of health services. The introduction of private health insurance market and National Health Insurance Fund (NHIF) accreditation of the private facilities is the case in point.

The Financing reform, as part of HSR has registered a pronounced increase in the population covered by health insurance. About 10%-15% of the population is currently covered by health insurance. Studies and reports which are currently available suggest that low enrolment in the scheme is related to perceived low quality of health services, and lack of trust in CHF leaders, while poor knowledge of the scheme is related to benefits and the overall risk pooling, management problems and failure to appropriately verify members (Kapinga and Kiwara 1999; Chee *et al.* 2002; Shaw 2002; Musau 2004; Kamuzora and Gilson 2007; Anaeli, 2013; Chomi, 2013). Despite deliberate government efforts to promote enrolment of CHF for over more than 15 years, the scheme coverage are still very low (Shaw 2002). Since 1996 CHF has been operating in Tanzania but yet the enrolment has remained low. According to the recent CHF report (URT, 2011), the scheme has only attained 6.6% coverage of the total national population. This implies that the equity purposes introducing CHF have not been realized (Anaeli, 2013).

² *Commercialized health care in this sense is currently dominant and requires out of pocket payment in all sectors. In the context of wide spread poverty this raises issues concerning access for the poor to health care, especially in the situation where the exemption system is not working are required.*

2.2 Public Private Partnership (PPP) in Tanzania

For more than two decades the World Bank and other international organizations have emphasized upon increasing the role of private providers in health care market. The main argument, based on welfare economics of competitive market, being that if the role of the market is promoted will tend to decrease the role of the state and improve the welfare optimality of the society. However, in the last two decades governments in developing countries have preferred to have a public private partnership (PPP-initially public private mix) rather than purely private provision and financing (Bennet, S., MacPake, Bennett., and Mills, 1996). The Tanzanian national health policy defines Public Private Partnership as " a transparent cooperation and collaboration mechanism between public and private sectors with mutual understanding as equal partners for a common goal with clearly defined roles (MOH, 2007). This implies a public-private collaborative undertaking. However, in the health sector PP has to be analyzed with a caution. PP in the health sector is implemented as of the opposite of what is done in other sectors in Tanzania. While in other sectors the private sector is given the mandate of managing the government units or work in collaboration with the government, in the health sector the MoHSW gives subventions ("subsidies") based on a memorandum of understanding on the levels and type of services to be provided by the non-for-profit private sector, especially those owned by Faith-Based Organizations (FBOs). In other words the government pays them to provide public services and also subsidizes the education of medical doctors who are trained in private universities³.

Focusing on the reforms' objectives of improving quality and quantity⁴ of health services and fostering equity among different population groups, the two most recent MOHSW strategic plans, 2003-08 and 2009-2015, emphasize on implementation of PPP. This is confirmed by the third Strategic Plan which is titled "**Health Sector Strategic Plan III: "Partnerships for Delivering the MDGs" July 2009 – June 2015**". The partnership is defined in health care provision, financing, distribution, and regulation. To improve efficiency in implementing the PPP and liberalizing the health sector, the MOHSW has therefore established a PPP office in the MOHSW, and national and district committees comprising of both public and private representatives, which are supposed to link the government and private providers at different levels (MOHSW/Strategic Plan, 2009-15).

The extent to which public private partnership brings about efficiency and effectiveness in financing and delivery of health services, and more recently on regulating the sector, is a long standing debate in the literature (Gilson, et al 1996; Kumnarayake et al, 2000; Mujinja et al, 2003; Mujinja et al, 2013). In general, the debate is based on a number of issues: The private for profit suffer from poor management; weak mechanisms of accountability to the government, and have less qualified health workers compared to government facilities (Gilson et al, 1994; Green and Mathias, 1993 quote in Gilson et al, 1996; HERA, 2004), and therefore deemed less efficient. Furthermore, the private sector is accused to have a different motive from that of the government: profit versus serve the population equitably; less vibrant and less willing to be regulated (Mujinja, et al, 2003; Mujinja and Mackintosh, 2010). The divergence between the government and the private sector are also not only a result of mistrust between the two parties but also the clients' misplaced trust on both providers that are the consequences of poor quality and less quantity of health services provided by both providers (Tibandebage and Mackintosh, 2005; Mujinja, et al 2013).

Theoretically, based on the above spelled out weaknesses and the fact that the two partners have different motives to partner and produce effective interventions towards a divergent motive, it

³ Currently there are about four private universities training medical doctors, although their admission rates are still low compared with the two government universities, the numbers are growing rapidly.

⁴ Quantity of health services in this document also means the amount and level of health services that would be provided given the ideal situation.

could be argued that it would be difficult to reach a common goal unless one of the partners accepts to relinquish her objectives and follow the objectives of the other partner. Consequently, the objectives of the partnership for a while have been difficult to be fully realized in Tanzania, despite the efforts by the Ministry of Health and Social Welfare. The differences and divergences in “performance drivers” between that of Government (population’s health) and that of for profit health providers (business environment); between the government and the NGOs (funding agents); and between the NGOs and the private for profit providers, are some of the main challenges facing the PPP to realize its planned objectives. Several evaluations conducted to assess the implementation of PPP in Tanzania shows that there is little evidence of progress in the PPP strategy (MOHSW/Joint Evaluation team, 2011; HERA, 2004). Most of the above mentioned gaps were also identified in the 2004 evaluation of PPP (HERA, 2004).

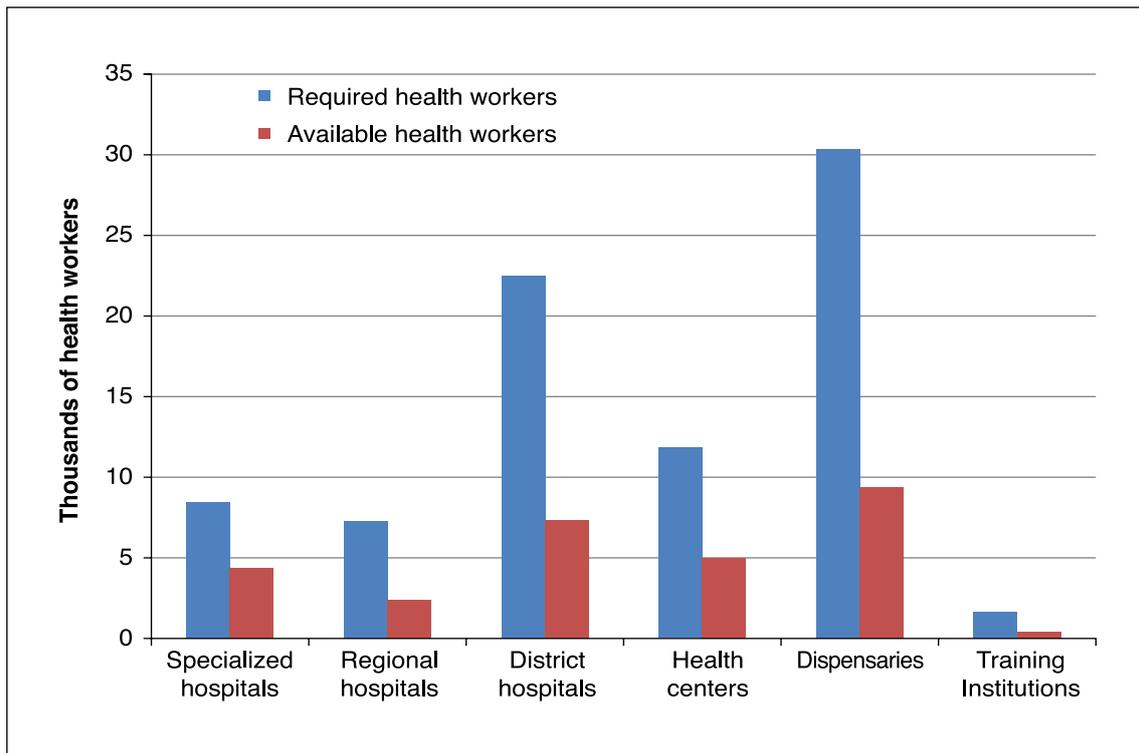
These disparities, challenges, gaps and problems for a long time have made this partnership (as defined in the health policy) difficult to be realized. To counter these challenges and minimize the divergence however, in recent years the Government has made tremendous effort to strengthen the PPP process. These include the development of policy in 2009, PPP Act in 2010 and PPP Regulation in 2011. To smoothen the challenges the government has come to an agreement with the private providers in a form of a Service Agreements between district councils with non-public providers [Faith based or Private] to deliver services to the population. The MOHSW milestones for 2012-2013 set the target of all hospitals having service agreements by June 2013. As of May 2012, 37 out of 130 districts/councils had entered into service agreement with FBO non-for-profit private providers (MoHSW, 2013).

2.3 Human Resources for Health (HRH)

Human resource for health (HRH) is the main input in health care production. The HSR (1994) in Tanzania emphasized the human capacity development with a focus on further strengthening district health service delivery by number and skill mix. Shortage of health personnel and poor health worker performance are among the most pressing problems of health systems in low-income countries, which results into poor health service delivery. Since HSR started to be implemented in Tanzania, there has been an acute shortage of quality and quantity of human resources, especially in poor rural areas (MOHSW/Strategic Plan, 2009).

The shortage of HRH has an adverse effect on the utilization of health care, especially in the rural areas in the last two decades. In Tanzania, the workforce of professional and other health workers has significantly declined in size (absolute numbers) relative to size of the population. The implementation of advices from the Bretton Woods institutions under the umbrella of structural adjustment programmes resulted into retrenchment of civil servants, included health workers resulting into a significant decline in absolute numbers during the 1990s. The freezing of employment in the public sector exacerbated the crisis in the 2000s, resulting in a loss of one-third of the health workforce (Mæstad, 2006; CEGAA, 2009). In 2006, the MOHSW estimated there was a shortage of 65 percent of the human resources for health working in government health facilities, while there was an estimated shortage of 86 per cent in the private health facilities (URT/MOHSW, 2008). The situation is exacerbated by the massive expansion of the health facilities in the rural areas under the primary Health Care Expansion Programme (URT/MOH, 2007c). The MOHSW estimated, as shown in Figure1, that an additional 144,700 workers would have to be trained and employed to work in the government sector and a further 39,400 for the non-government sector, between 2007 and 2017 (URT/MOHSW, 2008).

Figure 1: Human resources for health gap at all levels, in Tanzania as of 2006



Source: URT/MOHSW, 2008.

The decrease in number and skilled HRH in Tanzania cannot only be attributed to the above reasons, mainly external. Although the number of health and medical doctors is increasing, there is anecdotal evidence that shows that not all the required health and medical graduates, who graduate from public and private institutions, are employed by the government or the private sector. While the government cries of shortage of doctors, nurses and other health workers, a number of them are unemployed; while a good number of doctors work in NGOs as administrators because of missing employment in the government sector. Lack of HRH management skills in the MOHSW and districts are partly responsible for the crisis in human resources in the health sector of Tanzania. This also causes poor distribution of health care in the regions and districts respectively. One can argue that while, the HSR also emphasized the development of HRH, there were no plans for human resources management in the health sector. Since HSR was going along the central government reforms, including decentralization, the human resources management, specifically for health, was not clearly stipulated and implemented in the decentralization process.

Since 2006, the Government through the MoHSW has made deliberate actions to rescue the situation. According to the recent midterm analytical review of the performance of the health sector strategic plan III (2009 – 2015), there was a major increase in doctors during 2006-2011: generalist medical practitioners went up from 447 to 1,121 and specialist medical practitioners from 130 to 1,099, totaling 2,210 physicians. Furthermore, the 2012 data showed a similar number of medical doctors but considerably less medical specialists. This may be due to incomplete coverage of the national referral hospitals. It may also be partly due to differences in how medical doctors are classified into general practitioners and specialists. The density was 0.5 doctors per 10,000 population in 2012. According to the 2011 profile, 69% of the medical doctors and over 90% of the medical specialists were working in urban districts (MoHSW, 2013). It is also important to note that despite these recent improvement in increased supply of the medical professional,

three key challenge still remain; first the inadequate number of the medical specialists produced by our local institution; secondly, low absorption capacity of the government to employ the newly graduates in the medical field and, thirdly the skewed allocation of health workers, mainly allocated to urban areas. Therefore despite the increase in production of the medical personnel our health care facilities still experience severe shortages especially in rural areas (USAID, 2011).

As argued above the HSR had a gap in the human resources management strategy. To respond to this gap, quick and somehow poorly researched solutions have been put in place. To curb the shortages of HRH, the MoHSW has initiated a new way of training health workers. New and short duration curriculum has been developed. The change of curriculum and reduction of number of years of training among some low cadres (acronymied as *Voda Fast*) do not seem to be the solution to address the problem. It looks like a contradiction to the objectives of increasing the quantity and quality of health care where less trained and low level health facilities are used to provide care to the majority of the population in the rural areas. This perpetuates the bifurcation of the health sector since the low trained cadres will definitely be allocated to rural areas serving the majority poor.

The shortage of health workers is not only felt in the public sector, the private is also not spared. According to a recent study conducted by REPOA on Ethics, Payments and Maternal Survival in Tanzania there are prevailing staff shortages and work pressures experienced by maternal health staff in both private and public settings. Below are some of the qualitative evidences quoted from this study:

"For maternity care you need staff, we have a very high shortage of staff" Nurse midwife, FBO owned referral Hospital.

"The staffing level is very small. We are so much overworked" Nurse midwife, FBO owned referral Hospital.

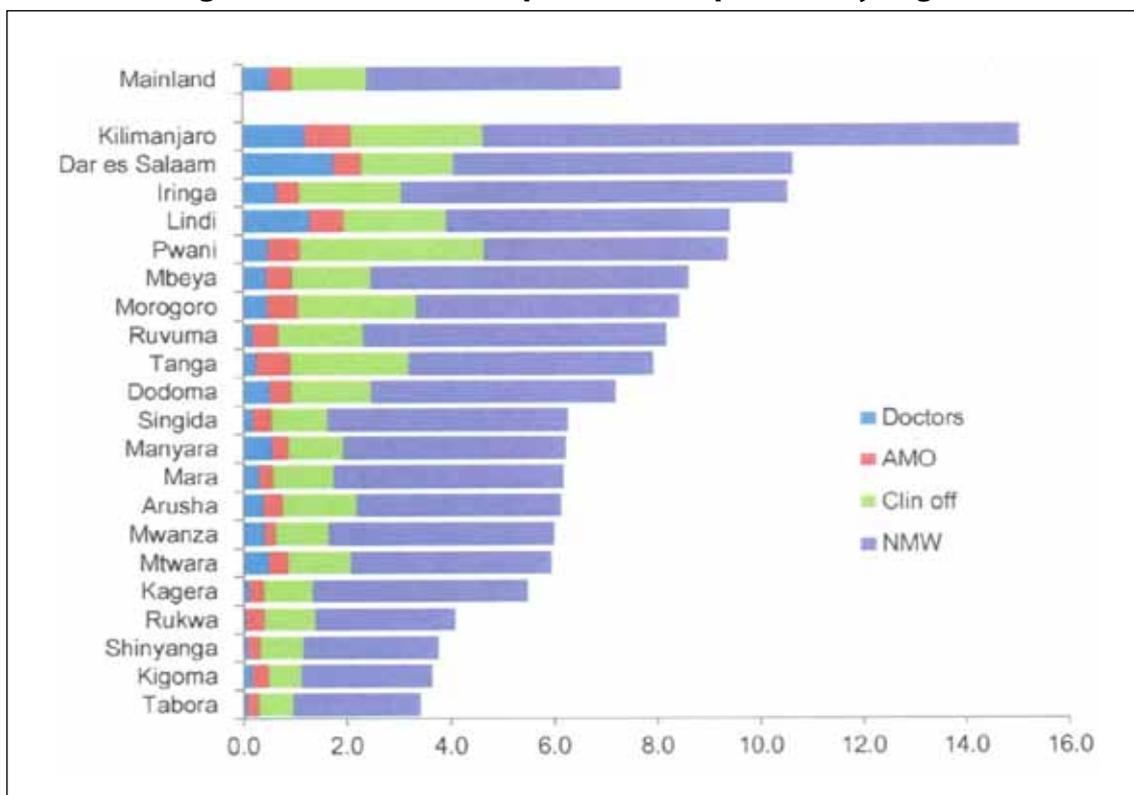
"Here it is heavy duty – deliveries are at all times. We have two wards but staffing is basically for one ward" Maternity in charge, Government Regional Hospital.

"It is hard to work in maternity ward; we are severely understaffed. In seven days we get only one day off. And this is when you have a night shift. So we are so much overworked and exhausted" Nurse Midwife, Government Regional Hospital

The HRH crisis in Tanzania is therefore aggravated by health system structure and the existing regional disparities. Most of the health workforce, both specialized and non-specialized, is concentrated in urban areas where there are hospitals (MOHSW and WHO (2007). Reports and studies reviewed by Kiwara, Mujinja and Chitama (2010) and Wyuss (2004) reveal a number of other reasons why health workers would like to work in urban areas: career plans, salary levels, recruitment and appointment procedures, and retention measures' individual worker preferences often do not match population health needs. A survey conducted in 2006 found that 52 per cent of all doctors work in the Dar es Salaam region; Dar es Salaam had 25 doctors for every 100,000 people compared with the national average of 3.5 doctors per 100,000 people; and in 14 out of 26 regions, there was only one doctor or fewer per 100,000 people (MOHSW and WHO (2007). This situation is also confirmed by the recent review of the performance of the health sector strategic plan III. It is revealed that health workers density varies from below 4 per 10,000 in Rukwa, Kigoma,

Shinyanga and Tabora regions to more than 10 in Kilimanjaro, Dar es Salaam and Iringa regions. (see Figure 2)

Figure 2: Health Workers per 10,000 Population by Region



Source: MoHSW, 2013

As argued above, the shortage of health workers is more worse in the rural health facilities and is further aggravated by allocative and administrative inefficiencies. A recent survey by Manzi et al (2012) found that only 14% (122/854) of the recommended number of nurses and 20% (90/441) of the clinical staff had been employed at the facilities. The shortage of health workers in rural areas is further worsened by (Kwesigabo et al, 2012; Mackintosh et al, 2013); working less productively for only about half of the working hours even when they are physically present in health facilities (Manzi et al, 2012). Manzi et al (2012) also reported a critical absence of health workers during the survey where about 44% of clinical staff was not available on the day of the surveys at the facility. The shortage and underemployment contribute significantly to the deterioration of the quality and quantity of health services to the rural poor.

More challenges to human resources crisis in the health sector is brought about by the vertical programmes. Although vertical programs such as HIV/AIDS, TB, and malaria control programs contribute greatly to the health system, they compete for quality staff within councils that already have HR shortages, since they demand attention from the existing staff who are already overstretched.

The MOHSW developed a HRH proposal which was later turned into a strategic plan. However, delays in implementing the HSR proposal on human resources for health have negative consequences. Apart from the poor delivery of health services due to shortage of human resources for health (URT/MOHSW, 2007b). The HRH strategic plan was later incorporated into the HSSP III, which was

not clearly specified in HSSP I and II. Due to that delay, the MOHSW reported that the shortage had contributed to a further shift of health care demand towards traditional healers. In 2007 the MOHSW estimated that about 60 per cent of all those seeking health services depend on some traditional health services, and that about 53 per cent of deliveries take place at home, mostly with traditional birth attendants (URT/MOHSW, 2007b).

2.4 Regulatory Framework in Health Care in Tanzania

Regulation in health sector is defined as 'a mechanism in which the government controls or deliberately tries to influence the activities of individuals or actors in health care provision by manipulating target variables such as price, quantity and quality' (Maynard 1982; Kumaranayake et al, 2000). It mainly emphasizes the licensing (entry) as well as controlling activities of provisioning of care once the health care providers joined the market. A well established regulation mechanism is important to ensure that there is proper control on many problems associated with delivery and financing of health care by the private health care providers (Bennett 1991).

As per HSR and later PPP, the regulatory framework in Tanzania is supposed to regulate quality and quantity of health services, ethics among health providers and consumer rights, standards of medicines, medical supplies, technologies and health care provision and consumption; and professionalism among health professionals including traditional healers. This implies that there are many actors in the health sector regulatory process in Tanzania. These actors include the MOHSW (on behalf of public providers), private for profit organizations, private non-for-profit, NGOs, FBOs, CBOs, sole providers, and traditional practitioners. Furthermore, there is also internal regulation of codes of conduct and standards that is done by professional associations (like Medical Association of Tanzania, Pharmaceutical Board) in the health sector, which have existed for some time now.

In the process of implementing HSR the government has laid a good foundation in formulation of regulatory frameworks, although late, the main challenge remains enforcement of these regulations. Tanzania Food and Drug Authority (TFDA) was established by the Act of parliament in 2001. Furthermore, the MOHSW has established a regulatory and quality assurance department. The Tanzania Bureau of Standards (although is multi-sectoral institution) participates in regulating health related commodities. The Medical Supplies Department (MSD) indirectly regulates the quality of pharmaceuticals and medical supplies by bulk ordering and inspection assisted by TFDA (Mujinja, 2013). It is very unfortunate that these regulatory frameworks were initiated long after the introduction of the HSR, making it difficult and for some problems taking a substantial amount of human and financial resources and time to effectively regulate (Mujinja et al, 2013).

Generally, a need for some forms of control over provider entry to and conduct in health care markets is universally accepted on the ground that the consumer/patients are insufficiently informed to protect their own interests (Kumaranayake et al, 2000). It is important to note that, regulatory framework in Tanzania that is aimed at regulating both the public and private sector is almost one decade old. The rapid growth of private health care providers in Tanzania called for increase in government capacity to regulate the health sector. However, the capacity to regulate and enforce regulations to ensure adequate quality of care have often been extremely limited in Tanzania (Kumaranayake et al. 2003; Soderlund et al. 2000; Kida 2009, Mujinja et al. 2003, Mujinja et al. 2013). Furthermore, the rapid expansion of private health care provision is also accompanied by significant movements into and out of the business by the private health care providers which makes it even harder to regulate their activities. These challenges are also supported and confirmed

by Kida (2009) as quoted below:

*“There are about 22 health officers at the MMOH conducting the inspection and supervision activities. Unfortunately, these officers have many other assigned activities. This makes the inspection and supervision enforcement system from the municipal level to the health care facilities weak. In principle, every Monday there is a routine schedule to supervise the specified facilities, however in most cases the schedule is not adhered to. This is either due to transportation problems or the responsible officers have been assigned **other tasks**”* (Respondent, MMOH Office, Kinondoni municipality).

Furthermore, in extreme cases, Kida (2009) revealed that some providers are operating completely illegally without a license to operate a health care facility.

“I have no comment on the system of supervision and licensing; I am not registered and therefore I am not supervised” (Owner of the informal operational dispensary, squatter area).

Given the above experiences, it is important to note that, the late establishment of a regulatory framework, after allowing private providers, contributed to the malfunctioning of the regulatory framework. This is the fact that the horse was tied before the cart—private practice started before regulatory framework was put in place. The issue is, since the regulatory framework had put in place, to what extent has it been effective in protecting both providers and consumers? If it is effective, is it collaborative as spelled out in the HSR and PPP?

As mentioned above, despite existence of regulations and regulators, effectiveness of the regulatory framework has been a public health policy concern in Tanzania for some time now (Kumanarayake et al, 2000; Mujinja, et al, 2003; Mujinja et al, 2013). Traditional and alternative medicine practices, which are officially registered by the MOHSW are left out in the regulation especially inspection schedules. Studies conducted in Tanzania have found that many people use traditional alternative medicines and other alternative medicine outlets for their dental and medical treatments (Sarita and Tuominen, 1993; Kayombo et al, 2012) and some patients often utilize both traditional and western medicine concurrently when attempting to cure a single ailment (Wenzel, 2011). These are private providers who are not officially involved in different committees in the MOHSW and districts (Ministry of Health Official personal communication, October, 2013). Lack of effective regulation in the traditional health sub-sector creates a room for providers to act unprofessionally and consumers to be denied of their rights. This is a weakness in implementing the HSR proposals. Therefore given the current scenario the future demands that deliberate efforts should be put in place to establish adequate capacity to enforce the existing regulatory frameworks in Tanzania i.e not only establishing new ones.

Even after the formation of TFDA, studies still find the health care market is still poorly regulated, especially in the rural areas. Lack of effective supervision gives room for drug outlets to employ unprofessional dispensers who practice unethically but fulfilling the outlet owner's desires, on the ignorance of the consumers (Mujinja et al, 2013; Mujinja et al, 2013). Although the MoHSW has formed a team that goes around in different districts to check for quality assurance, the involvement of the private sector in regulating is still unnoticeable.

In a study by Kida (2009) private health care providers admitted that the existing regulatory system is weak and therefore it is easier for them to take advantage of the system by operating against the

regulations set by the municipal authorities

“Supervision system should be reviewed and monitor closely the private sector. There is a need to have tight regulation on the use of drugs; drugs are carelessly prescribed by the private sector.” (Clinical Officer in Charge, public dispensary, medium density area).

“There is a need to have a closer look on the way the private pharmacies and laboratories are operating; most of them are operating just like ordinary dispensaries, prescribing medicines, providing injections and consultations. You just go around this area and you will see yourself that some drug stores even dare to advertise-consultation services also available here.” (In Charge, private for profit dispensary, squatter area).

In Tanzania, the medicine outlets are regulated by the Tanzania Food and Drug Authority (TFDA) assisted by the District Pharmacists and the recently appointed Ward Regulatory Committees (WRCs). A number of studies conducted before the establishment of TFDA, when district pharmacists were the sole inspectors of drug outlets, reported poor and irregular supervision of drug shops (Mujinja et al, 2000; Kumanarayake et al, 2000). Studies conducted after establishment of TFDA still show a similar ineffectiveness where 85% and 90% of the health facility dispensers and medical shop sellers respectively reported that their outlets had been inspected at some time in the past, the inspections were irregular (only about 66% of the dispensers and 47% of medical shop sellers had had their outlets inspected at least once within six months prior to the interview (Mujinja, 2013). It has been found and argued that the fact that the regulatory framework was established after the health system functions had already been reformed abiding to the regulations (by the regulates) needs a very high degree of enforcement. This is to say that without the incorporation of the providers and consumer organizations, it cannot be easily implemented (Mujinja, 2014).

The government has responded to some of these challenges. For example, TFDA has introduced reforms that may help to reduce the ineffectiveness of regulation. There is also the initiation of the Accredited Drug Dispensing Outlets (ADDO), which also aims at improving the efficiency of regulation by for instance cutting down undercover dispensing of some common prescription drugs, a number of operational difficulties still need to be addressed to improve the regulation framework. The drug dispensing outlets (shops) are still the first point that a large proportion of people would visit when they fall sick, therefore more human resources are required to regulate these outlets (TFDA, 2008).

Regulation does not end in inspecting physical environment of health facilities or just checking providers' behaviour, as is mostly done by the inspection teams from DHMT and or MoHSW (Mujinja et al, 2013). Consumers of medicine have the right to treatment that are ethically appropriate, safe and that meets professional standards, including the right to full information about the risks and benefits relating to efficacy and safety of medicines she or he would use (WHO, 2002). These have to be regulated, and in Tanzania this is rarely done (Mujinja et al, 2013). Some countries have consumer charters that define the rights of the consumers of medicine. To legalize these rights, some countries especially developed countries where there are constitutional provisions on the right to health and health information, enforce them in a court of law (Hogerzeil et al, 2006). Effectiveness of regulatory framework requires the involvement of the individual consumers to protect consumer rights. As of now there is no working consumer charter in Tanzania, making the regulatory framework weak (Mujinja,, 2014).

3. Development of Main Health Status Indicators during the Health Reforms Implementation

In this section we are interested in looking at the main health status indicators during the implementation of the HSR. These indicators include Infant Mortality Rate (IMR), Child Mortality Rate (CMR), Maternal Mortality Ratio (MMR) and Life Expectancy. We trace their happening in the time of HSR implementation. We explain factors associated with these measures by analyzing child health, maternal health, malaria and HIV/AIDS. The services provided and their demands (utilization) are also analysed, since they are linked to mortality, morbidity and disability related to these measures. Malaria and HIV/AIDS have been included because they greatly contribute to both child and adult mortality and morbidity and disability (URT/MoHSW, 2013), and therefore affecting life expectancy of Tanzanians.

The HSR as presented in chapter 2 above was generally intended to minimize the burden of diseases in Tanzania by improving the functioning of the health system. Reduction of the burden of diseases implies the improvement of health status of the population by reducing morbidity, disability and mortality among the population. We are quite aware that the health status indicators are multi-faceted variables influenced by a combination of factors. Among factors that have been found to influence health indicators include socio-economic determinants, income and wealth distribution, decline in diseases death rates, improvement of health seeking behavior; and improvement in health system (Mahdavi et al, 2013). Therefore, one may argue that only improvement of the health system through HSR may not adequately explain the relationship between HSR and health indicators.

We did not get literature in Tanzania that are directly associated with changes of the health indicators to the health system determinants. So one may conclude that it is not easy to directly link the HSR performance to health indicators, although one could trace what happened during the implementation of the HSR. However, we argue that the relationship can also be traced by holding other variables that influence health indicators constant (*ceteris paribus*) and isolate the accessibility and health seeking behavior as a demand side variables and use them to trace the link from the demand side, as done in other studies (Mahdavi et al, 2013; Szwarcwald, et al, 2013) tracing such well-being and health indicators. We strongly argue that health systems planning and therefore functioning are for meeting the satisfaction (utility) of the populations (demand side) and not to only satisfy the providers and the MoHSW (supply side). In this section, we explore what has happened to these indicators during the implementation of HSR, as one of the measures of the reforms implementation. In chapter 4 we explore some of the health system determinants of health indicators on the demand side, accessibility and utilization

In this section we try to provide a brief analysis of the trends, not a correlation, of the health status in the last two decades of the implementation of health sector reforms. We focus on the four key indicators: Child health; Maternal Health; HIV/AIDS and Malaria. A review conducted in

2013 indicates that there has been a substantial improvement in these indicators in the HSSP III compared to the previous years (URT/MOHSW, 2013).

3.1 Child Health

A review of documents to assess the health system in Tanzania shows that Child Health status in Tanzania is improving in many important areas. National statistics indicate substantial reductions in infant and under-five mortality. From 1978 to 2012, infant mortality fell from 137 to 68 per 1,000 live births, and under-five mortality declined from 231 to 162 in 2002 and to 68 per 1,000 live births in 2012 (REPOA, 2006; WHO, 2013; URT/MoHSW, 2009). The recent demographic and health surveys shows that infant mortality rate has decreased from 58 per 1,000 live births in 2007/2008 (URT/THMIS, 2008) to 51 per 1,000 live births in 2010 (DHS 2009/2010). The under-five mortality rate has also decreased from 91 child deaths per 1,000 live births in 2007/08 (THMIS, 2008) to 81 child deaths per 1,000 live births in 2009/10 (DHS, 2009/2010). Furthermore, in light of abstract positive trends in declining child mortality rates, it is also important to note the stagnant statistics of hospital admission rates over time. In 2012, there were 699,000 hospital admissions of children under 5 years. This was about the same as the average of the three years before, 694,000 admissions per year (MoHSW, 2013).

The nutritional status of children in Tanzania has not recorded a substantial improvement. The country data show that the proportion of children stunted and underweight have declined slightly for the first time in the last decade according to the NPS 2010-11. In addition, there are still very large gaps on nutrition status between urban and rural children. For instance, children living in the poorest 20% of households had 48% stunting, compared to 26% among those living in the wealthiest 20% of households. For Vitamin A, there has been a decline in the availability of vitamin A capsules, which points to a major supply problem in 2012 which may pose a challenge in attaining the 2015 target of 90% Vitamin A supplementation coverage (See Table 2).Table 2: HSSP III Targets and Indicators

HSSP III TARGETS & INDICATORS*				
Indicator	Baseline (Year)	Achievement	Target 2015	Comments
Underweight among children under 5	22% (TDHS 2004–05); 16% (NPS 2008)	20.5% (TDHS 2010)	14%	Old NCHS growth standard used; declined and reached the target.
Stunting among children under 5	38% (TDHS 2004–5); 43% (NPS 2008)	36% (TDHS 2010) 42% (new WHO standard)	27%	Improvement since 2008, but well off target.
Vitamin A supplementation coverage (2 doses/year)	95% (HMIS 2007); 46% (TDHS 2004–05)	60% (TDHS 2010)	90%	Improvement since 2004–05

* Other M&E documents: Ministry of Health and Social Welfare. National roadmap strategic plan to accelerate reduction of maternal, newborn and child deaths 2008-2015. April 2008. Indicators for FP are: Total fertility rate, age-specific fertility rate; contraceptive prevalence rate by age group and socio-economic quintiles, met need for family planning by age, number of individuals accepting contraceptives new acceptors; Number of service delivery points per 500,000 population offering the full range of contraceptive information counseling and supplies.

Source: MoHSW, 2013.

The decline of child mortality rate can be possibly explained by increased effective prevention and treatment of malaria and high coverage of immunization levels, which are linked to HSR. However it is important to note that even though the immunization coverage is still high in Tanzania there has been a declining trend in recent years, despite the implementation of HSR. The DHS, 2009/2010 indicates there has been a slight drop in the immunization coverage from 95 percent in 2004 to

85 percent in 2009. According to the recent midterm analytical review of the performance of the HSSP III, Tanzania is revealed to be an average performer on the anthropometric indicators compared to other countries in the (sub) region. It is indicated that child health services are provided by most health facilities, but there are still gaps in the availability of trained staff, equipment, diagnostics and medicines. In addition the child health service readiness did not improve during 2009-12. It is revealed that the gaps in training and guidelines, equipment diagnostics and medicines during the HSSP III were to a deemed to have brought about major changes.

We argue that although the declining trend of child mortality in the past decade happened coincidentally with HSR implementation, could be highly explained by the increase in health promotion (use of ITNs) including vaccination coverage, which does not necessarily indicate improved accessibility and a better care of under-fives in health facilities. Studies on accessibility and quality of services show that accessibility to health care, especially in rural areas among the poor is still low as curative programmes are not evenly distributed (Save the Children, 2005). Furthermore, we argue that the vertical programs, which are highly financed by development partners⁵, not a national health budget, have made important contributions to the health status of children, especially the under- fives (USAID, 2011). These programmes have greatly contributed to reduction in children mortality in controlling malaria and HIV and AIDS effects. Therefore the positive results cannot be directly associated with the HSR implementation alone.

3.2 Maternal Health

The 2004/05 Demographic and Health Surveys (DHS) shows that pregnancy related mortality was not significantly reduced over the last two decades. The maternal mortality ratio for the period 1995 to 2004 was 578 per 100,000 live births, not significantly different from the 1987 to 1996 ratio of 529 per 100,000 live births. However, the 2009/2010 DHS show substantial reduction from 578 to 474 maternal deaths per 100,000 live births. Nationally, between 1999 and 2004, there was a slight increase in the proportion of births assisted by health professionals, from 41 % in 1999 to 46 % in 2004. The total fertility rate slightly decreased from an average of 5.6 children per woman of the reproductive age (age 15-49) in 2007/08 to an average of 5.4 children per woman of reproductive age according to the 2009/10 DHS. Contraceptive use is also on the increase though at a lower rate, as the recent DHS reported 34% of married women use “any method of contraception” compared with 26% in 2004/05h (THMIS, 2010). The percentage of pregnant women sleeping under an ITN also increased from 26.7% in 2007/08 to 57.1% in 2009/10 (URT/THMIS, 2010).

It is important to note that the leading cause of maternal deaths in health facilities is postpartum hemorrhage which is associated with almost one in four maternal deaths in 2012 with limited changes in the last four years. Maternal mortality ratio trends are fairly consistent and plausible in most regions, with little change over time, although underreporting of maternal deaths and/or deliveries is likely in some regions. Skilled attendance was at 51% during 2006-10. With regards to family planning contraceptive use it is still low though there have been a sharp increase by one-third to 27% during 2005-10 from 20% in 2004-05 (THDS 2010).

Furthermore the midterm analytical review of performance of the health sector strategic plan III indicates that in terms of the *timing of the first ANC visit* there was no progress at all between the two DHS surveys: during 2006-10, 15% of pregnant women made their first visit before 16 weeks, compared to 14% during 2000-04. Nearly all pregnant women attend antenatal care. The HSSP III

⁵ Although there is a substantial amount of funds from development partners that are channeled directly to the government budget, there is still some partners who do spend their funds to different vertical programmes off budget.

indicator of *at least four ANC visits* however shows a worrying trend. According to the DHS surveys, during 2000-04, 61% of pregnant women made 4 or more visits, but during 2006-10 only 43% did so; and, based on a re-analysis of the TDHS 2010, only 36% during 2009-10. In the TDHS 2004-05 only 13.4% of women received postnatal care within two days for the most recent childbirth. Five years later the proportion had more than doubled to 25%, a major increase but still far from universal coverage. Coverage of postnatal care was still only as low as 37% in urban women (22% in rural women). Among the facilities offering ANC services, 49% had a staff member trained in ANC and 60% had guidelines as well. Diagnostics were mostly not available, and in 2012 the situation was poorer than in 2008-09: only 8% could do an HB test on site in 2012, down from 21% in 2008-09. Urine dipstick (protein and glucose) were available in one fourth of clinics in 2008-09, and only one in 6 in 2012. A district facility survey (SARA) carried out in 2009-09 and 2011 on the delivery service readiness which found that one quarter offered all basic emergency care services (MoHSW, 2013).

Skilled birth attendance was 51% during 2006-10 in the TDHS 2010. The 95% confidence interval was 45%-52.5%. Both National Panel Surveys suggest higher levels and an upward trend during 2007-08 and 2010-11, from 59% to 62% in the mainland [among 955 and 1,171 births during the 24 months before the survey respectively], although not statistically significant. Skilled birth attendance coverage is examined to assess the trends in equity over time. The gaps between urban and rural women remained very large: 42% of rural pregnant women delivered with SBA, compared to 83% of urban women, during 2006-10. The gap between women in the poorest and the richest quintiles were even larger and did not reduce over time (33% and 90%) (URT, 2013).

Despite the slight reduction in maternal mortality, most of the indicators that would significantly reduce maternal mortality have not been well improved. The improvement of the reduction in maternal mortality and anemia amongst mothers are attributed to the use of ITNs, which are mainly financed externally by developing partners and not necessarily HSR, as such. More than 50% of the women still delivers at home implying that they are not attended by skilled health workers. Anaemia in pregnancy is still a problem. Less than 30 percent of the women uses modern family planning methods (URT/MOHSW, 2013). Furthermore, decentralization is an integral part of HSR implementation. It is widely argued that the failure of the Districts/Councils to attract qualified and skilled health workers to attend mothers, has contributed to the decline of mothers utilization of maternal services during the implementation of HSR. All these show a weakness in the health system, which needs to be strengthened to improve health services provision

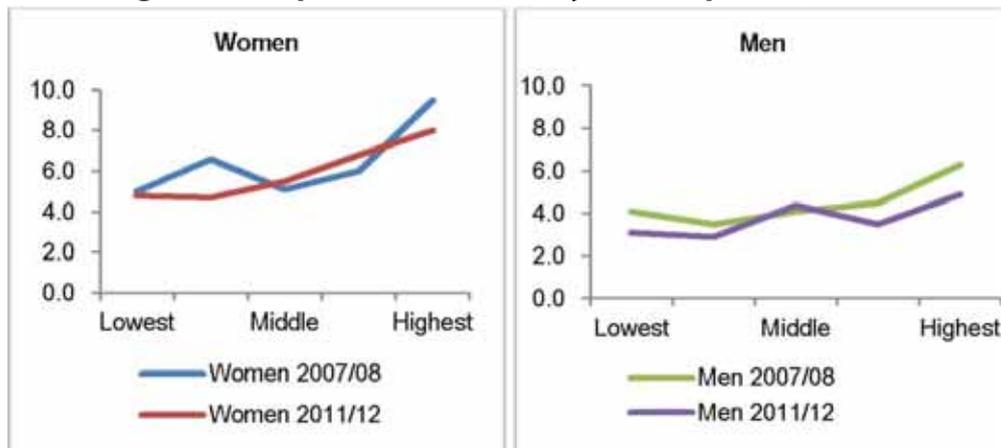
3.3 HIV and AIDS

Since the first case of HIV was diagnosed in 1983, AIDS has claimed a lot of lives, and HIV and AIDS have greatly contributed to the Disability Adjusted Life Years (DALYs) lost due to premature deaths and for years people have lived with morbidity and disability in Tanzania. Since early 1990's, Tanzania has developed key strategies and later multi-sectoral strategic plans through National AIDS Control Programme (NACP and later TACAIDS) to control and later treatment of HIV/AIDS in the country. As a vertical programme it has made important contributions to the health improvements including improvement in life expectancy.

Efforts and financial resources (mainly from development partners) that have been invested in HIV/AIDS control and treatment have made a substantial contribution in reducing mortality and

disability from HIV/AIDS. Overall there has been a decline in the incidence and prevalence of HIV in the general population. The Tanzania HIV/AIDS indicator survey (THMIS of 2010) shows that HIV rate fell from 8.8 percent in 2003 to 5.7 percent in 2010. A number of prevention and treatment programmes as reviewed by Mujinja et al (2010) have contributed to this reduction. For example, an anti retroviral therapy (ART) coverage among people with advanced HIV infection is currently 80% (NACP, 2010). HIV prevalence rates are declining slowly but steadily in urban areas and rural men, but not among rural women. Differences between the regions remain but are narrowing down with the low prevalence regions going up and the high prevalence regions going down (URT, 2013).

Figure 3: HIV prevalence 15-49, by wealth quintile, THMIS



Source MoHSW, 2013

Contrary to many other health issues, HIV prevalence is higher among the wealthier as illustrated in the figure above. The poorest two wealth quintiles have the lowest HIV prevalence, both among men and women. Remedial measures like the impact of ART on child survival is as good as for adults. Mortality in the first year of ART was 8.3% in 2010. A major problem in the assessment of adherence and survival rates is however that high loss to follow up: as much as one quarter of those who start ART are no longer receiving treatment from the clinic where they initiated ART (URT, 2013). By the end of 2011 Tanzania had more than 1100 health facilities approved to provide care and treatment services; 348 clinics reported individual patient level data for 2011 and 379 clinics provide quarterly aggregate reports only, and 171 clinics used some other type of reporting. A large proportion of data is lost to follow which means adherence and survival rates are uncertain. It is important to note, that HIV/AIDS treatment and control programmes are very fragile as they are heavily funded (over 90%) by development partners and other International NGOs.

There is an issue with HIV treatment that contributes to low coverage. While all other complicated treatments can be handled by other prescribers, it is not clearly known and evidence supported why only medical doctors should be the only cadre to handle ARVs. It is high time now that other cadres should be allowed to handle ARVs, and if possible train Nurses to prescribe, especially graduate nurses. Task shifting should be another alternative to be explored to improve ARV treatment coverage.

Before TACAIDS was established by an Act of Parliament in 2001, HIV/AIDS activities were managed

by the Ministry of Health. Significant efforts were exerted on prevention and control, and positive results were realized. Before and after TACAIDS the HIV and AIDS prevention, treatment and care activities have greatly contributed to the reduction of mortality and disability, and therefore the improvement of life expectancy. However, although these results are happening during the implementation of the HSR, the financial, and to some extent technical resources have been financed by development partners by more than 90%. HIV/AIDS has been operated as a vertical programme. While attracting substantial additional funding for health, HIV/AIDS programs also compete for limited health staff at the district level and above. For example, there is competition both among HIV/AIDS programs and with other vertical programs and services. HIV/AIDS and other vertical programs tend to operate independently, further which makes it challenging to use resources in the most efficient way (Musau et al, 2011), and therefore not entirely a product of HSR.

3.4 Malaria

The most recent data for malaria indicators for Tanzania are shown in the 2009-10 DHS, which shows marked improvement in nearly all malaria indicators when compared the 1996 and 2004 figures. The 2009/10 DHS revealed that the percentage of households that own at least one Insecticide Treated Net (ITN) has increased from 23% (2004) and 39.2% (2007/08)-from the Tanzania HIV and Malaria Indicator Survey- to 63.4% in 2009/10 (DHS, 2010). The percentage of children sleeping under an ITN increased from 25.7% in 2007/08 (Tanzania HIV and Malaria Indicator Survey) to 64.1% in 2009/10. The percentage of pregnant women sleeping under an ITN also increased from 26.7% in 2007/08 (Tanzania HIV and Malaria Indicator Survey) to 57.1% in 2009/10. This compares with just 15-16% usage in the 2004-05 DHS. On the ground the proportion of mothers who received 2 doses of intermittent preventative therapy (IPT) for malaria during last pregnancy, has been limited in progress with 31% (THMIS 2011-12) from 30% in 2007-08.

Furthermore, Parasitemia rates, as measured by RDT, differ considerably between the poorest and best-off children. In 2011-12 children in the best-off quintile had a prevalence of 1.3% compared with 12.6% in the poorest quintile, a tenfold difference. Yet, major declines in parasite prevalence (with the caveat of different tests used) occurred in all wealth quintiles. Its noteworthy, in light of successes accrued in curbing malaria through the drastic increase malaria diagnostic tests, it is yet prevalent as a leading cause of all deaths in hospitals (30%), followed **by** pneumonia (19%) and anemia (11%) among children under 5 years, mainland Tanzania, (2009-12, HMIS). In 2011-12 children in the best-off quintile had a prevalence of 1.3% compared with 12.6% in the poorest quintile, a tenfold difference. In 2011-12, the percent of children under five who slept under an ITN during the last night showed no differences between boys and girls, between urban and rural children, and by wealth quintile

Malaria is still the first cause of out of patient and hospital admissions (both above 30% respectively) despite the reported decline in prevalence and incidence of plasmodium falciparum (URT/MoHSW, 2013). It is also surprising that despite the decline in malaria cases, the use of ITNs is still 70 percent only (URT/MOHSW, 2013). Furthermore a review by MOHSW still shows that in some facilities ALU (the first-line malaria treatment drug) is not available all the time, some facilities have no rapid malaria diagnostic tests as of yet (MOH, 2013) and therefore malaria treatment is not optimal. This brings about the need for properly designed research to find out why these discrepancies.

It is also important to note that Malaria control spearheaded by the National Malaria Control Program (NMCP), is another vertical programme which has mainly been funded externally by the US government. The US government grants have provided most of the funding for the universal ITN campaign and for scale up of artemisinin-based combination therapies (ACTs), and a nationwide pilot of the distribution of subsidized ACTs in the private sector (USAID, 2013). It is therefore quite difficult to associate its success to the implementation of HSR. Furthermore, it is also difficult to argue that DALYs lost due malaria have been reduced since the outpatient and admission rates have remained at around 30% for many years as shown in the recent critical review of HSSP III (URT/ MOHSW, 2003).

4. The Demand Side Analysis: The Reflection of Health Sector Reforms on Accessibility Services

4.1 Introduction

As shown in chapter 2 of this document, Health Sector Reforms and its subsequent policies of Tanzania emphasize equity in access to health care. In the context of Tanzania, health equity refers to providing priority to those with greatest needs and those with least ability to pay for health service, while avoiding unnecessary avoidable and unfair differences in health and in access to health care (Loewenson, 1999). Accessibility of the vulnerable groups to health services is the primary focus of the Tanzanian Health Policy (MOHSW, 2007). However, what constitutes access to health care remains an issue of debate in the literature; most of the literature arguing that access is not equivalent to use of services (Pechansky, 1977; Thiede et al, 2007; Gulliford et al, 2002; Oliver and Mossialos, 2005). Others arguing that access to health services is the freedom to use the services, given the opportunity to use the services. Therefore there is a need to make available the acceptable and affordable services to the health system's clients (Thiede et al, 2007). The debate emanates from the fact that accessibility as a concept cannot be explained by a single variable, it is a composite variable consisting of affordability, acceptability, availability and equity (REPOA, 2006), we also add on appropriateness, quality and quantity, of the services provided.

Accessibility to health care has different multi-sectoral dimensions. Whatever factors are used to define accessibility, access to acceptable quantity and quality health care services remains a challenge for about 1.3 billion people worldwide; being more exacerbated in developing countries including Tanzania (REPOA, 2006). The most commonly used dimensions to explain accessibility are physical accessibility to health facilities, availability of diagnostic equipment in health facilities, availability of efficacious, safe and affordable medicines, are crucial aspects in improving access to health care (Thiede et al, 2007). Accessibility is also influenced by the availability of information on what type of health services and health workers are available in health facilities. Specifically, a number of factors have been associated with poor accessibility to health care in Tanzania include: unaffordable transport systems; poor quality of care; poor governance and accountability mechanisms; and poorly implemented exemption and waiver schemes meant to protect the most vulnerable and poor people (Mujinja et al 2013, Kida 2009).

This chapter explores these different dimensions of accessibility (affordability, availability, appropriateness, quantity and quality, acceptability), in relationship with *commercialization* of health services, which we argue that is a consequence of the health reforms policies and strategies in Tanzania. Specifically, this section examines how HSR in Tanzania has succeeded or not succeeded in improving accessibility to health care services given the prevailing health sector reforms implementation that has created and accelerated *commercialization*, and consequently creation more inequity in health care access.

4.2 Affordability

Translation and implementation of national policies into intentions have always faced challenges, and sometimes resulted into unintended effects (Gilson et al 1998). The unintended effects are a result of the focus of the policy. The primary focus of the HSR commercialization policies in Tanzania was mainly to raise revenue in order to improve the quality and quantity of health services, and equity was just a secondary objective (See Health Sector Reform Strategy, 2004). As a consequence, in trying to balance the primary focus and the secondary objective, some policy measures for improving revenue generation produce barriers in access to health services by the poor, results into further constraining affordability (Save the Children, 2005), and hence the poor are more distanced from the needed health services.

In 1993 the Ministry of Health introduced user fees in the public health facilities. Since then a number of studies have looked at affordability of health services in Tanzanian public and private health facilities (Hussein and Mujinja, 1997; Msamanga et al, 1996; Mujinja, 1997; Kalewenski et al, 2000). Other studies have looked at affordability in communities (Save the Children, 2005; Mubyazi et al, 2000). A Policy and Services Satisfaction Survey in 2003 found that for 73% of respondents, health care had become “less affordable” in the last 5 years. Cost of treatment was ranked as the most serious problem in the health sector, with 50% stating it to be a “serious problem”.

Apart from the high direct cost of seeking care that have constrained affordability, there is evidence in the literature that other pecuniary payments are exacerbating inaccessibility to health services for the poor. Because of the commercialization policy that makes the health services to the poor scarce. Clients in public health facilities have reported to have experienced with corruption for them to receive the services that they would be exempted from paying. Others have reported to have had paid a bribe to a health worker (PSSS 2003, Save the Children, 2005; Kalowenski, Mujinja and Jahn, 2000). Below are some of the feedback/ quotes from the study on Ethics, Payments and Maternal survival project conducted by REPOA (2013). Some of the respondents commented on the affordability of health services:

“Services in this hospital are unaffordable. . .if you do not have money do not care for you e.g one patient delivered on the floor because she did not have money to bribe a nurse” Woman, Public Regional Hospital

Furthermore, REPOA (Afrobarometer) study conducted in 2001, 2003 and 2005 found that in 2005, 39% of respondents report that “some” health workers are involved in corruption, and 20% believe that “most” or “all of them” are. Based on personal experience, 15% report that they had to resort to paying a bribe, giving a gift, or doing a favour to obtain medicines or medical attention from health workers in the past year. Furthermore a total of 30% report experiencing “demands for illegal payment” at their local public clinic or hospital in the past 12 months (REPOA, 2006). All these are draining the poor and creating more inaccessibility to health services.

More than 30% of the Tanzanians live below the poverty line, and most those who live in rural areas have irregular incomes making it difficult to meet out of pocket health expenditures. The poor are therefore more likely to delay in seeking care since they must first mobilize and convert resources to cash before seeking care (Save the Children, 2005; <http://www.novartisfoundation.org/platform/apps/Publication/getfmfile.asp?id=613&el=2775&se=4478496&doc=190&dse=1> Research Accessed September, 2013). This makes them more poorer since sometimes they are

forced to sell their assets at a lower price than what they would have realized in normal situation, prioritize household members in seeking care, hence they run into risk of impoverishment (Kida 2009). A number of respondents in Kida's study had this to say on the cost of illness in both public and private hospitals:

"My wife has spent part of the capital for her small business (retail shop) to finance my health problems—if we continue in this way the shop can close down" (Male, 55 years old, squatter area).

"I was able to pay the medical bills, but it was very expensive compared to the income I earn per month. Hence, I have almost spent my one month's salary on medical bills—but other important expenditures are still waiting for me to sort them out such as house rent, food, etc." (Male, 43 years old, squatter area).

"The cost was very expensive. Now I'm still sick but I cannot afford to go back to the health care facility because I don't have money." (Male, 35 years old, squatter area).

To accommodate the poor, The Ministry of Health instituted exemption and waiver system in public health care facilities. The system is also established the prepayment system through the Community Health Fund. However, the waiver system in public health facilities has been criticized for being ineffective and inefficiently administered (Mujinja, 1997; Msamanga et al, 1996; Save the Children, 2005; Kruk et al 2008; Kida 2009). However, as reported above accessibility to health services is also a function of information provided to the community by the providers. Failure to convey the right information at the right time may cause a decline and delays in people to seek care. The exemption and waiver mechanisms, have to a larger extent failed to accomplish its goal, due to lack of proper information to the community. Respondents in one of the studies referred above had this to say on the functioning of the exemption system in a public health facility:

"There is no proper information system to inform the public about the exemption policy in place; many people are unaware of it and its procedures; therefore, in most cases people do show up at the hospital already sick and with no exemption letter." (Hospital Management Secretary, municipal hospital).

"The exemption procedure is complex and not many people are aware of it. For example, TB and HIV/AIDS cases are supposed to receive free treatment, you hear some of the public health care workers sell these drugs to patients, either under the table or through bribes. It is important for the policy to be clear to the public that on these illnesses what exactly is being exempted." (Exit patient, female, 56 years old, private dispensary).

"The exemption system is not working well. Poverty is increasing and therefore it is becoming easier for the officers at the (street) local government level to be bribed and provide the exemption letters to people who do not deserve them. The counter checking mechanism is not in place as there is no clear linkage between the public health care facilities and the street authorities. We do not know the welfare status of our patients and therefore we depend almost 100 per cent on their welfare analysis. But how do they do it? Using what criteria?" (Hospital Management Secretary, municipal hospital).

Although one of the objectives of the health financing reforms of the HSR proposals was to introduce user fees to generate revenue that would be used to improve the quality and quantity of health services, it has ended up in compromising equity among the poor and other vulnerable groups. The scarcity of the services in public health facilities due to some of the reasons mentioned above, have also created another commercial line in the health sector. Clients have to pay bribes to receive exemption and the services respectively. This reflects a failure of the equity strategy to protect the poor in utilizing the quality and quantity health services.

4.3 Appropriateness, Quality and Quantity of Health Services

Consumers of health care in Tanzania have been registered to complain about the appropriateness and quality of health services provided in both public and private health facilities, which have a great impact on the accessibility to health services, especially amongst the poor in rural areas. Effective access to quality health care is a prerequisite to ensuring improved provision of health care. Evidence from several national studies and vulnerability assessments suggests that many poor people, particularly women and children, fail to access quality health care.

Afrobarometer survey indicated that between one-fifth and one-half of their respondents have frequently (i.e., "a few times" or "often") experienced each of the specified problems with their local public clinic or hospital in the last one year. Close to a half noted "lack of medicines or other supplies" (47%) and "long waiting time" (50%) to be common problems; and between a quarter and a third of the respondents mentioned "absent doctors" (32%), "services are too expensive/unable to pay" (28%), and "lack of attention or respect from staff" (28%) (REPOA, 2006).

A number of studies (REPOA, 2006; Kida, 2009; Mackintosh et al, 2013) have reported consumers' complaints on dissatisfaction of the quality and type of services provided in health facilities, both public and private. Respondents in the Kida's study had this to say:

"The service is not good at all, I was not satisfied with it because the attendants are after money; they do not attend patients with clean hearts; they do not care about mothers, they are corrupt"
Woman, Public Regional Hospital

Research in rural Tanzania on malaria treatment showed that only 22.5% of children and 10.5% of adults received appropriate and timely treatment. This was mainly due to frequent shortages of anti-malarials in health facilities and decreased availability of drugs in commercial outlets following more restrictive drug regulations (<http://www.novartisfoundation.org/platform/apps/Publication/getfile.asp?id=613&el=2775&se=4478496&doc=190&dse=1> Research accessed September, 2013).

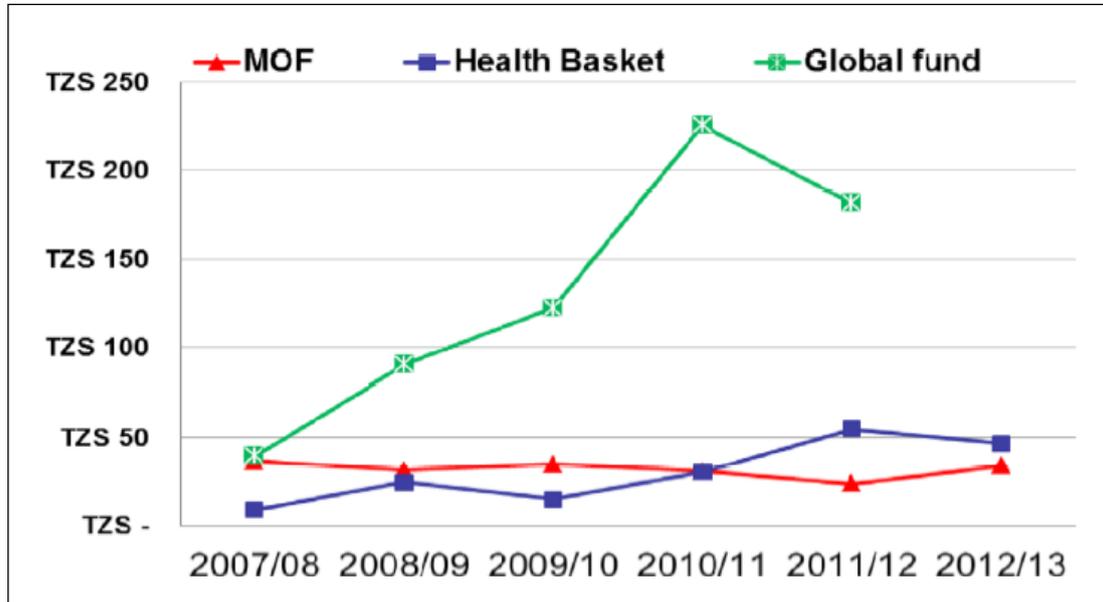
Technical quality includes the availability and functioning of a laboratory. Recent studies have found majority of the surveyed health care facilities having laboratories that are not performing optimally and majority performing less than average of what they should. The main reasons for sub-optimal functioning according to Mackintosh et al, (2013) include lack of reagents, too old and inadequate working instruments or equipment, shortage of laboratory personnel, lack of financial resources, lack of adequate space in the laboratory to accommodate staff, and obsolete technology.. Such shortages imply provision of less appropriate and quantity of health services in health facilities.

4.4 Availability of Health Services

Poor availability medicines, medical supplies and equipment continue to plague public health facilities in Tanzania (URT, 2006; 2009; Mackintosh and Mujinja, 2010). WHO (2012) statistics indicate that Tanzania currently has about 7 beds per 10,000 people compared to 14 beds per 10,000 people in Kenya. The highest number of beds Tanzania has ever had over the last 50 years was 14.9 beds per 10,000 people, in 1960 (Tanzania - hospital beds 2012). It is quite common to find two or more patients sharing a bed in public hospitals in Tanzania. These shortages are a reflection of the implementation of the financing reforms that are part and parcel of the HSR. Poor financing results into poor distribution of medicines, consumables and other medical supplies especially in rural remote areas (Mackintosh et al, 2013).

According to USAID (2013) –the Strategic review of the National Supply Chain for Health Commodities it is indicated that there is substantial insufficient funding to finance health care services. That is there is considerable funding Gap between estimated requirements and actual funds committed by GOT and development partners. It is indicated that GOT contribution to the national medicines and health commodity requirements has not increased significantly given the population growth, inflation and other factors in the last six years. Figure 4 indicates that the current level of contribution from the GOT to the national health budget is still very low. In 2012/13, development partners' contributions to the medicines and commodity requirements through the 'Health Basket Fund' had exceeded Government contribution.

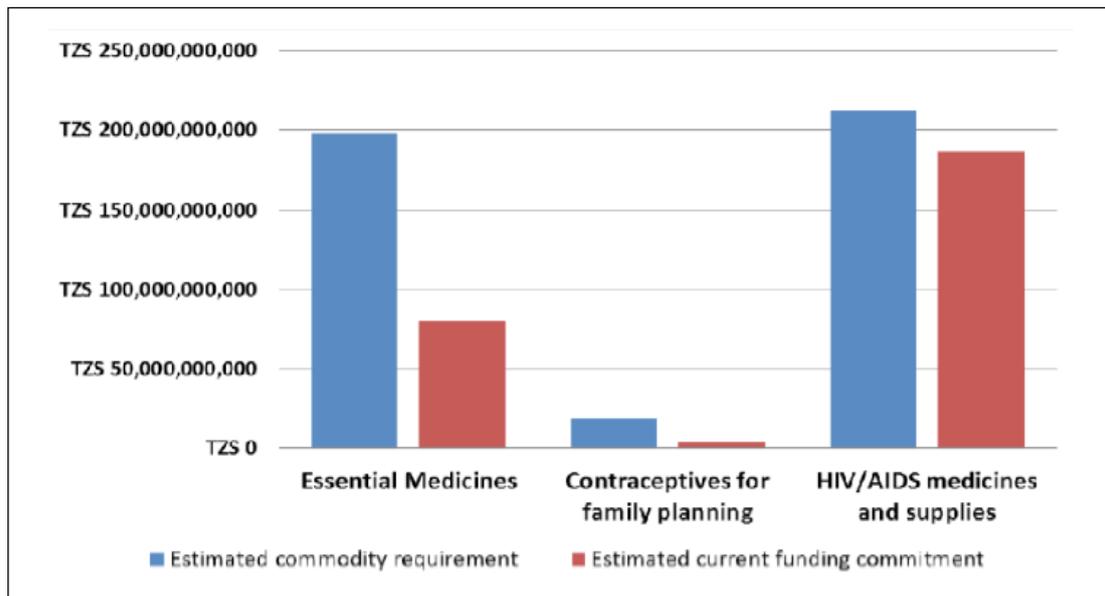
Figure 4: Contributions (in billions) to the national medicine and commodity requirements for Tanzania from three sources



Source: USAID 2013

It is also indicated that there were less than 50% of the funds required in 2012/13 for the purchase of essential medicines and family planning commodities (See Figure 5). Financing mainly remains skewed towards HIV/AIDS and Malaria; however, essential medicine needs to continue to grow in tandem with changing population demographics and emerging chronic-non-communicable diseases. Evidence from the review also suggests that this has been a longstanding problem that has perpetuated the chronic scarcity of medicines and supplies in the public sector (USAID, 2013).

Figure 5: Estimated funding gap for selected health commodities for 2012/13



Source: USAID 2013

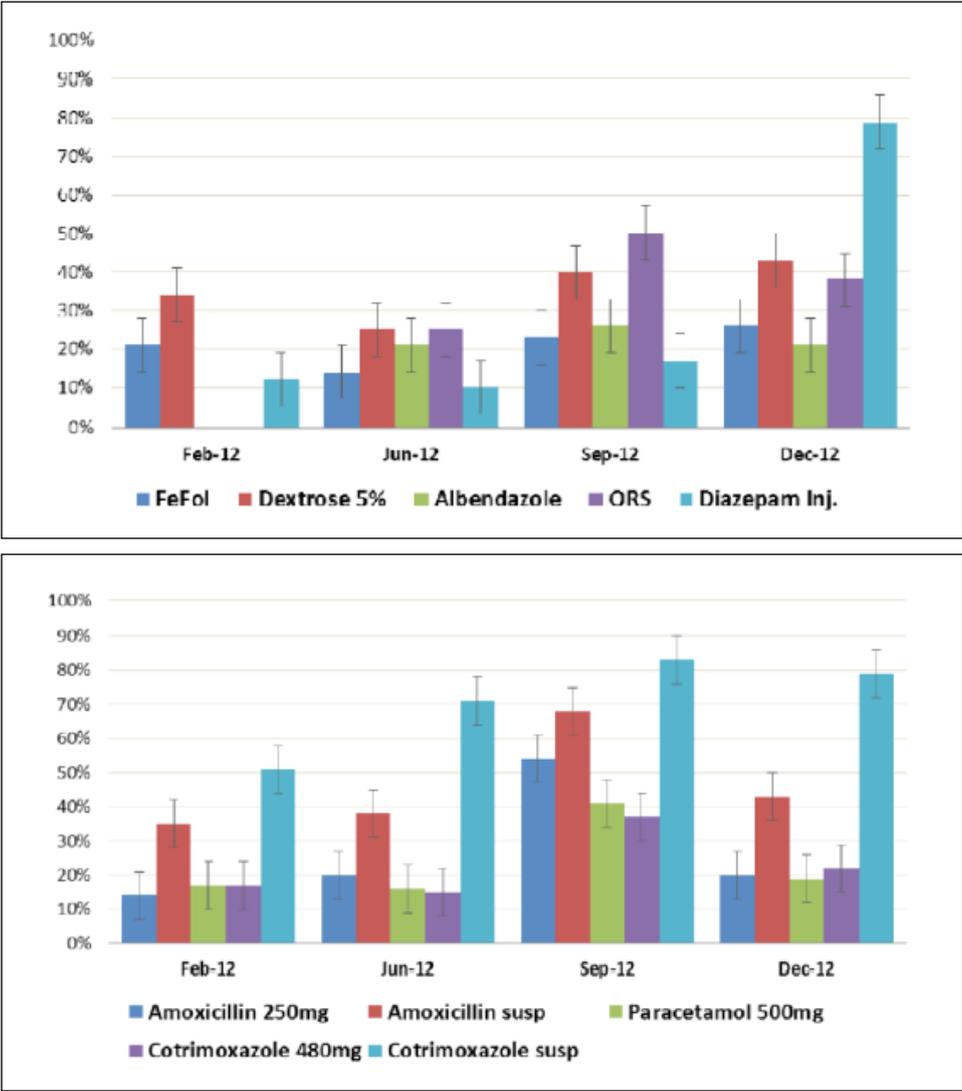
The financial constraints have a direct impact on the availability of medicines and essential medical supplies. The literature shows that access to medicines in Tanzania, measured by availability of medicines, in a given day, in a public health facility, is systematically worse and particularly in rural areas (Mackintosh and Mujinja, 2010; Chaudhuri et al, 2010; URT, 2006; 2009). A survey conducted by Sikika in 2012, revealed that ALu (Artemether/ Lumefrantrine), the first line malaria treatment, and quinine that is used against severe malaria were found to be out-of-stock in the majority of the hospitals surveyed. Out-of-stock period for medicines was also captured in the survey, whereby 51.9% (27) of health facilities reported being out-of-stock for more than four weeks, 40.7% (22) reported out-of-stock between 1 to 4 weeks, followed by a minority, 5.6% (3) and 3.7% (2) who commented having out-of-stock medicines for less than a week and not having any problems with out-of-stock medicines respectively.

Not only medicines are sometimes unavailable in public health facilities, medical supplies are equally affected. In some surveys, shortages of essential medical supplies have been reported by most hospitals (Sikika, 2012; Mackintosh et al, 2013) and low health care facilities (Mackintosh et al, 2013). These included most of the essential medical supplies such as gloves which are used to protect both patient and health professionals from infections were out of stock-out in the majority (83%) of the hospitals and this presents a major health risk. In these two studies other important medical supplies that were out of stock included gauze, which are used in cleansing, stitching and dressing wounds, mackintosh which are used during deliveries, and blood pressure monitor. The unavailability of these important medical supplies lowers the quality of care and creates a risk of hospital infections (Mackintosh et al, 2013).

Although the availability of medicines and medical supplies were measured by Mackintosh et al (2013) and Sikika (2012) on the day of the interview, further probing showed that more than 50 per cent of the missing medicines and medical supplies were out of stock for more than four weeks prior the day of the interview. Worse, some of the medical supplies had never been ordered or were out of stock for about a year (Mackintosh et al, 2013). The frequent out of stock forces health workers to provide inappropriate, poor quality and less than optimal amount of health services.

The Strategic Review of the National Supply Chain for Health commodities, (USAID, 2013) also confirms that availability of essential medicines is limited. Figure 6 below indicates that key essential medicines are often out of stock. Whereas Amoxicillin suspension and cotrimoxazole suspension are the products most often out of stock. It is further reported that in September 2012, more than 40% of facilities did not have paracetamol in stock.

Figure 6: Percent of facilities stocked out on the day of visit: essential medicines



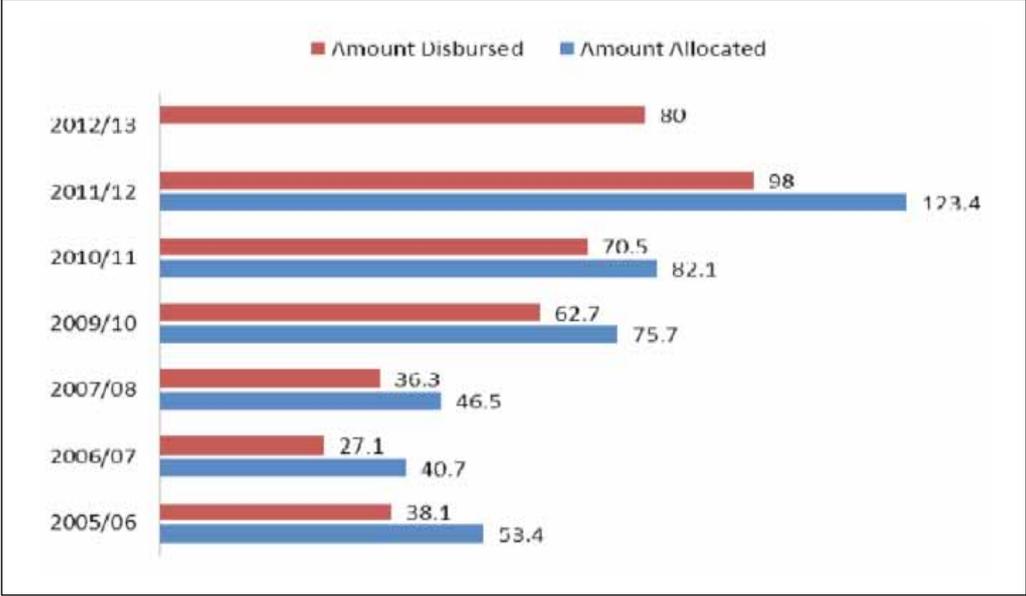
Source: USAID 2013

Studies have also identified factors that are associated with the unavailability of medicines and equipment that ranges from ineffective and inefficient use of the resources available to poor management and planning skills. Other factors noted include incomplete supply of medicine requests (from health facilities) by the Medical Stores Department (MSD), long ordering cycle (facilities were restricted to ordering on quarterly basis), late supply of medicines and medical supplies to designated health facilities by the MSD (Mackintosh and Mujinja, 2010; Sikika, 2012; Mackintosh et al, 2013).

Furthermore, the Strategic Review of the National Supply Chain for Health commodities, (USAID, 2013) indicates that the performance of MSD is challenged by financial constraints. There are routine

inconsistencies between the amounts allocated to MSD (for crediting the health facility accounts) in the MoHSW budget and the subsequent actual funds disbursed to MSD for the same period from MoF. It is indicated that on average only about 75% of the annual funding allocation is actually released, which implies that MSD has to operate on a deficit budget each year (see Figure 7).

Figure 7: Comparison of amounts disbursed with amounts allocated to MSD for purchase and distribution of medicines and supplies



Source: USAID 2013

In addition it is important to note that an unsustainable level of debt has been accumulating steadily since 1996. Although MSD is a not-for-profit government institution, it operates on a commercial basis to ensure its own sustainability without drawing from external resources. By 2010, MSD was owed close to 40% of its working capital i.e. the level of debt from financial statements and audit reports is approximately 40 billion Tshs (USAID, 2013).

4.5 Acceptability of Health Services

Accessibility to health care cannot be realized without appropriate information on the effectiveness and availability of health services are not well communicated to the communities (Thiede et al, 2007). The HSR proposals in Tanzania realized that equity would not be promoted if some potential consumers of health care are left out in the process because of a market and government failure reason, including information asymmetry. Therefore, they indirectly intended, among other things, to minimize information asymmetry in order to promote equity, which calls for involvement of the health consumers in making decisions that affect them, related to their use of health services available. However, HSR proposals did not directly focus on providing information on availability them to use the services in health facilities, which would induce consumers to choose the type of services they would want to demand. Most of the information provided is on specific programmes or projects.

In principle, health interventions that come from different policies and programmes should be able to bridge the gap of understanding of communities on causality and treatment of diseases, in order to improve acceptability to modern health care. However, there exists a gap between

what the communities know on health, and what would be transmitted to society by projects or programmes, implying that societies have not greatly provided communities on appropriate health information on the services provided. Studies in Tanzania have shown that “Social acceptability” has an important dimension of accessibility to modern health care, especially when there is a gap between the community understanding of the causes and treatment of a diseases and the biomedical knowledge. Understanding the match between local and biomedical understanding of disease is therefore fundamental to ensure acceptability of health care services, successful control and management of health problems are in place (Dillip et al, 2012). Services that are not acceptable by the people would not be used unless there are no close substitutes or alternatives.

The divergence and gap of knowledge between communities and health professionals has also been reported in preventive interventions in Tanzania e.g. in the use of insecticide treated bed nets. Mujinja (2002) reported that respondents were not ready to use treated bed nets because they were not sure of their effects on human health; and also for those who would be ready to buy and use one, the main objective would be to protect them from mosquito bites and not malaria, since malaria was not believed to be controlled by a mere bed net. This detergency could also be argued to be a contributing factor to low coverage of treated bed nets in rural communities, even in groups that are willing and able to buy treated bed nets (Mujinja, Makwaya, and Sauerborn, 2004).

This section shows that there is a divergence between what the health system would provide and what the consumers expect to receive from providers. This also indicates that the system has failed to satisfy the needs of the most deprived populations, in the rural areas and the urban poor. One may argue of the system being in the forefront of implementing political priorities rather than health priorities: increase number of facilities which compromises the quality of health services - implementing what the experts know and not what the communities would want to have. This also indicates how health profession would be ready to respond to what they would think is right while compromising what the communities would want (*monopoly professionalism*). Planning should focus on the needs of the population not the demands of the system. The implication of this is that management issues have not been streamlined to match the development of the health system indicators. Health system management should also be a priority to improve the quality of services to improve accessibility to health services.

5. Conclusions

Universal coverage is the current argument for a successful health system. Health strategic plans have been developed, implemented and evaluated, but they indicate a great distance to universal coverage. A number of pertinent issues still need to be addressed to have a well functioning health system that addresses universal coverage. Most evaluations indicate development of health financing mechanisms, human resources planning, information system, increase in number of health facilities, initiation of public private partnership and decentralization of decision making (Musau et al, 2011; URT/MOHSW, 2013). These assessments also show a great improvement in health indicators including Child and under five mortality ratios, and increase in life expectancy. Furthermore, malaria prevalence and incidence, and HIV prevalence and incidence have gone down⁶. Additionally, approximately 90% of Tanzanians live within five kilometers of a Primary Health Care (MOHSW/HSSP III, 2009). The initiation of Mpango wa Maendeleo ya Afya ya Msingi (MMAM) (Primary Health Care Service Development Programme, or PHCSDP) demonstrates the government's continued commitment to primary health care (PHC), although the quantity and quality of health services provided in these facilities leaves a lot to be desired.

Despite all the above registered supply side developments, there is still a gap on the demand side of the health system. The demand side developments are important in reaching universal coverage. The implementation of the HSSPs (I, II, and III) and the recent Human Resources for Health Strategy; the scarcity of health workers and distribution bias of HRH remains a problem towards universal coverage. The problem is more exacerbated by MMAM new facilities, which many of them are not staffed appropriately, and some have no staff at all (Mujinja, personal observation September, 2013; , USAID, 2011). Human resources planning and management also is faced with a challenge of vertical programs that compete for quality (trained, skills and supervisory level) staff within councils that is already stretched with HR shortages. A good and workable human resources management is lacking in the public health sector. We ascertain that not everyone trained in a medical field could be a better manager. MOHSW needs to develop a working human resources management system that is focusing on the universal coverage and shared with the districts/councils.

The improvement of the most vital health indicators seem to be driven by the financing of developing partners and not HSR per se. Despite the improvement of the key health indicators that contribute most to the burden of diseases, there remain substantial differences among urban and rural, and between different socio-economic groups (URT/MOHSW, 2013). We argue that the non-uniform distribution of these indicators between the rural and urban areas and between different socio-economic groups is a result of biased implementation of the health interventions, and their verticality. More resources are allocated in urban rather than rural areas (Mbuyita and Makemba, 2007). Although most of the development partners channel resources through the government budget, there is still off-budget resources that are channeled directly to these interventions. These interventions include HIV/AIDS, malaria, reproductive and child health. It can also be argued that such programmes have strategies that enable communities receive more information and sometimes easy access to such services, because of their resources muscle from development partners. This has created inequality in resource allocation to different health problems. Had it

⁶ However, most studies that have been reviewed and people interviewed elsewhere argue that these reductions in mortalities and increase in life expectancy are not purely a product of HSR but is a result of foreign funded vertical programmes (USAID, 2011).

been that the verticality was implemented equally for all other interventions, other health problems would also show a different picture from what they are now. It is also quite definite that non-communicable diseases are not privileged to receive such an attention. The epidemiological and environmental changes suggest that non-communicable diseases should as well be given equal attention, otherwise in the near future the burden of diseases will shift towards these health problems.

Furthermore, despite the successes in initiating health financing mechanisms, very few people are protected health insurance from loss of incomes in a situation of an illness episode. Out of pocket payment still prevail to the majority of the poor rural populations. These payments and other factors have constrained accessibility to health services. Less than 10% of the population is somehow covered by insurance and therefore a heavy reliance of out of pocket payment mechanism. The poor are poorly protected due to weak exemption and waiver system. The quality of health services is still regarded low by the consumers: inadequate drugs and medical supplies are observed in public facilities. Bribery and weak administrative and management at the health facilities also contribute to poor quality of health services provided in public health facilities. Furthermore, we also argue that the HSR has not provided enough information to communities to enable them access health services and manage their health; accessibility to health facilities, especially among the poor is still low; and there is still a divergence between social acceptability and professional recommendations in utilization of health services, and actually in improving human capital.

Much has been achieved in the process of implementation of HSR, but the challenges remain on the following key areas: protecting consumers from losing incomes through health financing; improvement of the weak HRH management; striking a way to merge the private and public health providers through PPP; finding ways to effectively communicate on health services provided to improve accessibility; streamline consumer information especially in the rural areas; improve the quality of health services together with strategies on how to improve accessibility of the poor rural to health services. If the poor are more addressed the chances of reducing the burden of diseases is high because much of the burden of diseases in different countries lies among the poor, especially the urban and rural poor of the poorest.

We further conclude that there is a mismatch between health indicators and quality and accessibility of health services. In this regard we suggest a need for further research to inform the relationship between the accessibility variables and health indicators. We further observe a positive trend on the most important burden of diseases indicators, but a negative relationship with the accessibility variables. The existing reviews of the sector cannot tell exactly the quality and research questions that the reviewed studies were trying to answer. Concise methodologies in studying such mentioned relationship need to be constructed to generate and subsequently fill the existing lacuna of information: the gap between indicators and accessibility and quality variables.

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