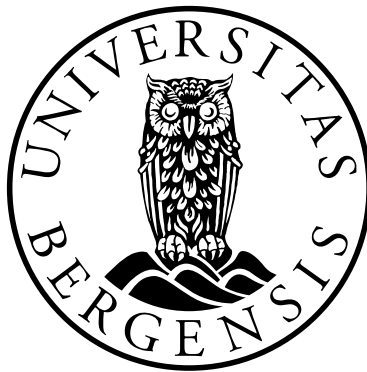


Health worker motivation in a low-income context

The case of rural health services in Tanzania

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Scientific environment

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This PhD thesis is the result of a process that started more than 20 years ago. After being trained in a very different field, my focus changed to development studies. A study tour to Tanzania in 1991 made me determined to work in the country. Employment with Fredskorpset (Norad) gave me an opportunity to work in Dongobesh, Mbulu District, Arusha Region from 1992 to 1994. After returning to Norway, I embarked on studies in social anthropology and comparative politics at University of Bergen. The focus of my research at that time was on local level political processes in Mbulu District. This PhD study draws heavily on my earlier experience with Tanzania and Mbulu District.

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Abstract

Background

The optimism from the early post-colonial period in sub-Saharan Africa, with the effort to provide good health services was in many countries challenged by severe economic problems a few decades later. The focus in the health sector has largely been on health workers in sufficient numbers and with adequate training, combined with infrastructure and supplies at the health facilities. In Tanzania, and in many other countries in sub-Saharan Africa, the number of health workers and their training has been a continuous challenge, not the least in rural areas, for decades. In addition to addressing this challenge, there is a growing focus on the importance of health workers' motivation for their work as a particularly important dimension.

Objective

Poor health worker motivation has been documented to have serious implications for the quality of health services, and has been coined a major challenge in many low-income country. The main objective is to generate knowledge on health workers' motivation with a particular focus on rural Tanzania. An overarching objective is to produce knowledge that can feed into debates on how to meet the complex challenges related to motivation in the health services in resource constrained rural settings. Health workers' experiences with working conditions have been located at the core of debates on motivation. Paper I explores public sector health workers' experiences with their working conditions and discusses the study findings within the context of post-colonial and post-socialist Tanzanian history. Paper II explores health workers' preferences for workplace with a particular focus on reasons for movements between health facilities with different types of ownership, in particular the public and church-run health system - the two central sectors in health service delivery in rural Tanzania. Paper III aims to address public sector health workers' experiences with a performance appraisal system and their expectations towards a planned results-based payment system in the health sector in Tanzania.

Methods and data

The study has chosen a qualitative study design to elicit detailed information on the study topic. The data comprise in-depth interviews (IDIs) and focus group discussions (FGDs). The bulk of the data was collected at public health facilities in Mbulu District, Manyara Region in northern Tanzania with additional data collected in a church-run hospital in the same district. In addition, national and local documents and informal discussions with health workers and local community residents have been central sources of information. The study draws on knowledge of culture and language gained through earlier work related- and ethnographic experience in the same area in Tanzania.

Results

This study provides insights into health workers' understanding and assessment of their working conditions and the relation to motivation at the workplace. The study has found that public sector health workers claim there is a considerable degree of unfairness in the working conditions, not the least in terms of the financial conditions. A serious lack of transparency in human resource management is also reported. Despite the considerable degree of dissatisfaction, the public sector health workers nonetheless seem to prefer to continue to work in the public health sector. The main reason for this preference is the good pension scheme in the public sector social security fund. Health workers in the church-run sector express great dissatisfaction with their pension scheme, which offers much lower retirement benefits than in the public sector. These health workers do however praise the workplace for the good resources and health facility infrastructure. The study revealed severe challenges in the implementation of the performance appraisal system in the public sector and questions its applicability. The performance appraisal system does not seem to function according to its intentions, as it neither facilitates a proper identification of work related aims nor does it ensure proper evaluation or follow up of the stated goals. The system is perceived as neither feasible nor acceptable to the study participants. Health workers expressed great expectations towards the results-based payment system that is to be implemented.

Conclusions

The overall study findings emphasise the importance of the financial dimension of working conditions for work related motivation. In a rural setting with limited access to formal employment, the income from salaried work plays a very important role in supporting the family. This explains the concerns about the salary level and not the least the concerns about access to any additions on top of the salary. The study has moreover revealed that recognition of performance seems to carry substantial potential in increasing work related motivation. It is vital that the human resource management in the health sector in Tanzania addresses the serious shortcomings in working conditions in terms of salary level and resources in public health facilities, as well as enhancing transparency at the workplace. The study calls for a wider historical, political, socio-economic and cultural contextualisation of the study findings in order to identify why the findings emerge in the way they do.

Abstract – Swahili

Maelezo ya awali

Maelezo ya awali mara baada ya ukoloni, nchi nyingi za Africa kusini mwa jangwa la Sahara, zilijizatiti katika kuunda mfumo madhubuti wa utoaji huduma za afya. Utawanyaji wa wahudumu wakutosha wa afya na wenye mafunzo ya kutosha ilikuwa mtazamo mkuu. Katika Tanzania na hata katika nchi nyingi za Afrika kusini mwa jangwa la Sahara, hii ilikuwa changamoto endelevu, na hasa kwa maeneo ya vijijini. Katika mpango wa maboresho ya mfumo wa afya, katika miongo miwili iliyopitapa serikali nyingi zimekuwa na mwamko wa kuhamasisha watumishi wa afya katika kuinua ubora wa kazi zao.

Malengo

Uhamasishaji dhaifu umeonyeshwa kuwa na matokeo mabaya kwa uwezo wa sekta ya afya kutoa huduma stahiki kwa wagonjwa wake, na imethibitika kuwa tatizo hili linachangiwa na na maslahi duni. Nia ya mradi ni kuongeza ufahamu juu ya hamasa ya watumishi wa afya katika hali ya maslahi dunina hasa kwa kuitazama Tanzania. Kusudi kuu ni kutoa ufahamu ambao utajengwa na kuingizwa kwenye mijadala juu ya namna ya kukabili changamoto hii nzito, ambayo inahusishwa pia na watumishi wengi kutokuwa na hamasa ya kufanya kazi katika mazingira ya vijijini. Jarida la kwanza linapima uzoefu wa watumishi wa afya na hali wanayofanyia kazi ikikusudia kujadili matokeo ya tafiti kwa mtazamo wahistoria ya Tanzania baada ya uhuru na hasa baada ya kipindi cha Ujamaa. Jarida la pili linachambua uchaguzi wa sehemu ya kufanyia kazi kwa wafanyakazi wa afya kwa kuzingatia sababu za kuhamia huduma za afya zenye umiliki tofauti. Lengo ni kutambua sababu kuu au wigo wa huduma za afya ya serikali na zile zinazoendeshwa na makanisa – mifumo mikuu miwili itoayo huduma za afya vijijini nchini Tanzania. Jarida la tatu inafafanua uzoefu na matumaini kuelekea namna mbili tofauti ya upimaji wa utendaji kazi na nyezo ya tathmini ambayo inatumika au itatumika nchini Tanzania.

Mbinu na data

Tafiti imechagua muundo wa tafiti wenye ubora kwa njia ya kujaribu kushawishi kupata habari za undani zaidi katika mada jadiliwa. Nyezo kuu ya taarifa inajumuisha mahojiano ya undani, na mijadala ya vikundi. Nyaraka za kitaifa na enyeji na mijadala isiyo rasmi na watumishi wa afya, viongozi, na wanajamii wakazi. Taarifa nyingi zilikusanywa kutoka vituo vya huduma ya afya serikalini katika Wilaya ya Mbulu, Mkoa wa Manayara, kaskazini mwa Tanzania. Taarifa ya ziada ilikusanywa kutoka hospitali inayoendeshwa na kanisa katika wilaya hiyo. Utafiti ulitumia ufahamu wa awali wa tamaduni na lugha iliyojifunzwa katika kazi za awali na pia uzoefu wa mila na desturi za makabila kutoka Tanzania.

Matokeo

Tafiti inaonyesha undani wa uelewa wa wafanyakazi wa afya na upimaji wa hali wanayo fanyia kazi. Tafiti imebaini kuwa wafanyakazi wa afya serikalini hawaridhiki na namna wanavyofanya kazi, na wanadai kuwa kuna kiasi kikubwa cha ukosefu wa haki katika namna wanavyofanya kazi na muhimu zaidi ni masilahi duni. Ukosefu mkubwa wa uwazi kutoka kwa uongozi wa rasilimali watu umeelezwa pia. Kikundi hicho hata hivyo kwa kiasi kikubwa bado wanapenda kuendelea kufanya kazi serikalini, sababu kubwa ikiwa manufaa yake ya pensheni na juu ya hisia ya uwezekano wa kukubaliana wakati wa tofauti. Wafanyakazi wa makanisa wa sekta ya afya kwa upande wao wanaelezea kutokuridhishwa kabisa na utaratibu wa pensheni yao, ambayo inatoa kiwango kidogo sana cha mafao wakati wa kustaafu kuliko wenzao wa serikalini. Hiki kikundi cha watoahabari hata hivyo wanajivunia eneo la kazi kwa kuwa na mazingwa bora ya kazi ikiwa ni pamoja na vifaa muhimu vya kufanyia kazi. Tafiti imefichua changamoto mabalimabalii katika utekelezaji wa mfumo wa upimaji wa utendaji kazi na unahoji juu ya matumizi yake. Inaonyesha haufanyi kazi kama ulivyokusudiwa, kama isivyoweza kutambua malengo halisi yanayohusiana na kazi wala thibitishi tathmini halisi au ufuatiliaji wa malengo kusudiwa. Watumishi walielezea matumaini makubwa kwenye mfumo wa malipo yafanywayo kufuatia utekelezaji wa kazi ambayo itaanzishwa.

Hitimisho

Matokeo ya ujumla ya utafiti yamekazia umuhimu na ukubwa wa hamasa ihusianayo na malipo. Tafiti imefichua zaidi kuwa katika hali yenye upungufu mkubwa wa rasilimali, pale ambapo kazi kwa kawaida inamaanisha kukutana na vikwazo vya mahitaji, utambuzi wa utendaji kazi unaonyesha kubeba kiasi kikubwa cha uwezo wa kuongeza hamasa kati ya wafanyakazi wa afya. Inaonekana kuwa ni muhimu sana uongozi wa rasilimali watu wa afya katika Tanzania ushughulikie dosari kubwa za mapungufu ya hali/mazingira ya kufanyia kazi na ishughulikie mapungufu ya ukosefu wa uwazi katika sehemu za kazi. Tafiti inahitaji kwa mapana ya kihistoria, kisiasa, kijamii uchumi na kuiweka katika muktadha wa kitamaduni matokeo ya utafiti ili kutambua siyo tu sababu za hamasa au kukosekana kwake, lakini kwa sababu ya kuelezea kwa uthabiti jinsi matokeo yalivyotoka.

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List of publications

Songstad, N.G., Rekdal, O.B., Massay, D.A., and Blystad, A. (2011). Perceived unfairness in working conditions: The case of public health services in Tanzania. *BMC Health Services Research*, 11, 34.

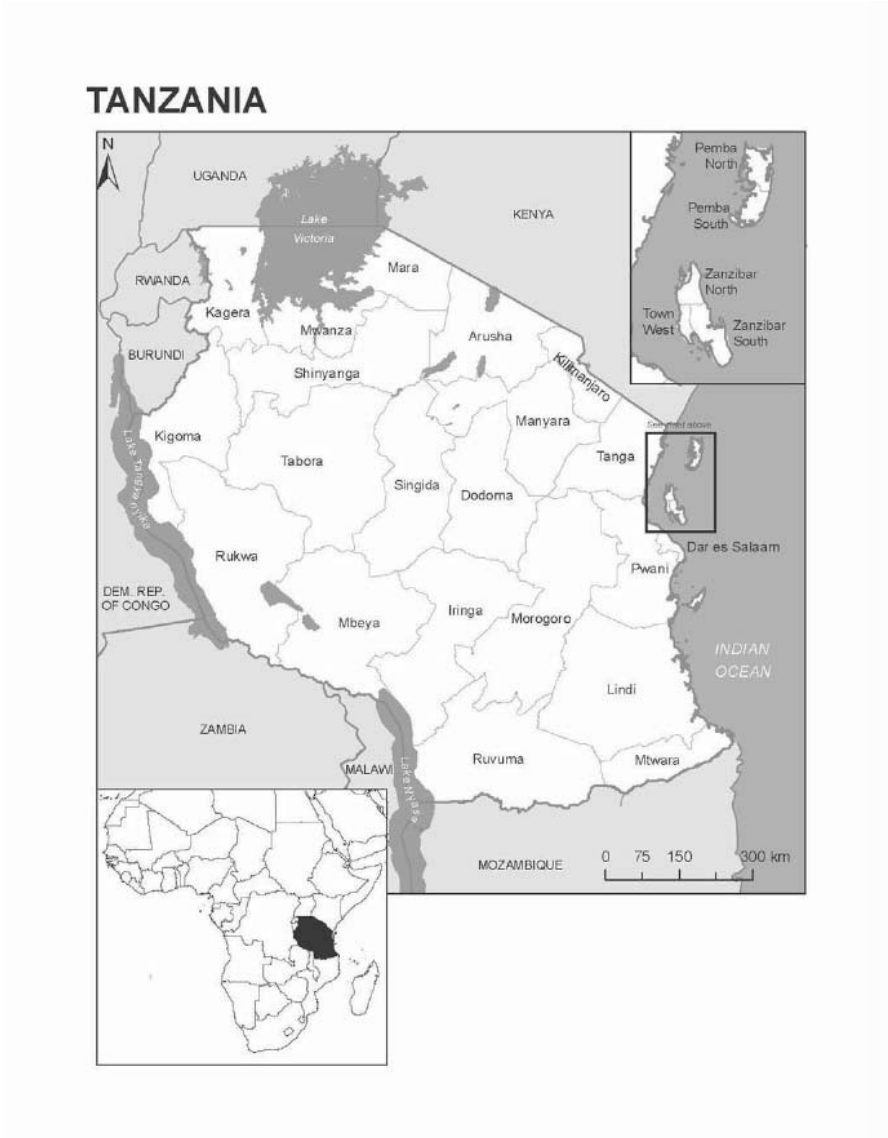
Songstad N.G., Moland K.M., Massay D.A., and Blystad A. (2012). Why do health workers in rural Tanzania prefer public sector employment? *BMC Health Services Research*, 12, 92.

Songstad N.G., Lindkvist I., Moland K.M., Chimhutu V., and Blystad A.: Exploring the applicability of the Open Performance Review and Appraisal System (OPRAS) in the health sector in Tanzania. Submitted to *Globalization and Health* 15 February 2012

List of abbreviations

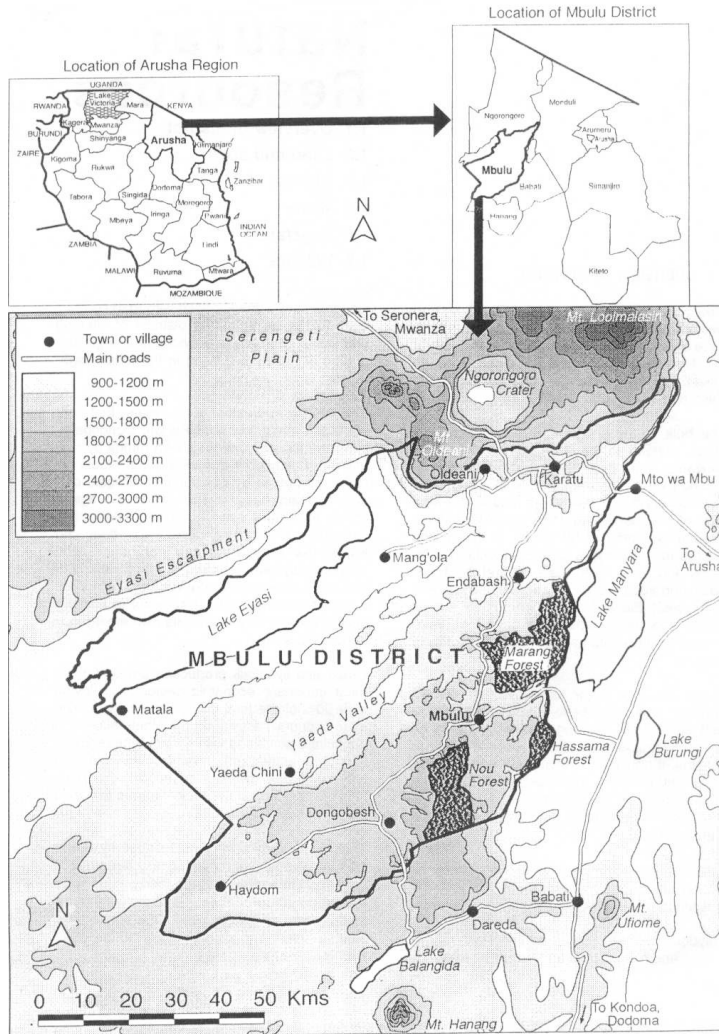
DMO	District Medical Officer
GoT	Government of Tanzania
HMIS	Health Management Information System
HRH	Human resources for health
JLI	Joint Learning Initiative
LAPF	Local Authorities Pensions Fund
MMAM	Mpango wa Maendeleo wa Afya ya Msingi
MDG	Millennium Development Goals
MoHSW	Ministry of Health and Social Welfare
MTUHA	Mfumo wa Taarifa za Uendeshaji wa Huduma za Afya
NSSF	National Social Security Fund
OPRAS	Open Performance Review and Appraisal System
P4P	Payment for performance
PHSDP	Primary Health Services Development Programme
PRSP	Poverty Reduction Strategy Paper
PSPR	Public Sector Reform Programme
SAP	Structural Adjustment Programme
SSRA	Social Security Regulatory Authority
UNDP	United Nations Development Programme
URT	The United Republic of Tanzania
WHO	World Health Organization

Map of Tanzania



Source: National Bureau of Statistics (2005:xxiv). Mbulu District is located in the western part of Manyara Region.

Location and topography of Mbulu District



Source: Meindertsma and Kessler (1997:2).

This map depicts the extent of the region and district as of 1997. Arusha Region was later split in two, and the southern part consisting of the districts Simanjiro, Kiteto, Hanang, Babati and Mbulu make up the current Manyara Region. Mbulu District was also split in two, making Mbulu District and Karatu District.

1. Introduction

This chapter is a literature review of studies relevant to understand health system challenges and health workers' motivation. The focus is on health workers' experiences with their working conditions and the relation to motivation for work. The first part introduces health system challenges in low-income contexts. The second part is a discussion of what factors influence motivation in the health sector. The third part is an approach to relevant theories drawn upon to explain health workers' motivation and their responses to the working conditions. The last part of the chapter presents in brief the health system in Tanzania, its challenges and efforts to improve the quality of service delivery in the health sector.

1.1 Health system challenges in low-income contexts

The health system is a key factor to provide good health services. The 2000 World Health Report, with the title *Health systems: improving performance*, focussed on the role of the health systems, and defines it as “all the activities whose primary purpose is to promote, restore or maintain health.” (2000:5). Good quality health services is very resource demanding and the public health sector constitutes a considerable fraction of the national budget in many countries. From the 1980s onwards, many low-income countries in sub-Saharan Africa faced severe economic problems. Structural Adjustment Programmes, which imposed limited spending in the public sector, were implemented in many countries and the harsh austerity measures caused severe challenges in providing adequate health care (Labonte, 2004:177:14-17).

As a response to the problems faced by many low-income countries, the Millennium Development Goals (MDGs) were launched in 2000 and set ambitious targets for improving social and economic conditions in low-income countries. In the decade after the launch of the MDGs, much emphasis has been put on overcoming the challenge of low quality service delivery in the public sector. The World Bank in its

2004 *World Development Report* addressed a range of service delivery issues and paid much attention to the health services (2003:133-158). In the wake of the introduction of the MDGs it has been pointed out that huge investments are necessary to strengthen the health systems to reach the health related MDGs (Travis et al., 2004; Murray et al., 2007; World Health Organization and Global Health Workforce Alliance, 2008; Frenk, 2010). WHO sees the health system as comprised of six building blocks: health service delivery, health workforce, health information systems, access to essential medicines, health systems financing and leadership and governance (2010b). Much emphasis has been placed on the health workforce as a very important component of the health system, but the 2000 World Health Report mainly focussed on numerical imbalances, training and skill mix imbalances and distribution imbalances as important to strengthen the health workforce component (World Health Organization, 2000). More than two decades earlier, the Alma-Ata Declaration pointed to the need for health workers with proper training to meet the primary health care challenges (World Health Organization, 1978).

Good quality health services require more than health workers in adequate number and with formal qualifications. It is increasingly acknowledged that resources and health workers' knowledge are very important, but Franco et al. argue that these two factors "are not sufficient in themselves to ensure desired worker performance." (2002:1256). Over the last decade there has been an increased focus on the importance of a motivated health workforce. Several studies have reported that health worker performance is a serious problem, for example Das et al. who point out that "access to health care facilities and personnel often do not translate into health" (2008:93). Rowe et al. state that in low- and middle income countries "inadequate health-worker performance is a very widespread problem." (2005). An important report clearly pointing out this problem was *Human resources for health: overcoming the crisis* by the *Joint Learning Initiative* (JLI), an enterprise comprising more than 100 global health leaders. The report argues that the health worker is "the most neglected yet most essential building block of effective health systems." (2004:14).

In the next three sub-sections, the focus is on aspects of the health workforce component in the health system and the relationship to the quality of health services: first, issues pertaining to distribution and retention of health workers; second, health workers' qualifications; and third, health workers' motivation looking further into the challenges of ensuring a motivated health workforce.

1.1.1 The challenge of distribution and retention of health workers

Health workers in sufficient numbers and their distribution across health facilities are obviously key factors for provision of adequate health services. The Joint Learning Initiative states that “[s]ub-Saharan Africa has a tenth the nurses and doctors for its population that Europe has.” and that the density of health workers has influence on the progress towards the MDGs (2004:2). It is reported that many countries in sub-Saharan Africa face difficulties in recruiting enough qualified health workers and retaining those who have been recruited (Habte et al., 2004; Hongoro and McPake, 2004). The challenges related to distribution and retention of health workers start with recruitment of students for training, and end with retirement from employment. Wyss writes that the decision to enter the health sector “is influenced by the person's cultural, social and economic background, ethnicity, age, gender, education, physical and mental wellbeing, and other circumstances” (2004). Glassman et al. point out that labour market dynamics affect choices and decisions on whether to work in the health sector (2008:694). It is however reported that work in the health sector in sub-Saharan Africa has become less attractive, and Connell et al. argue that “[a] career in health is now seen as not having the prestige and salary it once had” (2007:1887). These studies point out some of the challenges the health system has to overcome in the competition for the workforce.

Health workers make decisions on whether to remain at the same workplace or to seek employment at other health facilities. In a context of shortage of qualified staff, a trained health worker not bound by a contract of employment at a particular health facility has ample opportunities to seek alternative employment. Health workers'

reluctance to work in rural and remote areas is reported as a general feature of many countries (Huicho et al., 2010). In low-income countries the movement of health workers from rural to central or urban areas poses a considerable challenge for the health systems which already have other constraints in providing good quality services. Employment in urban areas is generally considered more attractive than in rural areas for number of reasons. One reason for his preference is the possibility of engaging in additional work outside the workplace (Ferrinho et al., 2004; van Lerberghe et al., 2002). Another reported challenge in the health system in low-income countries is an increasing workload (Chen et al., 2004; Willis-Shattuck et al., 2008) and this also has impact on decisions on workplace. Other reasons may be access to employment opportunities for spouse and schooling opportunities for children. An effect of such intra-country movements of health workers is difficulties in employing and retaining skilled health workers in rural areas. It is important to emphasise that a range of factors influence health workers' decisions, see for example Lehmann et al. (2008), Wilson et al. (2009) and WHO (2010a). In addition to the challenge of attracting health workers to rural areas, another challenge in the public health system in countries with a low salary level is that health workers seek employment with international organisations. Moreover, many countries experience considerable migration of health workers to countries offering better working conditions (Stilwell et al., 2004) and this adds to the challenge of attracting health workers to the perceived less favourable areas or less favourable health facilities.

Health workers' decision on workplace is closely related to their experiences with the current workplace. A health worker being dissatisfied with the working conditions may seek employment elsewhere. Gilson and Erasmus emphasise the close link between motivation and retention, and argue that factors with positive impact on motivation also increase retention (2005). Thus, it is important to address issues pertaining to motivation to disentangle factors with influence on retention. In addition to this general problem, a comprehensive approach to addressing the distribution of health workers also needs to address differences in working conditions between various types of health facilities with different ownership and management procedures.

1.1.2 The challenge of health workers' qualifications

Health worker's qualifications and competence are vital to provide good quality health services, and both global and national policies have emphasised these issues. It has been pointed out that the “increased migration of health professionals, the loss of health workers due to HIV/AIDS, the effect of countries' economic difficulties on health” as well as the expansion of services require a considerable increase in the number of health workers (Dovlo, 2004). An approach chosen by many countries to alleviate the health worker shortage is to train and employ health workers with shorter training, often referred to as mid-level cadre health workers. Chandler et al. point out that “[n]on-physician clinicians (mid-level cadre health workers) are central to healthcare delivery in half of the countries in Africa” (2009:2078). This approach enables training institutions to train a higher number of health workers than they would have done with fully trained staff. The 2006 World Health Report states that “[s]hifting tasks between health care workers and expanding the clinical team can relieve short-term human resource limitations in settings with low resources.” (2006b:24). Training and employing mid-level health workers has indeed been an appropriate strategy to overcome health worker shortages in many countries. Other approaches to extend the number of health workers comprise for example lay health workers (Lewin et al., 2005) or community health workers (CHW) (Lehmann and Sanders, 2007).

The effect of shorter training can be compromised quality of health services. The national health system needs to make trade-offs between the number of health workers and their training. In the case of clinicians, the shorter training inevitably makes these health workers less qualified than fully trained medical doctors. The same applies to training of nurses where shorter training leaves the nursing staff with less formal qualifications than staff with more comprehensive training. The effect of the differences in training is debated. In a review study, Dovlo found no clear indications of lower quality of the care provided by the substitute cadres (2004). However, there appear to be particular challenges in managing mid-level cadres. One challenge is

how the differences in training are reflected in the salary scale. Another challenge is the career development available to health workers with mid-level training. In a study in Malawi, Bradley and McAuliffe found that an important strain on the mid-level cadres was the limited career opportunities and they held that considerable improvements in human resource management is needed (2009). Similar points have been made by McAuliffe et al. (2009a). Determining the mode of training and management of staff with various types of training constitute in itself a vast field of research.

1.1.3 The challenge of health workers' motivation

During the last decade a growing emphasis has been placed on the importance of motivated health workers in providing good quality health care. The 2006 World Health Report discussed at length the challenge of making the most of the existing health workers and it was stated that “[d]eveloping capable, motivated and supported health workers is essential for overcoming bottlenecks to achieve national and global health goals” (2006b:xv). In 2008, the *Kampala Declaration* of the Global Health Workforce Alliance further emphasised the importance of motivated health workers in service delivery (2008). WHO similarly has pointed out that “[t]he ability of a country to meet its health goals depends largely on the knowledge, skills, motivation and deployment of the people responsible for organizing and delivering health services.” (2010b:24).

The increased focus on health workers' motivation as vital to ensure good quality health services is a very important shift from seeing quality of service delivery in the health sector as a function of the number of health workers and their qualifications. This shift warrants a further discussion of motivation of health workers in low-income settings. A systematic review study of motivation and retention in low-income countries concluded that “[h]igh quality care cannot be provided unless issues of demotivated staff are comprehensively addressed” (Willis-Shattuck et al., 2008). It is pertinent at this point to discuss what may increase or reduce health workers'

motivation. Four major factors of importance for workplace motivation will be addressed in the following section. These factors should however not be seen as technical checklists but as sets of issues both interacting and not the least strongly influenced by the local context in which the health system is located.

1.2 What factors influence motivation in the health sector ?

A number of factors can be pointed as important for motivation, but the complexity of factors which influence motivation of health workers in a low-income setting is important to stress. Gilson et al. argue that health worker motivation “reflects a range of personal, organisational, and societal factors, including relationships with others, and itself influences many aspects of the provision of health care.” (2011). The Joint Learning Initiative similarly emphasises the complexity and argues that health workers “have mixed motivations, which include dedication to service, the desire to contribute to society, or wanting to advance their own interests.” (2004:22). Despite the huge body of studies carried out, Chopra et al. argue that “the amount of synthesised research evidence about the effects of relevant policy options to guide policy makers in countries with low and middle incomes is inadequate.” (2008:673). Thus, it is important that policies aimed at improving health workers’ motivation are based on thorough studies. In our study, factors at the workplace, as well as contextual factors, are addressed to increase the knowledge on health workers’ motivation in a low-income context. In the sections that follow the focus is on factors that have been brought up as central to understand health workers’ motivation. The four categories of factors are not mutually exclusive but help us in addressing issues pertaining to work motivation.

1.2.1 Salary and financial aspects of working conditions

Many studies have pointed out that the financial aspects of working conditions are important for health workers’ motivation. The common denominator of these studies

is that albeit the salary is important, a range of other factors also have impact on motivation. Based on a study from Vietnam, Dieleman et al. argue that “although financial incentives are important, they are not sufficient to motivate personnel to perform better” (2003). McAuliffe et al. found that in the case of mid-level health workers in Malawi, the salary level was seen as important, but that much emphasis was also placed on possibilities for promotions and satisfaction with work assignments (2009b). In a study from Mali, Dieleman et al. pointed out that “the main motivators of health workers were related to responsibility, training and recognition, next to salary” (2006). In a study from Malawi, Mangham and Hanson found that nurses are willing to “forego salary increases to obtain improvements to other aspects of their employment conditions.” (2008:1437). The 2006 World Health Report states that “[s]alary increases alone are not enough to change performance” (2006b:80).

The role of the salary in workplace motivation is matter of much debate and has to be addressed in more detail. In addition to being one of several factors with influence on motivation, it has also been argued that “satisfaction with salary level may be a prerequisite for any intervention to change motivation with non-financial incentives.” (Chandler et al., 2009:2085). The potential negative impact of a low salary level is also addressed by McCoy et al. who argue that it is important to address the “adequacy of pay to assess to what extent it contributes to the bad distribution, poor retention, and low motivation of public sector health workers.” (2008:677). In a setting where the salary level is considered not to be satisfactory, the risk is high that health workers embark on strategies that may have a negative effect on the quality of health services (van Lerberghe et al., 2002). The 2006 World Health Report pointed out several coping strategies to deal with low salaries, for example dual employment and absence from work (2006b:77). Based on a study from Uganda, McPake et al. found extensive leakage of drugs from health facilities as a coping mechanism for health workers to increase the income (1999). Closely related to these practices is the issue of informal payment and corruption which has been noted to be a considerable problem in the health sector in many countries (Vian et al., 2010). The 2006 World Health Report pointed out that “in many countries, in all continents, informal payments provide a

major source of income for health workers” (2006b:79). Huss et al. argue that effective mechanisms must be put in place to combat these practices (2010:482; see also Vian, 2008). Donors provide considerable support to finance the public sector in many low-income countries. An extensive review report from the Norwegian Agency for Development Cooperation (Norad) identified service delivery as a critical field but it is reported that “donors have so far provided little in the form of support to address corruption in the service sectors.” (2009:11). Informal payments or outright corruption continues to be a challenge which needs to be tackled alongside other health system challenges.

1.2.2 Resources and infrastructure at the workplace

Health facility infrastructure and availability of resources obviously influence the quality of health services. Access to resources at the workplace is not only a requirement for providing good quality health services, it is also a factor stimulating the workforce (Willis-Shattuck et al., 2008; Henderson and Tulloch, 2008). Modern working equipment creates a much more stimulating work environment than working with dilapidated equipment. Mathauer and Imhoff argue that shortage of supplies and resources is considerable challenge at many health facilities, in particular in rural areas in Africa (2006). Thus, health workers experiencing inadequate resources may easily become demotivated by a difficult work environment. In a study from Mali, Dieleman et al. found that ‘lack of material’ was by far the most important factor for demotivation (2006: table 3). Moreover, it is noted that the quality of medicines available in many low-come countries is sub-standard (Newton et al., 2011) adding further strain to both the actual quality of health services and health workers’ experience of working in a proper environment. In a study from Malawi, Thorsen et al. found a high degree of burnout, defined as a negative response to chronic job-related emotional stress, among health workers in maternal health services (2011). These findings add evidence to the growing literature on health workers in low-income countries facing difficult working conditions.

1.2.3 Supervision and recognition

Several studies emphasise the importance of recognition of good performance at the workplace. Recognition is closely related to motivation as it creates a feeling of contributing to the work at health facilities. In a study from Vietnam, Dieleman et al. made the observation that “[p]ositive feedback is lacking when the health workers are performing well.” (2003). Bennett and Franco suggest that feedback from supervisors, as well as peers and clients can have a positive effect on motivation (1999:7). In a study of nurses from Tanzania, Häggström et al. found that nurses “need help and support in the form of being seen and acknowledged at work.” (2008). Lack of recognition may lead to an experience of not being seen as important at the workplace. Dieleman et al. found in a study from Mali that ‘feeling responsible’ was the factor with the highest score among factors motivating health workers (2006: table 2). The current practices of supervision in many countries appear to be lagging behind what is required. In study from Tanzania, Manongi et al. found that “supervision was not systematic – and was not supportive when provided.” and that lack of proper and supportive supervision was an important factor causing demotivation of health workers (2006).

An issue that emerges closely related to recognition is the prospect of being selected for further training on the basis of having performed well in the current position. Van Lerberghe et al. point out that a very important factor for maintaining and increasing motivation is “developing career prospects and providing perspectives for training” (2002:583). As other studies have shown, for example in the case of mid-level workers, restrictions on access to further training and career development is a demotivating factor (McAuliffe et al., 2009a). The findings of all these studies indicate that regular recognition of performance as well as supervision carry great potential in increasing motivation. The studies referred above place much emphasis on the importance of workers being recognised at the workplace, hence it is important to address these issues with reference to the local context through looking at practices in human resource management

1.2.4 Human resource management

The need for proper human resource management to ensure motivated staff has been pointed out in a number of studies. Human resource management in the health sector can be defined as “activities that mobilize and motivate people and that allow them to develop and reach fulfilment in and through work aimed at the achievement of health goals” (World Health Organization, 1989:18). Bennett and Franco suggest that the human resource management is likely to affect both health workers’ perception of their capabilities and their actual capabilities (1999:4). Dussault and Franceschini argue that management style in combination with other factors have impact on distribution of health workers and hence on issues pertaining to retention (2006). Mathauer and Imhoff found that health workers may become unmotivated “due to inadequate or inappropriately applied human resource management tools.” (2006).

It may be useful to distinguish between two dimensions of human resource management. One dimension concerns the procedures laid down in the national legislation and regulations and implemented at the workplace. Mbindyo et al., based on a study from Kenya emphasise the importance of reliable and transparent implementation of rules (2009). The responsibility of the relevant government offices in implementing proper human resource policies is evident. The second dimension concerns health workers’ relationship with the workplace leadership. Gilson et al. point out that human resource management is based on trust between the employer and employee and that the relationship between health workers and the workplace leadership has much effect on the experienced working conditions (2005:1421). Several studies have addressed health workers’ experiences of how they are treated at the workplace and how it impacts motivation. McAuliffe et al. argue that the perception of justice at the workplace is closely linked to perceptions of how staff is “treated by their managers and the extent to which they were informed about decisions.” (2009b:86). In a study from South Africa, Dzansi and Dzansi report that perceptions of fairness in human resource management practices influence quality of the health service through commitment and behaviour (2010:1003). Another study

from South Africa in a similar vein indicates that management style is very important for health workers' evaluation of the workplace (Couper et al., 2007). On both these two dimensions of human resource management, severe difficulties have been reported in resource constrained settings.

Several studies have questioned the quality of the human resource management in many countries in sub-Saharan Africa. Leonard argues that the management procedures in the public services in many countries are inadequate and may allow practices with negative effect on the health services (2002:62). For example, the issue of informal payment may undermine the quality of service delivery. Lindelow and Serneels warn that the effect of inadequate policies, poor regulatory framework and weak enforcement can contribute to “an erosion of trust and professional norms among health workers.” (2006:2234). The findings of these studies attest to the importance of proper human resource management to ensure motivated health workers. Health systems in sub-Saharan Africa have been subject to extensive reforms, but it is reported that there has been little focus on human resources in these reforms (Franco et al., 2002; Kolehmainen-Aitken, 2004; Rigoli and Dussault, 2003). The findings concerning the importance of workplace leadership are not exclusive to low-income contexts. However, in low-income and resource constrained settings it seems reasonable to argue that recognition of performance and the broader human resource management become very important to motivate health workers.

1.3 Theoretical approaches to motivation

Interventions towards increasing health workers' effort and motivation are informed by theories postulating that motivation is influenced by factors external to a person. Such theories are grounded in various academic fields, such as economics, psychology and organisation theory. It is beyond the scope of this thesis to give an exhaustive account of these theories, but it is important to briefly outline some theoretical approaches to explaining motivation in the workplace context. Motivation at a general

level concerns what makes a person decide what to do and with what effort. Ryan and Deci state that “[t]o be motivated means *to be moved* to do something. A person who feels no impetus or inspiration to act is thus characterized as unmotivated, whereas someone who is energized or activated toward an end is considered motivated.” (italics in original) (2000a:54). The question that arises is what makes a person motivated to carry out a particular task and with what degree of effort.

1.3.1 Intrinsic and extrinsic motivation

The distinction made between *intrinsic* and *extrinsic* motivation emerges as an underlying premise in many studies of motivation. The *Self-determination theory* (SDT) developed by Deci and Ryan discusses intrinsic and extrinsic motivation and what influences motivation (Deci and Ryan, 1985). Intrinsic motivation is defined as “the doing of an activity for its inherent satisfactions rather than for some separable consequence.” (2000a:56). The theory sees the innate needs for *autonomy, competence and relatedness* as constituent parts of intrinsic motivation (2000a:57). A work environment that enhances a health worker’s experience of autonomy in terms being recognised as important at the workplace as well as enhancing the experience of using one’s qualifications to accomplish workplace tasks is conducive to increasing intrinsic motivation. In this context, Wyss’ notion of health worker motivation is noteworthy and he states that “[h]ealth workers are motivated by a feeling of responsibility and technical and financial achievement, working in an environment of mutual reliance in which differences are dealt with in a team spirit.” (2004). The Self-determination theory however emphasises the variation in terms of what increase intrinsic motivation, and it is stated that “[p]eople are intrinsically motivated for some activities and not others, and not everyone is intrinsically motivated for any particular task.” (2000a:56). Thus, intrinsic motivation is in flux and exists in the nexus between a person and a task. If the work environment is not conducive to nurture the intrinsic motivation, the total motivation can only be upheld if extrinsic motivation is increased. Extrinsic motivation implies that motivation is the result of factors external to the person, for example incentives, rewards or sanctions against behaviour. Ryan and

Deci point out that extrinsic motivation refers to “doing something because it leads to a separable outcome.” (2000a:55). One approach to increasing motivation and in effect performance is to offer incentives or rewards to increase the extrinsic motivation (Prendergast, 1999). A person’s total motivation towards a task however comprises both intrinsic and extrinsic motivation.

In studies of motivation in the health sector a much used definition is “an individual’s degree of willingness to exert and maintain an effort towards organizational goals” (Franco et al., 2002:1255; see also Bennett and Franco, 1999:7; Kanfer, 1999:1). The challenge of aligning employees’ goals to the goals of the employer is sometimes addressed as the *principal-agent problem*. The principal-agent problem arises when the *principal* hires an *agent* to do a job, and when “the desires or goals of the principal and agent conflict” and “it is difficult or expensive for the principal to verify what the agent is actually doing” (Eisenhardt, 1989:58). The model is thus based on the premise that the principal and agent may have diverging interests and views on how the work is to be carried out. The theory postulates that increased alignment between the agent’s and the principal’s goals can be achieved if the principal offers rewards or incentives to the agent. The relevance of this theory in a study of health worker motivation is the focus on incentives and in particular the results-based payment. However, Huss et al. argue that the model of principal-agent is requires that the principal is honest and the legal framework is effective (2010:481; see also Andvig et al., 2001:79-90). In a context where other factors than the agent’s evaluation of the reward or incentives offered by the principal influence decision making caution is required in explaining behaviour as a result of increased alignment of goals.

Interventions to increase extrinsic motivation require close attention so that the intrinsic motivation is not compromised. A range of studies have addressed the issue of potential negative effects of extrinsic rewards on intrinsic motivation. Four decades ago, Deci wrote that “when money was used as an external reward, intrinsic motivation tended to decrease” but also that “when verbal reinforcement and positive feedback were used, intrinsic motivation tended to increase” (1971:105). The effect of incentives on performance and possible impact on motivation has been discussed by

for example Prendergast (1999), Frey and Oberholzer-Gee (1997) and Holmstrom and Milgrom (1991). A more detailed account of effects and potential challenges of financial incentives to increase motivation in the health sector has been provided by Golden and Sloan (2008). Other scholars raise concerns about the potential negative impact of financial incentives in the health sector in low-income settings (Mæstad, 2007:20; Oxman and Fretheim, 2008:2-3). These issues in relation to results-based payment will be discussed later.

1.3.2 The psychological contract

At any workplace staff members have expectations towards the employer in terms of payment and other aspects of the working conditions. Such expectations may be based on promises made by the employer as well as more general perceptions of what the employer ought to do in terms of providing proper working conditions. These expectations in the employer-employee relationship can be addressed by the *psychological contract* (Rousseau, 1995). This theory addresses the unwritten part of the relationship between the employer and the employee. In essence, the psychological contract emerges when an employee perceives that the employer is obligated to reciprocate in response to work effort. Rousseau defines the psychological contract as “individual beliefs, shaped by the organization, regarding terms of an exchange agreement between individuals and their organization” (1995:9). Rousseau and Tijoriwala make a distinction between the psychological contract and the wider expectations towards the employer and delimit the psychological contract to promises made by the employer (1998:680). Cable argues that psychological contracts are not formally negotiated and hence the extent of coherence of shared goals between employer and employee is difficult to assess (2008:12-13). Albeit the contested delimitations of the psychological contract, it is a useful complement to other theories explaining causes of loss of motivation.

1.3.3 Job satisfaction versus motivation

Some theoretical approaches to motivation make a distinction between motivation and job satisfaction. A health worker can be satisfied with the working conditions, for example the ratio between workload and salary, without being motivated to perform above the minimum level to fulfil the employer's requirements. Herzberg et al. made a distinction between *motivators* and *hygiene factors* and hence separated motivation and job satisfaction. The hygiene factors are considered important to be in place to avoid workers getting demotivated, whereas the motivators are factors which increase motivation and effort. In Herzberg et al.'s study it was found that salary is a hygiene factor and not necessarily a motivator (1959:82). The theory developed by Herzberg et al. is based on studies in American industrial town in the 1950s, a very different context than contemporary rural sub-Saharan Africa. Thus, the role of the salary level in motivation may be different in a setting where the basic salary does not suffice to cover the household's basic needs. The distinction between motivators and hygiene factors is however important, but could be seen as context specific. The prime contribution Herzberg et al. (1959) is the emphasis on explaining motivation as complex and influenced by several factors. A comparison of the two-factor theory and the distinction between intrinsic and extrinsic motivation shows that hygiene factors largely refer to extrinsic factors whereas the motivators are intrinsic factors.

The concepts motivation and job satisfaction are sometimes mixed and used interchangeably. Lichtenstein states that job satisfaction has multiple dimensions and refers to different aspects of the work environment (1984:58). Peters et al. define job satisfaction as "the attitude towards one's work and the related emotions, beliefs, and behaviour" (2010). Other studies have made a clear distinction between job satisfaction and motivation. Dieleman et al. argue that "two different areas of motivation are often confused: motivation to be in a job and motivation to perform." (2006). Dieleman and Harnmeijer moreover point out that job satisfaction not necessarily leads to motivation (2006:17) and this resonates with Herzberg et al.'s distinction between motivators and hygiene factors (1959). The apparent lack of

agreement and the diverging views on what job satisfaction is in relation to motivation does however not compromise the generally agreed notion of the need to address a wide range of factors important for motivation.

The theoretical approaches briefly outlined above provide useful insights to understand motivation, how staff can be motivated and the risk of demotivating staff. It is necessary to emphasise that any study on motivational factors, or interventions aimed at increasing motivation, take place in a historical and socio-economic context with much influence on how motivation is conceptualised. No study or intervention is void of this impact. To identify challenges and devise strategies to improve motivation and ultimate performance it is vital to apply the theoretical approaches in parallel with a focus on the local context.

1.3.4 Contextualising motivation

It is necessary to go beyond the individual centred approach to address how health workers are situated in a wider societal context. Social science disciplines have developed theories and methods that are particularly suited to generate knowledge on complex social phenomena enhancing the understanding of locally situated processes and structures. Ortner argues that the increased focus on individual agency in anthropology “restored the actor to the social process without losing sight of the larger structures” (2006:3; see also Ortner, 1984). The canvas of cultural knowledge forms the context for possibilities and limitations on actions and behaviour. Ortner points out that the acting individual is embedded in both relations of solidarity and relations of power, inequality and competition (2006:130-131). However, as Anderson notes, “decisions are made within cultural norms” (2011:322), and Heggenhougen and Pedersen emphasise that people live their lives in local contexts influenced by larger, both national and international forces (1997:816). These observations will be further discussed later.

1.4 Health system challenges in Tanzania

Tanganyika gained independence on 9 December 1961, and formed a union with Zanzibar on 26 April 1964, and came to be The United Republic of Tanzania. The Arusha Declaration in 1967 established Tanzania as a socialist state (Nyerere, 1968:231-250). In the period after 1967 the government placed much emphasis on providing good quality education, health and other social services to the population (Munishi, 1995:145-149). Tanzania has for decades been among the poorest performers in economic terms in sub-Saharan Africa, however, the ranking on the United Nations Development Programme (UNDP) Human Development Index has been better than the ranking based on income per capita. This indicates a relative success in terms of provision of education and health care (United Nations Development Programme, 2009:171-174).

In the 1980s, Tanzania faced severe economic difficulties and a Structural Adjustment Programme (SAP) was implemented (Kanaan, 2000). The effect was reduced funding of the public sector, for example an employment freeze in the public sector from 1993 to 1999 (The United Republic of Tanzania, 2008a:14; The United Republic of Tanzania, 2008c:2). The employment freeze had a profound negative impact on the availability of health workers in the public sector. It is reported that between 1995 and 2005 only 16 % of health staff graduating from training institutions were employed in public service (The United Republic of Tanzania, 2008a:14). Moreover, the salary level was in effect reduced due to high inflation (Stevens, 1994:68; Lienert and Modi, 1997:6-7; Mtatifikolo, 1988:35-36). The strict austerity measures combined with other shortcomings were key factors behind the deteriorating quality of public health services reported by many studies (Tibaijuka, 1998a; Munishi, 1998; Therkildsen, 2000:62; Harrington, 1998:148-150; Harrington, 1999:218; Lugalla, 2005).

The health sector in Tanzania continues to face considerable challenges. In terms of the MDGs, UNDP reports that “[u]nder-five mortality decreased from 191 per thousand live births in 1990 to 133 in 2005 and further to 81 in 2010” (United Nations Development Programme, 2012). On the MDG 4 target, Tanzania has thus made great

inroads towards meeting the goal. Some improvements have also been seen in maternal mortality, MDG 5, and UNDP reports that “[t]he estimated maternal mortality rate in 2010 at 454 is an improvement from 578 in 2005 and 529 in 1999” but it is still very far from the goal of reducing maternal mortality with two-thirds from the 1990 baseline (United Nations Development Programme, 2012). These figures indicate an increase in maternal mortality in Tanzania after 1999 and this provide further support for the argument of the enormous health system challenges to overcome. As an intervention to improve performance in the health sector to reach MDG 4 and MDG 5, the donors have introduced a results-based payment programme.

With regard to MDG 6, UNAIDS reports a HIV prevalence rate of 5.6 %, but it is argued that there has been a significant decline in recent years (UNAIDS, 2010). The Joint Learning Initiative points out three health system challenges of HIV/AIDS. One challenge is that the pandemic increases the workload and skill demands of health workers. Another challenge is that health workers also are victims to HIV/AIDS and health workers are lost. Moreover, the health system has to cope with the psychosocial stress of the HIV/AIDS pandemic (2004:18-19). A recent study from Tanzania points out the negative impact of HIV-related challenges on health workers’ motivation (Mbilinyi et al., 2011).

1.4.1 Health system structure

In Tanzania, public health services are provided through dispensaries, health centres, district hospitals, regional hospitals and referral hospitals. The total number of hospitals in Tanzania is 223, comprising 89 government, 90 faith-based (in our study referred to as church-run) (Christian Social Services Commission, 2010), eight parastatal and 36 private hospitals (The United Republic of Tanzania, 2008a:28).

Health facility structure in Tanzania

<i>Referral/Consultant hospitals</i>	The highest level of hospital services in Tanzania
<i>Regional hospitals:</i>	Regional Hospital offer similar services to district hospital. In addition, regional hospitals have specialists in various medical fields.
<i>District hospitals:</i>	Each district has a district hospital. In some districts these services are provided by district designated hospitals run by non-governmental organisations.
<i>Health centres:</i>	A health centre is expected to cater for 50,000 people.
<i>Dispensaries:</i>	A dispensary caters for between 6,000 to 10,000 people.

(National Bureau of Statistics, 2003:105).

Below the level of the district hospitals, health centres and dispensaries provide very important health services, and comprise 4,679 dispensaries and 481 health centres, all types of ownerships combined (The United Republic of Tanzania, 2009:11). About 90% of the population in Tanzania lives within five kilometres of a primary health facility, in most cases a dispensary or health centre (The United Republic of Tanzania, 2009:11).

The Health Management Information System (HMIS) / Mfumo wa Taarifa za Uendeshaji wa Huduma za Afya (MTUHA) plays a vital role in reporting the activities in the public health system. Moreover, the information reported in MTUHA is the basis for planning of activities. Maluka et al. however argue that “weak information collection and management systems, seemed to impinge upon the priority-setting exercise in the district.” (2010a:758). The low quality of MTUHA, both in terms of its design and its implementation has been reported in several studies and reports (Mubyazi et al., 2004; Lauglo and Swai, 2009; Health Research for Action (HERA), 2000).

1.4.2 Health workforce crisis in Tanzania

Statistics from the World Health Organization show that Tanzania is one of the countries with the lowest density of physicians with only 0.02 physicians and 0.37 nurses per 1,000 population (World Health Organization, 2006b:198). These statistics also show that Tanzania has a low density of health workers compared to other countries in sub-Saharan Africa (World Health Organization, 2006a; Kinfu et al., 2009). The *Health Sector Strategic Plan III* adds recent evidence to the extent of the crisis and states that only 35% of the health worker positions are filled by qualified health workers (The United Republic of Tanzania, 2009:11). In a situation of severe overall shortages of health workers, there are huge challenges to secure an equitable distribution of health workers across health facilities. Munga argues that rural and remote districts are very disadvantaged in terms of number of health workers per capita and shortage of qualified staff (2011:41). Munga and Mæstad report that the number of health workers per capita varies greatly in Tanzania, spanning from 0.3 health workers per 1000 population in the most underserved district to 12.3 health workers per 1000 population in the best served district (2009). Similar differences are pointed out in the annual health statistical abstracts (The United Republic of Tanzania, 2006; The United Republic of Tanzania, 2008a). Mamdani and Bangser found that rural health facilities in Tanzania are understaffed and hold that approximately one third of the existing labour force is unskilled (2004:141). Mæstad reports that the number of skilled health workers in rural areas is disproportionately low (2006:2). Olsen et al. found that most qualified staff for emergency obstetric care is concentrated in a few centralized locations causing the rural health facilities to be understaffed (2005b). These studies illustrate a severe problem of distribution of skilled health workers between urban and rural health facilities in Tanzania. Kurowski et al. argue that shortage of staff in the public health sector influences the possibilities for scaling up health service delivery (2007).

In Tanzania, two groups of semi-trained physicians, *Clinical Officers* (CO) with three years of training and *Assistant Medical Officers* (AMO) with several years of practice

as CO and additional two years of training, occupy very important roles in the public health service. The large presence of these positions is in compliance with the national human resource policy (The United Republic of Tanzania, 1999a; The United Republic of Tanzania, 2008c). In addition to the general training as AMOs, they may through additional training specialise in several fields. Health centres are required to be staffed by at least one AMO (The United Republic of Tanzania, 1999a:63-64). Clinical Officers often fill positions where Assistant Medical Officers are not available. The staff establishment requires rural dispensaries to be headed by a Clinical Officer, however, a severe staff shortage is reported at the dispensary level (The United Republic of Tanzania, 2008c). Among the nursing staff, *Enrolled Nurses* have the shortest formal training of the two main groups of nursing staff. *Registered Nurses* have secondary school education and a longer training period. The highest nursing position in the health facilities in Tanzania is *Nursing Officer*. *Medical Attendants* with one or more years of pre-service training, or on-job training, fill many vacant nursing functions in the rural areas.

Closely related to the shortage of health workers is the workload on the available workforce. However, Manzi et al. found in a time and motion study of nursing staff in a rural health facility in Tanzania that “a surprising amount of time was non-productive” (2012). A similar observation was made by Mæstad et al. who found “no association between caseload and the level of effort per patient” (2010:686). Another challenge linked to shortage of health workers and the workload is the problem of absenteeism. Schellenberg et al. found in study in another district in Tanzania that “only about 40% of dispensaries had a prescriber or a nurse present on the day of the survey” (2008). In another study, Manzi et al. found that 44 % of the clinical staff was not available, for various reasons, on the day of the survey (2012).

In this context of severe human resource challenges, the Health Sector Strategic Plan III claims that it is “the crosscutting strategic plan for the health sector of Tanzania for the period July 2009 - June 2015” (The United Republic of Tanzania, 2009:80). A range of other plans also provide guidance on human resource issues. The *Human Resource for Health Strategic Plan 2008-2013* strongly emphasise the importance of

training more health workers (The United Republic of Tanzania, 2008c). The *Primary Health Services Development Programme (PHSDP) 2007 – 2017*, commonly referred to as MMAM (*Mpango wa Maendeleo wa Afya ya Msingi*), states that “[t]he government has identified HRH as a priority area and is fully committed for its improvement.” (The United Republic of Tanzania, 2007a:12). The *National Health Policy* states that “[t]he goal of human resources development is to prepare and empower health workers to provide and manage quality health services at all levels.” (The United Republic of Tanzania, 2003b:25). The main focus in these national documents seems to be on the number of health workers and their qualifications and less emphasis is placed on health workers’ motivation, although it is acknowledged in some recent policy documents. The Health Sector Strategic Plan III states that “[t]he Ministry will, therefore ensure that, good performance is achieved and better rewarded, and that, our health workers are motivated to achieve the MDGs.” (The United Republic of Tanzania, 2009:ii). Our study aims to shed light on health worker motivation, and hence aims to add knowledge related to factors that are vital for a well functioning health system.

1.4.3 The quality of the health services

Several studies from Tanzania have pointed out the low quality of the health services and attributed this both to staff practices (Gilson, 1995:699) and lack of resources (Gilson et al., 1995:112; Kitua et al., 2000; Leshabari et al., 2008). These studies add evidence to findings by for example Das et al. (2008) and Rowe et al. (2005) referred above. More recent studies have emphasised the relationship between the quality of the health services and health workers’ motivation and professionalism. Leonard and Masatu found in a study from northern Tanzania that only 20 % of the health workers behaved professionally, defined as “adhering to the accepted standards of a profession and placing the interests of the public above the individual professional’s immediate interests” (2009). Lindkvist found lack of professional behaviour in terms of not following clinical guidelines for examining patients (2011). Nsimba et al. found poor quality of malaria treatment and attributed this to poor performance of clinicians

examining the patients (2002), and Eriksen et al. reported sub-optimal quality of care in managing malaria patients and point to the importance of a motivated health work force to ensure good quality health services (2007).

The quality of services is of much concern to the users of health services who make decisions on where to seek medical service based on perceptions of differences in quality. In Tanzania there is evidence of considerable bypassing of health facilities meaning that the closest health facility is not selected (Manongi et al., 2006; Kruk et al., 2009; Kahabuka et al., 2011). This tendency is confirmed by the *Tanzania Service Provision Assessment Survey 2006* (2007) and the *Joint External Evaluation of the Health Sector in Tanzania 1999-2006* (2007). Akin and Hutchinson argue that bypassing a health facility is indicative of either a problem with the quality of care at the bypassed facility or of significantly better care than average at the health facility chosen (1999). This is not a new problem in Tanzania and Heggenhougen found that complaints about the attitude of health workers towards patients is a factor which influences the choice of health facility (1986:311). How patients experience the courtesy and professionalism of health workers is thus important in addition to the quality of the medical services. Another factor influencing decisions on where to seek medical services relates to the cost of the service. Studies from sub-Saharan Africa have identified the existence of various forms of informal payments in the health sector. Stringhini et al. argue that the actual effect of informal payments is demotivating of health workers (2009). Mæstad and Mwisongo argue that the practice of informal payment has a negative effect on the quality of health services (2011; see also Lindkvist, n.d.). On a larger scale, the role of the health system is important beyond merely providing health care, and Gilson argues that “[p]eople value health systems not only for the care they themselves receive in times of sickness but also for the contribution the systems make to the broader well-being of society.” (2003:1463). These findings clearly indicate that health service users’ experiences with and expectations towards particular health facilities influence decisions on where to seek medical treatment.

In Tanzania, churches provide a considerable part of the health services. A study by Olsen et al. found that pregnant women in rural areas tend to utilize the services of church-run hospitals to a greater extent than they use government health services (2005a). In terms of supply of drugs, Vogel and Stephens argued more than 20 years ago that non-governmental health facilities in sub-Saharan Africa are likely to have better access to pharmaceuticals than public health facilities (1989). This observation was made at the height of the structural adjustment programmes in many countries. A decade later, Green reported that in many African countries it has been noted that church-run health facilities often have better access to resources than public health services (2002). These observations may explain the trend noted by Leonard and Masatu in Tanzania that patients often prefer church-run health facilities over public facilities (2007). The 90 faith-based hospitals (The United Republic of Tanzania, 2008a:28) are primarily located in rural areas. Gilson et al. found that in Tanzania 90% of church-run hospitals “are in rural areas initially less favoured by other health care providers” (1994:15). The challenge of attracting staff to these rural health facilities has increased because of changes in the public sector working conditions, in particular the pension benefits, have reduced the attractiveness of work in church-run health facilities (Pamba and Kahabi, 2009). In addition, there is a private health sector which is still very limited in rural areas.

1.4.4 Public sector reforms

In 1993, Tanzania embarked on the World Bank funded Civil Service Reform Programme. In 2000, the comprehensive Public Service Reform Programme (PSRP) I was launched, replaced by PSRP II in 2008 (The United Republic of Tanzania, 2008f). The PSRPs, fall under the umbrella New Public Management (NPM) (Therkildsen and Tiedemand, 2007:10), and encompasses “a management culture that emphasizes the centrality of the citizen or customer, as well as accountability for results.” (Economic Commission for Africa, 2003:6). The aims of the public sector reforms were to improve the effectiveness of the public sector (Bana and McCourt, 2006). Decentralisation and devolution of power (Munga et al., 2009) and democratic reforms

(Hydén, 1999) have also been high on the reform agenda. One important part of the PSRP process is human resource development (Issa, 2007). Performance appraisal has become a strategic approach to human resource management in many countries. The rationale for introducing performance appraisals is to measure performance for devising and implementing measures to improve performance (Landy and Farr, 1983; Aguinis, 2009). The introduction of the Open Performance Review and Appraisal System (OPRAS) must be understood in the context of the substantial public sector reforms. Ronsholt and Andrews point out that Government of Tanzania has embarked upon an ambitious strategy of implementing performance based management in the public sector (2005:332) and OPRAS has been made compulsory in public sector (The United Republic of Tanzania, 2007b; The United Republic of Tanzania, 2002).

Extensive reforms have also taken place in the health sector as part of the wider public sector reforms (Gilson and Mills, 1995; The United Republic of Tanzania, 2001b; Mubyazi et al., 2004). These reforms form an important part of the context for understanding health system challenges in Tanzania. Other reforms and important developments in Tanzania concern the economy at large. In recent years, the annual economic growth has been in the range of 5-7 % (World Bank, 2012b). In the period after 2005, health workers in Tanzania have enjoyed a considerable salary increase (The United Republic of Tanzania, 2005a:177-183; The United Republic of Tanzania, 2005b; The United Republic of Tanzania, 2008h). The salary increase has been much higher than the annual inflation (Bank of Tanzania, 2009:9). Another important factor being part of wider reforms in Tanzania is the planned results-based payment *Payment for performance* (P4P) in the health sector (Chimhutu, 2011). Results-based payment rests on the assumption that it is possible to increase health workers' motivation and performance and ultimately the quality of the health services through financial incentives (Trisolini, 2011). Results-based payment draws on agency theory and the premise that effort can be increased and aligned with organizational goals if rewarded. However, several studies have questioned the effectiveness of introducing results-based payment in the health sector in low-income countries (Basinga et al., 2011; Van Herck et al., 2010). Other studies of results-based payment have warned against

potential pitfalls if not carefully implemented (Rosenthal and Frank, 2006:153; Oxman and Fretheim, 2008:4; Eichler and Levine, 2009). Careful management of human resources in the context of such new initiatives is paramount for the success of these reforms.

Another important factor emerging as a result of lack of reforms is the considerable difference in the level of retirement benefits between the social security funds in the two main health sectors in Tanzania, the public and the church-run. The Local Authorities Pensions Fund (LAPF) available to public sector employees offers far better retirement benefits than the National Social Security Fund (NSSF) available to staff in the church-run health sector (The United Republic of Tanzania, 2003c:7). The differences between the social security schemes has received increased attention (The United Republic of Tanzania, 2010b) and a Social Security Regulatory Authority (SSRA) has been established (The United Republic of Tanzania, 2008g). It is however important to note that pension benefits are only available to the limited part of the population (Mchomvu et al., 2002).

2. Objective

The literature review has identified three major health system challenges in low-income countries. The challenge of distribution of health workers and the challenge of ensuring qualified health workers have received much attention in many countries. The last decade there has been a growing focus on health workers' motivation as vital for performance and ultimately for the quality of health services. This focus on health workers' motivation implies an important shift from seeing the quality of health services as a function of the number of health workers and their qualifications to recognition of the importance of the motivation they have for the work they carry out. In resource constrained settings, where both availability of health workers and their level of training may be compromised, health workers' motivation to continuously perform well and to ensure quality care is challenged. The literature review has identified a range of factors that may influence work related motivation, factors which may be grouped into four major categories, namely 1) salary and other financial aspects of the working conditions; 2) resources and infrastructure at the workplace; 3) supervision and recognition; and 4) human resource management. Despite the substantial body of studies in the field, there are a number of important voids in the existing literature. Our study addresses some of these.

The main goal of this study is to explore in depth health workers experience with factors of importance for their work related motivation in rural low-income settings. Three sub-studies address gaps that are found to be of high relevance to enhance our understanding of factors which impact on health workers' motivation in rural Tanzania.

The first sub-goal is to explore health workers' experiences with their working conditions. Our study addresses factors related to the working conditions that health workers experience as important and that impact on their motivation. The aim is to locate the study findings within a broader socio-economic and historical and political setting to illustrate the importance of contextualisation of research results.

The second sub-goal is to study health workers' preferences for workplace. Whereas a range of studies have addressed topics related to preferences for urban or rural employment, there has been less focus on the role of the potential role of 'ownership' of health facilities and the implication this potentially may have on working conditions. A particular scrutiny is placed on the public and church-run sectors as they dominate the health services in rural areas of Tanzania.

The third sub-goal is to assess health workers' experiences with performance appraisals as a tool to increase motivation and performance. The experiences with the Open Performance Review and Appraisal System (OPRAS) as well as the expectations towards a results-based payment system in the process of being implemented in Tanzania will be scrutinized.

Our research, with its three sub-studies aims at enhancing our knowledge on health workers' motivation in low-income contexts. Only with sound and grounded information can good and appropriate measures be taken to ensure work related motivation and enhance the quality of health services. Thus, a major objective is to place the research into a larger socio-economic and historical context to address these important issues.

3. Materials and methods

3.1 The study setting

The study was conducted in Mbulu District, a rural district in Manyara Region in northern Tanzania, which at the time of the last national census (2002) had a population of 237,882 (The United Republic of Tanzania, 2003a:171). Most of the district is located at altitudes between 1500 – 2000 metres above sea level (Meindertsma and Kessler, 1997:2). The Iraqw, a Southern Cushittic group, is the dominant ethnic group in Mbulu District as well as in some of the neighbouring districts. During the last decade, the Iraqw have expanded their territory into areas that had been inhabited by other ethnic groups (Rekdal and Blystad, 1999; Snyder, 2005:17-26). Maize accounts for more than 90 % of the total food crop production in Mbulu District (National Bureau of Statistics and Manyara Regional Commissioner's Office, 2005:49), virtually all households in the district have maize fields providing the staple food. The rains in the highlands where Mbulu District is located can be erratic (Meindertsma and Kessler, 1997:12). In the period of cultivation of maize fields, in December and January, timely preparation of the fields is hence a major concern to the population.

The public health facilities in Mbulu District comprise one hospital, two rural health centres and 19 dispensaries (Mbulu District Council, 2008; Mbulu District Council, 2009).



Section of Mbulu District Hospital



Section of Dongobesh Health Centre

In addition to the public health services there is a large voluntary agency hospital in the area, Haydom Lutheran Hospital run by the Evangelic Lutheran Church of Tanzania (ELCT), located approximately 85 km to the south-west of Mbulu town (Haydom Lutheran Hospital, 2009). In addition, there are two health centres and six dispensaries run by various church organisations. One dispensary is private (Mbulu District Council, 2008). There is however a relatively low presence of private health

facilities in Mbulu District and the main provider of health services outside the public sector is thus the church-run sector. It has been reported that the area (Mbulu District plus adjacent districts) has shown good progress towards meeting the targets set in MDG 4 and 5 due to comprehensive health services, in which Haydom Lutheran Hospital is very important (Evjen-Olsen et al., 2009). The Council Comprehensive Health Plan of the district confirms the progress towards meeting the targets (Mbulu District Council, 2009). The district enjoys a relatively good coverage of health services with the presence of the church-run hospital known for the comprehensive services offered. In terms of livelihood and socio-economic conditions, the district is a typical rural district in Tanzania.

Table 1 Public sector health worker positions filled in Mbulu District

Health worker cadre	% of positions filled
AMO	73 %
CO	73 %
Nursing Officers	80 %
Nurses	62 %
Medical attendants	152 %

(Mbulu District Council, 2008:15)

These statistics do however not reveal the full picture of the actual shortage of health workers. The shortage of qualified staff is most pronounced at the lower levels, at health centres and dispensaries. Many nurse positions in these health facilities are filled by medical attendants with little or no formal training, hence as we see in table 1, the number of staff in this cadre is much higher than required. At the dispensaries and the best staffed health centre, only 20 % and 37 % respectively of the nurse positions are filled with qualified staff (Mbulu District Council, 2008:15). Among clinicians there are shortages in overall numbers of Clinical Officers and Assistant Medical Officers, as well as specialized Assistant Medical Officers in Mbulu District. At the time of the data collection there was no fully trained Medical Officer present in the district.

The district hospital was visited again after the main data collection periods were completed, and the staffing situation had at that point been improved. The employment of health workers had increasingly been managed by Ministry of Health and Social Welfare to ensure an equitable distribution of health workers across the country. Moreover, it was observed that a Medical Officer had been recruited as District Medical Officer (DMO) and AMOs were getting training in some of the required specialised medical fields. Also at one of the two rural health centres an improved staffing situation was observed. In addition, extensive construction work was taking place at several health facilities and the largest rural health centre in the district had electricity installed in 2009.

3.2 Data collection

The broad research topic has been to gather in-depth understanding of health workers' experiences with their working conditions and the importance of these experiences on their work related motivation. To enhance the knowledge of a complex issue like motivation it has been imperative to capture detailed data. The research project has employed a qualitative design in methods and data collection. Qualitative methods are particularly suited to gain insight into how research participants view and understand the world and construct meaning of their experiences. To approach the data collection with a high degree of flexibility is one of the keys of qualitative approaches. The interaction between the collected data and the evolving analysis is what Hammersley and Atkinson refer to as "a constant interplay between the topical and the generic, or the substantive and the formal" (1995:31). This interplay has been a vital part of developing and adjusting the scope of the research.

The aim has been to capture information on issues of particular concern to health workers. The concept of discourse has thus become useful as it captures both general views and diverging opinions (Foucault, 1991). The discourse in its simple form refers to communication between people. People or groups of people with particular

interests or issues to advocate express their views as part of a larger discourse, for example on working conditions at the workplace. The various stakeholders are parties to the discourse through communicating and presenting the issue in question to enhance the chance to arrive at the wanted outcome or result. At a workplace the discourse becomes evident in the communication between the employer and the employees.

The scope of this study made it necessary to draw on several academic disciplines, both within and outside the social sciences. It has proved fruitful to draw on studies in economics, psychology and organizational theory in addition to anthropology in developing the approach to health workers' motivation. Our approach to choice of academic discipline concurs Moland who writes that “[t]he traditionally rather rigid boundaries between the disciplines have become more fluid, allowing for greater flexibility in methodological and analytical approaches” (2002:23).

The two main methods for collection of data in our study were *in-depth interviews* (IDIs) and *focus group discussions* (FGDs). In-depth interviewing is a data collection technique that involves individual interviews with research participants to openly explore their experiences and perceptions on the research topics. An interview guide indicates the issues to be covered, but is commonly applied with flexibility to dwell on important issues or to include emerging issues (Malterud, 2011:129-131). The number of in-depth interviews (IDIs) to be conducted depends on whether the IDIs reveal new information. When no new major topic is appearing, a sense of *data saturation* is reached. Whether data saturation has been achieved is assessed by the researcher(s) and is a subjective assessment. A focus group discussion (FGD) is a facilitated discussion among a group of research participants. Some degree of homogeneity among the research participants is sought to ensure interaction and a dynamic within the group related to their shared experiences relevant to the research questions (Malterud, 2011:133-135). As for IDIs, the number of FGDs is determined by the researcher(s) assessing whether substantial new information emerges.

The data collection comprises five phases of field work. During the first formative phase (April-May 2007), health facilities in Mbulu District were visited and initial exploratory interviews were carried out where the research issues to be pursued were identified. The topics pursued were 1) salary, allowances and living conditions, 2) workload, 3) human resource management, 4) the possibility of to provide good quality service as well as 5) changes in the health system in the last decades. Through broad and open discussions of these issues it was possible to achieve a good overview of the general challenges in the rural public health services. Moreover, the general focus on the challenges in ensuring motivated staff enabled the development of more focussed research foci to pursue for the rest of the research.

The bulk of the data were collected during the second phase comprising IDIs carried out at remote rural dispensaries in October 2007 and FGDs at the district hospital in January and February 2008. More targeted IDIs in the public health sector were carried out during the third phase (May 2009), and FGDs during the fourth phase (May 2010). During the fifth phase, October 2010, the data collection took place at Haydom Lutheran Hospital in Mbulu District. The time gaps between the data collection periods allowed for analysis of the data collected, extensive document review and for further development of the topics to be pursued.

The interview guides for the IDIs and the topic guides for the FGDs guides were used in a flexible manner and were revised during the course of the research to allow for focusing on emerging issues. Two very important new topics were brought to the forefront and informed the further data collection. The first topic was the dynamics between the public and church-run health services and the competition for the scarce human resources. This issue was deemed very important to pursue as knowledge of health workers' consideration for choice of workplace is closely linked to motivation. The second topic was the performance appraisal system which had been implemented in the public sector in Tanzania a few years before the research took place. At the same time the plans for a results-based payment system came to the forefront on the discourse on working conditions. Specific interview- and topic guides were developed to pursue these two topics (appendix VIIa and VIIb respectively).

In addition to the IDIs and FGDs a large number of official documents were reviewed. *Documentary reviews* involve the use of documents as source materials in qualitative data analysis. A range of Government documents, both in English and Swahili, provided a useful source of data on relevant legislation and government policies on the human resource situation and challenges in the health sector. Additional documents like instructions from the Ministry of Health and Social Welfare and the Public Service Commission added very useful information on the actual regulation of salary and allowances. Moreover, annual plans and reports from health facilities in the study district also provided useful information to understand the local human resource issues. In addition, *informal discussions* with health workers and residents living in the district centre and in nearby villages provided very useful information and informed the revision of the interview- and topic guides during the course of the research. The long-term exposure to the study district made this approach very useful as an addition to the formal data collection methods.

3.2.1 Research participants

Research participants were identified to cover various categories of health workers, different types of health facilities as well as both central and rural parts of the district. A total of 54 IDIs were carried out (cf. table 2). Of these, 30 IDIs were conducted with staff at public health facilities. Seven IDIs were conducted with administrators responsible for human resource management in the district administration and at the district hospital. One IDI was carried out in a private dispensary. Eight IDIs were carried out at a church-run hospital. In addition, eight IDIs were carried out with local community residents. Eleven FGDs (cf. table 3) were carried out with altogether 56 participants comprising clinicians, nursing staff and auxiliary staff in separate groups.

Table 2 In-depth interviews per institution

Institution / type of health facility	Number of interviews
District Council	3
District hospital (public)	21
Health centre (public)	3
Dispensaries (public)	10
Church-run hospital	8
Private dispensary	1
Local community residents	8
Total	54

Table 3 Focus group discussions

FGD number	Category of staff	Location	Participants	Men	Women
FGD 1	Nurses in a training course	Health centre (public)	7	0	7
FGD 2	Medical attendants	District hospital (public)	7	1	6
FGD 3	Medical attendants	District hospital (public)	5	1	4
FGD 4	Nursing staff	District hospital (public)	5	0	5
FGD 5	Nursing staff	District hospital (public)	6	0	6
FGD 6	Clinicians (AMO/CO)	District hospital (public)	6	6	0
FGD 7	Nursing staff	District hospital (public)	5	0	5
FGD 8	Nursing staff	District hospital (public)	3	0	3
FGD 9	Nursing staff	District hospital (public)	4	0	4
FGD 10	Nursing staff	Church-run hospital	4	0	4
FGD 11	Nursing staff	Church-run hospital	4	1	3
Total			56	9	47

The IDIs and FGDs were collected to elicit data on the three topics of our research. As the data collection took place in several phases, not all IDIs and FGDs were used in all research papers. Table 4 and table 5 show which IDI and FGD was used for each research paper respectively.

Table 4 Categories of IDIs (excl. local community residents) per research topic

Category of interviewee	Location	Paper I	Paper II	Paper III
Clinical Officer	District hospital	X		
Nursing Officer	District hospital	X		
Assistant Medical Officer	District hospital	X		
Nurse	District hospital	X		
Clinical Officer	District hospital	X		
Nursing Officer	District hospital	X		
Assistant Medical Officer	District hospital	X		
District Medical Officer	District hospital	X		
Clinical Officer	Health centre	X		
Clinical Officer	Health centre	X	X	
Nurse	Health centre	X		
Human Resource Officer	District Council	X		
Medical Attendant	Dispensary	X	X	
Clinical Officer	Dispensary	X	X	X
Nurse	Dispensary	X		X
Clinical Officer	Dispensary	X	X	X
Nurse	Dispensary	X		X
Nurse	Dispensary	X	X	X
Medical Attendant	Dispensary	X		X
Clinical Officer	Dispensary	X	X	X
Clinical Officer	Dispensary	X	X	X
Medical Attendant	Dispensary	X	X	X
Assistant Medical Officer	Private disp.	X		X
District Health Secretary	District hospital	X	X	X
Nursing Officer	District hospital	X	X	X
Nurse	District hospital	X	X	X
Assistant Medical Officer	District hospital	X	X	X
Clinical Officer	District hospital	X	X	X
Nurse	District hospital	X	X	X
Assistant Medical Officer	District hospital	X	X	X
Medical Attendant	District hospital	X	X	X
Medical Attendant	District hospital	X	X	X
District Health Secretary	District hospital	X		X
Nursing Officer	District hospital		X	X
Clinical Officer	District hospital		X	X
Human Resource Officer	District Council		X	X
Council Health Management Team	District hospital			X
Council Health Management Team	District hospital		X	X
Leadership position	Church-run hosp.		X	
Leadership position	Church-run hosp.		X	
Leadership position	Church-run hosp.		X	
Nursing Officer	Church-run hosp.		X	
Clinical Officer	Church-run hosp.		X	
Nursing Officer	Church-run hosp.		X	
Leadership position	Church-run hosp.		X	
Leadership position	Church-run hosp.		X	

Table 5 FGDs per research article

FGD number	Category of staff	Location	Paper I	Paper II	Paper III
FGD 1	Nurses in a training course	Health centre (public)	X		
FGD 2	Medical attendants	District hospital (public)	X	X	
FGD 3	Medical attendants	District hospital (public)	X	X	
FGD 4	Nursing staff	District hospital (public)	X	X	X
FGD 5	Nursing staff	District hospital (public)	X	X	X
FGD 6	Clinicians (AMO/CO)	District hospital (public)	X	X	X
FGD 7	Nursing staff	District hospital (public)		X	X
FGD 8	Nursing staff	District hospital (public)		X	X
FGD 9	Nursing staff	District hospital (public)		X	X
FGD 10	Nursing staff	Church-run hospital		X	
FGD 11	Nursing staff	Church-run hospital		X	

3.2.2 Challenges in data collection

The data collection has been guided by interview- and topic guides that have been modified to include emerging issues identified during the course of the research. The collected data are hence a result of these guides and their application. When assessing the data collection process, several challenges need to be addressed and possible biases influencing the quality of data need to be identified.

The research assistant was a Tanzanian trained Clinical Officers with work experience as a Medical Secretary in the local Roman Catholic Diocese. He also had extensive competence in data collection in qualitative research. Some of the IDIs at remote dispensaries were carried out by the research assistant alone. The bulk of the IDIs and all but the first FGD were carried out by the researcher and the research assistant together. The research assistant's knowledge of the health sector and that fact the he

was respected in the local community as an amicable and knowledgeable person emerged as important assets. The research assistant gradually became a research collaborator and co-author. During the IDIs and FGDs both asked questions, discussed the topics with the research participants and added probing questions.

The IDIs and FGDs were carried out at locations providing the necessary privacy to allow interviewees to speak freely, such as at offices in the hospital or at other health facilities. With the exception of the IDIs carried out during the formative phase and some later IDIs with local community residents, all IDIs and FGDs were audio recorded. The language of communication in all IDIs and FGDs was Swahili, the national language of Tanzania. In the IDIs in formative phase and IDIs with local community residents, rapid note taking was employed.

The data collection was characterised research participants' willingness to share information and discuss issues pertaining to work related motivation, such as experiences with their working conditions. The study topic was clearly of much concern to the study participants and the possibility to discuss at length about these issues appeared to be highly appreciated. In a typical Tanzanian manner, the interviews took place in a relaxed positive atmosphere. The research topics did not seem to be particularly sensitive. The majority of the interviewees shared a wealth of information with researcher, but some of the interviewees in the IDIs appeared to be uncomfortable being interviewed alone. Thus, the amount of data and the quality of data in terms of the degree of detailed information collected varied between the IDIs. The FGDs offered very valuable data as the interaction and discussion between the FGD participants yielded rich data. The research participants seemed to be comfortable with discussing these topics in groups.

3.3 Data analysis

In qualitative research, the process of analysis of the data starts from the first interview. The interview guide for IDIs or the topic guide for FGDs provides the

broader research questions. Follow-up questions or probing questions are in principle a part of the analytical process as such questions are asked based on the researcher's preliminary analysis of the information provided by the research participant. Thus, an IDI or FGD where the interview- or topic guide is applied with flexibility is in principle data collection with a concurrent analysis. After conducting an IDI or FGD, a researcher, or research team should reflect on the data collected. In this process, the interview- or topic guide may be modified. Not only may some questions be rephrased or relevant probing questions added, new topics may also be added. The important reflexive process should thoroughly challenge the researcher's pre-understanding of the research topic. This continuous analytical process is crucial to determine the amount of data necessary to collect. If the reflexive process is carefully done, it is possible to assess whether the total body of data is saturated.

Various approaches have been suggested as appropriate for analysing qualitative data. Some approaches apply a relatively stringent methodology of condensing data to develop categories or even theories emerging from the data. The data analysis in the present research has been informed by an inductive approach as explained above. The data analysis largely follows the four steps of data analysis suggested by Malterud (2011:111). The first step is to identify the broader themes present in the data. If the reflexive process has taken place during data collection and if properly recorded, this step is more or less completed. The second step is to assign codes to the data. Different approaches devise different strategies for coding. Whether or not one is bound by certain theoretical or analytical frameworks, this is a very important process. The third step, sometimes as a distinct step and sometimes integrated in the coding process, is to develop a structured set of codes. The fourth step requires reflection to systematise the codes into larger units, or categories.

The principle guiding the data analysis in our research was to assign and modify codes until a detailed overview reflecting the complexity of the data was achieved. The aim of the analysis has hence been to look carefully both at the detailed and concrete information provided in the IDIs and FGDs as well as looking carefully at what the material speaks about pertaining to health workers' motivation. Thus, the analysis

aims at looking behind the manifest content to identify broader and larger discourses on motivation in the health sector. After the first coding to identify the broader themes, the next step was a thorough review of the data to develop sub-codes under the broader codes identified in the first review of the data. A tree-like structure of codes was developed. During the process of detailed coding, the analysis also focussed on identifying recurring themes and patterns as well as contradictory or ambiguous statements. This process was structured at times but also challenging in terms of developing a code structure providing a coherent picture of the data.

The analysis also draws on the general principles of thematic analysis in terms of recognising patterns within the data (Braun and Clarke, 2006). At the same time, the data analysis comprises features of content analysis which is more explicit on how both manifest and latent content is searched for as broader codes or categories are identified based on a thorough review of the data (Graneheim and Lundman, 2003).

The audio recorded IDIs and FGDs were translated and transcribed in English by a research assistant, but were carefully checked by the research collaborator who had participated in the data collection. A further check of the quality of the transcription was done by the researcher who listened through all the audio recordings in Swahili with a parallel reading of the English transcripts. Audio files, transcribed IDIs and FGDs and central documents were imported into NVivo 7 (later converted to NVivo 8 and NVivo 9), for the purpose of data management and easy recording of all steps in the data analysis.

The first coding by using NVivo software took place during the data collection. This approach concurs with what Lu and Shulman point out as a great advantage of using advanced software packages in analysing qualitative data, namely “[e]xploratory coding schemes can evolve as soon as the first data is collected, providing an opportunity for a more thorough reflection during the data collection process, with consequent redirection if necessary.” (2008:106). The same principle of reflection, tentative coding and revision of the coding is the same regardless of whether or not software for qualitative data analysis is used.

The coding of data and the further development of structures and categories required continuous access to the collected data, both audio and text, in order to verify or modify the codes. Much emphasis was placed on a careful review of both the audio files of the IDIs and FGDs and their transcripts. Albeit verbatim transcription has been the goal, the only authoritative data source was the audio file. The data management possibilities offered by NVivo 8 and NVivo 9, as well as other similar software packages, on handling audio files and transcripts in parallel make it less important to condense the material in the course of the data analysis. Through careful application of the tools offered in the software package, the steps in the data analysis can be recorded at a meta-level without losing access to the original data. Hence, the advantage of qualitative data analysis software is that one at any time can move from the categories or codes to the original data (text, audio, video or pictures).

3.4 Ethical considerations

The study is part of a collaborative research venture funded by the Research Council of Norway entitled *Strengthening human resources for health: A study of health worker availability and performance in Tanzania*. The National Institute of Medical Research (NIMR) in Tanzania granted ethical clearance for the project, ref. NIMR/HQ/r.8a/Vol. IX/433, dated 25 May 2006 (appendix I). The study was judged not to require approval from the Regional Committee for Medical Research Ethics in Norway as the study did not aim to collect data from patients. Information that would make it potentially possible to identify the research participants has not been stored.

Research permit was also granted by the Tanzania Commission for Science and Technology (COSTECH). The initial research permit (2007-59-CC-2006-193) was issued 12 March 2007 (appendix IIa). Extensions were granted 30 June 2008 (2008-181-ER-2006-193 (appendix IIb) and 1 October 2009 (2009-250-ER-2006-193) (appendix IIc). Residence Permit was obtained from the Immigration Office after each renewal of the research permit (appendix III). After obtaining the research permit, a

letter of introduction from the Regional Administrative Secretary was obtained (appendix IV). This letter was presented to the District Administrative Secretary and the District Executive Director in the district where the research was carried out and a district specific support letter was issued (appendix V). The subsequent arrangements for interviewing health workers in the district health services were made through the office of the District Medical Officer. These steps were repeated for each renewal of the research permit at COSTECH. In the church-run hospital the arrangements for carrying out interviews were made through the office of the Managing Medical Director.

The research complied with the relevant regulations of the Tanzania National Health Research Forum regarding information for the study participants (2001:18; Tanzania National Health Research Forum, 2009:22). All informants participating in the IDIs and FGDs received information about the research both verbally and in writing before signing a consent form. The consent form was prepared in both English (appendix VIa) and Swahili (appendix VIb). The research participants could choose the language they preferred. All research participants were given time to read the information about the project carefully before deciding whether they would like to participate or not. The consent sheet contained information about the background for the research project. It was emphasised that participation in the study was voluntary and that the research participants could decide not to answer particular questions or to withdraw from the research at any time. The consent sheet also contained information on the clearances and approvals obtained for the research at national, regional and district levels. It was also emphasised that the information would be treated confidentially by the researcher and that the research assistants had signed a declaration of privacy. The consent form also contained the full contact details of the researcher. Before the IDI or FGD commenced both the research participants and the researcher signed two consent forms and both parties retained their copy of the form. None of the study participants expressed reluctance or indicated that they declined to participate in the research. The health workers expressed that they appreciated the detailed information about the research project.

4. Results

4.1 Paper I

Perceived unfairness in working conditions: The case of public health services in Tanzania

Working conditions is a key factor in ensuring a motivated and well performing staff. The study revealed substantial levels of frustration and even anger towards the employer. The factors causing this frustration were experiences of unsatisfactory working conditions combined with a perceived lack of fairness at the workplace. A cross-cutting issue was the financial compensation for the work performed, and health workers emphasised in particular the salary level and allocation of allowances at the workplace. The emphasis on access to allowances illustrates the concern about the salary level in relation to the cost of living as the allowances paid when attending a workshop or seminar may add a considerable amount to the salary. Other factors with impact on the salary level are for example promotions, access to further training and the differentiation in salary level between health workers with different lengths of training or working experience. An overarching issue across all these factors was the frustration with the human resource management, both at the national and local level, and how this affected justice and fairness at the workplace. It was further revealed that many health workers lack information or knowledge about factors that influence their working conditions. The study found that health workers without hesitation express dissatisfaction with the employer and present their complaints in various ways. The findings on experiences of unfairness are located in a broader historical/political context marked by a shifting landscape of state regulation, economic reforms, decentralisation and emerging democratic sentiments.

4.2 Paper II

Why do health workers in rural Tanzania prefer public sector employment?

This study addresses the dynamics between the public and the church-run health sector. The study found huge differences in the pension schemes in these two sectors and that health workers placed substantial emphasis on the pension schemes as important for choice of workplace. The majority of the interviewed health workers in both health sectors stated preference for work in the public health sector with reference to the pension schemes. In addition, health workers in both sectors held that the workload and working hours are less demanding in the public sector. Moreover, a more lenient approach to misconduct and absence from work was reported in the public sector. A very important factor counteracting the preference for the public sector employment was the considerable differences in access to resources at the workplace. Health workers in both sectors emphasised that the church-run sector has much better equipment as well as other resources than what is found in the public health sector. Public sector health workers expressed a degree of envy of such resources, whereas health workers in the church-run sector praised their workplace for the access to resources. Another factor pointed out by health workers in the church-run hospital was the religious dimension which many placed substantial emphasis on. In addition to these factors pulling health workers towards either health sector, a range of personal and family related issues were emphasised. Health workers' age appeared influence the preference for workplace as younger health workers tended to look at the employment as a stepping stone to further career developments. Health workers with longer work experience tended to emphasise the importance of relevant work for the spouse and the needs of the larger family as decisive factors for choice of workplace. Knowledge of factors influencing health workers' decision for workplace is important to understand issues of distribution and retention in a resource poor setting. The importance placed on the differences in the pension scheme is strongly indicative of the need for coherent policies regulation of the financial conditions of employment.

4.3 Paper III

Exploring the applicability of the Open Performance Review and Appraisal System (OPRAS) in the health sector in Tanzania

Employers need to ensure that staff members perform work in accordance with the organisational goals. In the health sector in a resource poor setting where the availability of qualified staff may be compromised, the performance of the existing staff becomes vital to ensure good quality services. Our study has addressed health workers' experiences with the Open Performance Review and Appraisal System (OPRAS) in use in the public sector in Tanzania. OPRAS sets goals and measures individual work performance and is based on the principles of transparency in defining the goals and regular supervision. Our study has found serious challenges in the implementation of OPRAS and health workers express much reluctance in complying with OPRAS. One reason is the low acceptability of OPRAS, in particular health workers' expressed scepticism towards using numerical targets in terms of number of patients attended as an indicator of performance. Another reason concerns feasibility of an advanced performance appraisal tool in a setting characterised by considerable resource deficits. The study has also found that health workers are not given the intended feedback related to the work targets, and that health workers see very few tangible benefits of complying with OPRAS. OPRAS could potentially fill an important void in the human resource management in the public sector in Tanzania as our study has found that recognition of performance carries a huge potential in motivating health workers. The scepticism against OPRAS was coupled with great expectations towards the coming results-based payment system. The potential links between the two tools however remained unclear. Knowledge about how tools in human resource management practices are interpreted and health workers' responses and strategies towards such tools is vital in devising policies to increase motivation.

5. Discussion

The growing recognition of the importance of motivated health workers is an important shift in the approach towards improving the quality of health care in resource poor settings. Our study has found that a major and cross-cutting issue important for motivation is the importance placed on the financial aspects of working conditions. The study has also found that motivation is complex and that motivation can be increased through good management practices and making health workers feel valued at the workplace. The complexity of factors influencing motivation, and retention, can be addressed through looking closer at health workers' actions and strategies to overcome the challenges they meet.

5.1 Experienced unfairness at the workplace

In order to understand health workers' actions and responses towards their working conditions it is important to dwell on the notion of unfairness at the workplace. Folger defines unfairness as “[a]n outcome can seem unfair if it was preventable in a particular way, namely, it could have been prevented by someone else's doing what he or she was supposed to do.” (1987:146). Paper I identified several issues which health workers held to be unfair. The reasoning behind the claims about unfairness was based on the experience of not receiving what was perceived to be their entitled rights. It was implied that the employer, both at local and national level, could have avoided the unfair situation if they had paid attention to health workers' demands and needs. Paper II and paper III also addressed issues that contain experiences of unfairness at the workplace. In paper II, the substantial difference in pension benefits between public and church-run health facilities was perceived as fundamentally unfair. In paper III the experience of not seeing improvements in the human resource management after the introduction of the performance appraisal in terms of feedback

or encouragement, as well as the postponed introduction of the results-based payment system (P4P) generated frustration and sentiments of unfairness in working conditions.

A perception of unfairness in working conditions is closely linked to perceptions of justice. At the workplace, it may be useful to distinguish between *distributive* and *procedural* justice (Folger, 1987). Distributive justice concerns the outcome of the allocation of goods and benefits whereas procedural justice concerns the procedures for such allocations. Claims of not receiving what is considered entitled benefits concern distributive justice. The legislation and regulation decided upon at the central level and implemented at the district level belong in the domain of procedural justice. These two kinds of justice however influence each other (Folger, 1987:148), and claims about injustice, whether substantiated or not, concern thus both distributive and procedural justice. In all three research papers, health workers expressed much dissatisfaction with the benefits they receive as well with the related legislation and its implementation. Following this brief introduction to unfairness and justice and how these concepts emerge as relevant, the analysis can be enhanced by looking at how health workers expectations towards the employer are formed.

5.2 Expectations towards the employer

The formal contract of employment and the national laws and regulations define the central dimensions of what health workers are entitled to, for example in terms of salary, access to training, promotions, working hours and allowances on top of the basic salary. Efficient human resource management requires that the regulation of such issues is clear and properly implemented. Both parties to the formal contract, i.e. the employer and the employee, need to have relevant and correct information on how human resource management issues are regulated. Our study has however revealed that health workers often lack relevant information on the formal contract.

In addition to the formal contract, expectations towards the other part may have substantial impact on perceptions of fairness and justice at the workplace. In our study

it has been useful to apply the concept of the psychological contract (Rousseau, 1995) to address expectations towards the employer. This concept provides a framework for understanding health workers' claims. The psychological contract can be formed as part of the employment process if the employer promises goods or benefits outside the formal contract of employment. Health workers' expectations are however likely to be modified over time. In our study, it has thus been found useful to look at the formation of the psychological contract as a continuous process. Changes in the administrative structures, implementation of new procedures in human resource management and changes in the management style are factors with impact on health workers expectations towards the employer. These factors are all in flux and change with the implementation of new regulations as well changes in the people holding offices.

In our study, paper I addressed how health workers find the psychological contract to be violated. Paper II addressed the huge differences in the pension schemes and how the disadvantaged health workers found this to violate their due expectations towards the employer. Paper III addressed the performance appraisal and the postponed introduction of the results-based payment and both these issues were seen as violation of health workers' expectations towards the employer. A common denominator of these three topics was the concern with the financial aspects of working conditions. In the section below, the aim is to explain the emphasis placed on various aspects of the salary and additions to the basic salary.

5.3 To make ends meet

The issue permeating our study is health workers' strong emphasis on the financial returns of the work. In rural Tanzania, access to formal employment is very limited and work in the agricultural sector is the most common type of work for adults. The 2007 Household Budget Survey states that 68 % of the employed adult population are employed in agricultural activities (National Bureau of Statistics, 2009:xii). The

International Labour Organization (ILO) indicates an even higher rate of employment in the agricultural sector (2011:5). The characteristics of Tanzania are common in rural sub-Saharan Africa. Bryceson argues that the Structural Adjustment Programmes in many countries in Africa increased the importance of agriculture as access to formal public sector employment became restricted (1999; 2002). The majority of the population in rural areas in Tanzania rely on agricultural activities. In the study area, the importance of agriculture in securing the livelihood of the household is confirmed by Snyder (2005) and Baker and Wallevik (2003). Statistics on Mbulu District show that as much as 84 % of household heads are self-employed and that only 9 % are formally employed (Meindertsma and Kessler, 1997:63).

The relative financial stability provided by the income from salaried work makes formal employment desirable over the unpredictable income from agriculture. In particular the risk of inadequate rains makes it impossible to predict the harvest of maize and other crops and the support it provides to the household. In a setting of limited access to formal employment, people who are employed in salaried work become vital for support far beyond the nuclear family. Throughout the three sub-studies, the challenge to pay children's school fees was particularly emphasised. Moreover, the challenges of building a permanent house and to be able to support the larger family were stressed by all the interviewed health workers.

The importance of adequate remuneration is acknowledged in the 2006 World Health Report. The report devises 10 strategies to improve health workers' performance (World Health Organization, 2006b:71-86), and much emphasis is placed on remuneration. The report states that “[t]hree aspects of remuneration influence the behaviour of health workers: the level and regularity of pay, the way people are paid, and other incentives.” (World Health Organization, 2006b:75). There is no doubt that a proper salary is vital for motivation at the workplace. It is however necessary to dwell further on the issue of salary as factor increasing motivation and in turn performance. In the introduction, it was pointed out that the salary level clearly is important. Herzberg et al. placed salary among factors that need to be fulfilled to avoid dissatisfaction (1959). Our study however holds that the role of the salary as a

motivational factor in dependent on the role salaried work plays in the local setting. The importance placed on attending seminars and workshops clearly illustrates this point. The amount paid as daily allowance depends on the type of employment contract and the location of the seminar or workshop (The United Republic of Tanzania, 2008i). The concerns identified in paper I about selection of staff to attend seminars clearly indicate the immense importance of maximising the salary and hence these findings do not fully concur with the findings of Herzberg et al. (1959). It has however been argued health workers' practice of maximising the allowance have a detrimental effect on the health system. Ridde claims that "[a]cute 'perdiemitis' is decidedly one of the most prevalent illnesses in African public health projects." (2010). Several studies from Tanzania have shown a relative high degree of absenteeism from the workplace, partly due to attending seminars. The importance such allowances play in increasing the total payment largely explains Ridde's claim that the practice of chasing allowances has a negative impact on the quality of health services due to absenteeism. Our study concurs with the findings from Tanzania by Manzi et al. who argue that improved health services management is required to avoid staff absenteeism (2012).

Paper II and paper III also identified that health workers place much emphasis on financial aspects of working conditions. In paper II, it was found that health workers evaluate their workplace and make decisions on workplace based on their expectations to the future pension benefits. This finding resonates with findings of paper I and the importance of securing resources to the household. In paper III it was found that one reason for the reluctance towards the Open Performance Review and Appraisal System (OPRAS) was that the system doesn't offer any tangible financial benefits. Moreover, it is reported that OPRAS seems not to be integrated with policies for training and skill development (The United Republic of Tanzania, 2010c) which could have provided salary increase in the future. Health workers expressed high expectations towards the results-based payment system as this was as seen as offering additional payment on top of the basic salary.

5.4 Recognition and supervision

In Tanzania, important national documents, for example the Human Resource for Health Strategic Plan 2008-2013 (The United Republic of Tanzania, 2008c), have a focus on increasing the number of health workers in Tanzania and to improve health workers' qualifications. Some documents, for example the Health Sector Strategic Plan III also emphasises the importance of health workers' motivation, however this his report also spells out the importance of supportive supervision (The United Republic of Tanzania, 2009:26).

The study has identified a considerable lack of systematic and thorough supervision as well little effort from the management side of recognising good performance. Both empirical studies and theoretical approaches to workplace motivation place emphasis on the importance of workers being recognised for their effort. Herzberg et al. placed the factors achievement, recognition, work itself, responsibility, advancement (in ranked order) as important motivators (1959:59-66). Several of the referred studies above from Tanzania and other countries in sub-Saharan directly or indirectly emphasise the importance of these factors for motivation. These are factors important for health workers' perception of the role they play at the workplace. Being seen and valued and important at the workplace hence emerges as a very strong motivating factor.

The distinction between inner motivation and being motivated by factors external to the individual is generally accepted. The Self-determination theory sees the innate needs for *autonomy, competence and relatedness* as constituent parts of intrinsic motivation. It is held when these needs are satisfied they "yield enhanced self-motivation and mental health and when thwarted lead to diminished motivation and well-being." (Ryan and Deci, 2000b:68). Motivation is conceptualised as ranging from amotivation to intrinsic motivation (Ryan, 1995:406). Between the two extremes lie various forms of extrinsic motivation. Our study has not aimed to measure intrinsic motivation, but has revealed that intrinsic motivation is very important in the health sector. Many of the interviewed health workers emphasise their calling, or vocation,

as important for their work. Some of them explained that they work hard because of the satisfaction it gives to be able to assist patients who need help and care. Health workers' emphasis on the importance of having a calling or determination to serve patients indicates that there is latent motivation possible to nurture. To understand the importance of intrinsic motivation it should be acknowledged that intrinsic motivation is in flux and exists in the nexus between a person and a task. Moreover, it has been pointed out that intrinsic motivation varies much between people. Thus, if the work environment is not conducive to nurture the intrinsic motivation, the motivation can only be upheld if extrinsic motivation is increased. However, motivation contingent on external rewards needs to be maintained and there is a considerable risk of compromising motivation if the incentives can not longer be offered.

The individual goals set in OPRAS could ideally be the basis for feedback and supervision, but the experience with OPRAS is however that it does not serve this purpose. The degree OPRAS is used for individual feedback is likely to vary from one workplace to another depending on the workplace leadership and management procedures. Supervision and recognition are constituent parts of the larger human resource management domains and these challenges need to be addressed through adequate planning at the national level and its local level implementation.

5.5 Resources and structural challenges

The Structural Adjustment Programmes (SAP) in many countries in sub-Saharan Africa led to huge challenges in service delivery in the public sector. The consequences in the health sector were serious strains on health workers through shortage of equipment and medicines, shortage of staff and deteriorating value of the salary. Several studies have reported serious negative consequences on health sector service delivery in Tanzania (Semboja and Therkildsen, 1995; Tibajuka, 1998b). Despite the considerable challenges in service delivery following the extensive structural adjustment, the People's Health Movement points out that the SAPs and the

Poverty Reduction Strategy Papers (PRSP) are still central documents in the development discourse in many countries in sub-Saharan Africa (2008:8). The structural adjustment policies are based on the privatisation of service delivery, income diversification and economic development are key issues in poverty reduction. Thus, in the wake of the structural adjustment in Tanzania, there has been an increased focus on economic development to improve living conditions. In Tanzania, the Poverty Reduction Strategy Paper (PRSP) states that “while budgetary expenditure will continue to be restrained because of macroeconomic considerations, special efforts will be made to channel the limited Government resources toward the support of key programs and social services” (The United Republic of Tanzania, 2000:18). Despite these considerable challenges, some positive developments are seen in Tanzania. Tanzania is currently experiencing a steady economic growth. There is however disagreement on the effect on the living conditions Kamat argues that “living conditions have not ‘perceivably’ improved” in rural Tanzania after the structural adjustment programmes (2008:377). Our study has however observed that despite that urban-rural divide, there has been a general positive development in Tanzania in terms of access to services, also in rural areas. An important question is the distribution of wealth within the country. There are indications of growing disparities in wealth in Tanzania, measured by the Gini index which has increased from 33.8 in 1992 to 34.6 in 2000 to 37.6 in 2007 (World Bank, 2012a). The much cited report of the *Commission on Social Determinants of Health* states that it is vital to address and tackle “the inequitable distribution of power, money, and resource” to overcome to challenge in health disparities (World Health Organization and Commission on Social Determinants of Health, 2008:43). Marmot argues that this should be an important concern across all sectors (2005:1099) and this adds another dimension to the importance of good governance. Good governance to ensure equity is vital in the health sector but also the society at large. Key elements in addressing these very important issues are the national policies and leadership. It has however been argued that in the wake of structural adjustment programmes, the “the power of governments to shape national policy is being considerably limited and diminished by an increasingly international economy” (Navarro, 1999). In a study from Tanzania,

Maluka et al. argue that the current strategy of devolution of power to the local governments has little impact the district level decision making and that the power asymmetries between the national and local level clearly influence the decision making (2010b). These structural factors provide both opportunities and restrictions which the Government of Tanzania has to address to overcome challenges in service delivery in general and the health system in particular.

In Tanzania, there has been an increased focus on financing the health sector. The aim of the Government of Tanzania to improve health services is clearly stated in the *Development Vision* (The United Republic of Tanzania, 1999b). The National Bureau of Statistics states that “Government expenditures on health have steadily increased from US\$ 3.46 per capita in 1995, to US\$ 6 per capita in 2000, to almost US\$ 9 per capita in 2006” (2007). The sources of financing the health sector in Tanzania comprise taxes plus income from health insurance schemes and user fees (The United Republic of Tanzania, 2011; see also The United Republic of Tanzania, 2008b:12). During the last decade, many donors have channelled resources to a new financing mechanism in the health sector, the Health Basket Fund (The United Republic of Tanzania, 2004). The Health Basket Fund was introduced in 1999 (Mubyazi et al., 2004:S169) and is a pool of funds from the donors for activities to be implemented under the Health Sector Strategic Plan III (The United Republic of Tanzania, 2009). The Health Development Partners Group in Tanzania claims that “[t]he combination of increased funding with financial decentralization has given the districts the possibility to selectively increase resources for key interventions.” (2012). Detailed guidelines exist on calculating the allocation to each district as well as on distribution of various activities within the district (The United Republic of Tanzania, 2003d; The United Republic of Tanzania, 2001a). The Joint External Evaluation of the Health Sector in Tanzania 1999-2006 states that “the Health Basket Fund has been a particularly effective mechanism, alongside of the system of Health Block Grants instituted by the Government of Tanzania.” (COWI et al., 2007:21). The funding mechanisms of the health sector are important in addressing the health sector challenges identified. The

challenge of shortage of resources in the public health sector can only be alleviated through increased funding.

It is however important to contrast the relative optimism noted in Tanzania with observations from other countries in sub-Saharan Africa. On a general level in sub-Saharan Africa, Labonte et al. found in 2004 that the public expenditure on health in sub-Saharan Africa has been reduced (2004:177). The same year the Joint Learning Initiative stated on a more optimistic note that “[a]lthough few African countries have yet to meet the Abuja target of allocating 15 percent of governmental expenditures to health, many are moving their budgetary allocations in the right direction.” (2004:17). The mixed picture of investments in the health sector in many countries becomes more worrying because of the complex coordination of support to the health sector in low-income countries. The difficulties of coordinating vertical and horizontal approaches are well known (Mills, 2005). Moreover, effective coordination requires that stakeholders, i.e. both donors and the national government develop a joint plan for improving the health and sector and that the national budgets accommodate and plan for the use of the available funds (Sundewall et al., 2009:123). In Tanzania this process has largely been successful because of the role of the Health Basket Fund.

In addition to the overall funding, the management of the available resources is crucial. Sanders et al. argue that to overcome the human resource crisis in Africa it is imperative to address “[r]etention policies, including financial and non-financial incentives such as accelerated training, support and supervision” (2005:758). In addition to the need for planning, good practices are needed in all phases of implementation of the policies. Dieleman et al. argue that “governance to improve HRH must be viewed as inseparable from the wider health system and state governance within which it is integrated.” (2011). The issue of governance is multifaceted, but the interaction between health workers and the employer is a vital aspect of governance. The claims about unfairness and flawed human resource management thus indicate that improved transparency in all aspects of health sector governance could play a vital role in increasing health workers’ motivation.

The introduction of the new results-based payment has been discussed above. The donors, with Norway as the lead donor (Morgan and Eichler, 2009:10), have been instrumental in develop the first plans for this scheme through commission in feasibility studies (Smithson et al., 2007; Smithson et al., 2008) leading up to the official documents for implementation (The United Republic of Tanzania, 2008e; The United Republic of Tanzania, 2008d). The donors however expressed much concern about the modalities in the plans, and an appraisal study was commissioned (Lauglo and Swai, 2009). The initial plans were halted and replaced by a much more detailed plan to be piloted in one region (The United Republic of Tanzania, 2010a).

The impact of these shifting strategies and the information to the health workers led to much confusion and disappointment. In this setting it is striking that the Primary Health Services Development Programme (PHSDP) emphasise the need for a coherent and transparent system for human resource management, and it is acknowledged that “[h]aving multiple players in the management of human resource for health has contributed to inefficiency in some practices including development, recruitment, deployment and retention processes.” (The United Republic of Tanzania, 2007a:12). In a review study, Dieleman and Hilhorst make a similar observation of fragmented responsibilities for human resource management issues (2011). The implementation of results-based payment in Tanzania, alongside OPRAS, clearly demonstrates some of the grave challenges in building a coherent and transparent human resource management system.

5.6 Health workers’ exit, voice and loyalty options

A challenge in human resource management is to implement effective management systems which at the same time pay attention to fulfilling the employees’ entitled claims. In our study we have seen that health workers’ experience of not receiving what are claimed to be entitled benefits leads to frustration at the workplace. Dissatisfaction with working conditions inevitably impact on the commitment which

in turn may influence work performance and ultimately the quality of the health services.

Health workers' claims concern for example unfairness in allocation of goods and resources as well as claims that the employer does not fulfil the contract, relating to both the formal contract and the psychological contract, are discussed above. The underlying notion of the psychological contract is that an organisation's failure to honour the psychological contract leads to feelings of mistrust, job dissatisfaction, and lower organisational commitment (Rousseau, 1995). In our study the psychological contract has proved to be a relevant theoretical approach to the study of the employer-employee relationship. In the setting of dissatisfaction with the working conditions health workers develop responses and strategies to overcome the unsatisfactory situation.

Turnley and Feldman employs Hirschman's framework of *exit*, *voice*, and *loyalty* (Hirschman, 1970) in the study of the psychological contract (1999). Albeit Hirschman's model was initially developed for studies of political participation, the model seems useful in studies of behaviour when faced with several options of action in response to specific circumstances. Health workers may hence respond by accepting the working conditions (*loyalty*), or protest against working conditions (*voice*) or leave the workplace (*exit*).

The *exit* option refers to leaving the workplace or health facility for other employment opportunities or leaving the health sector altogether. In paper II it was explained that health workers' perceptions of difference between various employment options have much impact on whether to leave a workplace or to stay. The shortage of trained health workers in Tanzania makes it in principle easy to change workplace if not bound by contractual agreements to work at particular health facilities. It has been reported that health workers' age has an impact on preferences for workplace and decisions on leaving a workplace (Hagopian et al., 2009). Zurn et al. argue with reference to nurses that "younger, well-educated nurses are likely to want to develop their careers and that this is likely to mean they may change their employer or even

their profession” (2005:18). Kolstad reminds us that it not necessary the location of the health facilities that make health workers reluctant towards working in rural areas but the “poor infrastructure and the fear of falling behind in professional development” (2010:208). Moreover, it has been argued that the health sector has lost its attractiveness as an employment opportunity in sub-Saharan Africa (Connell et al., 2007). The option of loosing health workers is another dimension which needs attention.

The *voice* option takes several forms. Claims and complaints to the employer are examples of the collective voice option. In many countries the trade unions have a very important role in mediation between the interests of the employers and employees’ organisations. The voice option is also exercised at the workplace and many of the research participants reported that they had brought their complaints to the hospital or district offices working on human resource management.

The *loyalty* option in principle refers to accepting the working conditions. Accepting the working conditions does however not guarantee motivation. The parallel to the two-factor theory of Herzberg et al. (1959) becomes evident. An employer may thus provide working conditions sufficient to ensure that staff members maintain their employment, but this is not enough to motivate staff.

The fourth option discussed by Turnley and Feldman is *neglect*. Actions falling within the category of neglect include for example reducing work efforts, paying less attention to quality or becoming lenient to absenteeism. Neglect thus encompasses activities or responses to working conditions that have negative consequences for the organization and ultimately the quality of health services. Turnley and Feldman argue that the effect of violations of the psychological contract “may result in increased exit, increased neglect of in-role job duties, and a reduced willingness among employees to defend the organization against outside threats.” (1999:920). The type of action by a staff member is the result of evaluations or assessments taking personal and organisational factors into account.

All the strategies referred above have been found in our study. The exit option is clearly utilised in order to advance one's own working conditions through changing workplace. In Tanzania, the voice option is evident in the vocal complaints on the salary level in the health sector. This issue has come to the forefront in trade unions' work on improving working conditions and the role of trade unions in the health sector in Tanzania seems to be increasing. Several strikes at the national hospital indicate health workers, in particular doctors, determination to increase the salary level (Daily News, 2010; Daily News, 2012). The loyalty option is clearly an option to many health workers which in practice refers to accepting the working conditions without being in the forefront of requesting changes and improvements. The line between loyalty and neglect is however difficult to draw. Apparent loyalty towards the employer may easily shift to outright neglect. In this field of options available, some requiring explicit effort and other only requiring that the work is performed, health workers evaluate the expected advantages and potential costs of embarking on these options. The ability to navigate the options available, Vike argues, can "be seen as results of cognitively effective ways of dealing with options, anticipating scenarios and possible sanctions" (2011:379). When acknowledging that health workers are consciously acting individuals responding to the environment it becomes important to address the wider context.

5.7 Health workers and the larger societal structures

In the sections above the focus has been on how health workers are influenced by the working conditions. Dissatisfaction with the working conditions leads to individual strategies and actions to overcome the challenges met. Some actions can have a negative effect on the availability of health workers or a detrimental effect on motivation, effort and ultimately the quality of health services. An important contribution of anthropology is the emphasis on explaining actions and behaviour within a local setting. Insights into health workers' strategies can be gained by studying how health workers' *agency* can explain strategies and actions in response to

the work environment. Agency in anthropological theory refers to peoples' possibility of choosing actions and strategies to influence one's own livelihood. Also in the Self-determination theory agency is important as the theory attempts to explain the human nature to influence and improve one's own life. Thus, the focus on agency in the self-determination theory resonates with the anthropological approach. In our study, the importance placed on agency in both anthropological theory and the self-determination theory become important tools in understanding health workers actions in response to the working conditions. Paper II and paper III addressed issues where the decisions at the national level have much impact on how health workers experience their working conditions. The difference between the pension schemes is clearly an example of how legislation has much impact on the financial benefits available to health workers. Justice argues that it is important to address how policies and plans interact with cultures at the local level (1999:330). In the study district, access to formal employment is limited and salaried work highly sought after. The focus on both salary and additions to the salary in terms of allowances as well as the focus on the future pension benefits has to be interpreted in this particular setting.

The performance appraisal, OPRAS, and results-based payment fall under New Public Management which has informed public management policies in Tanzania during the last decades. New Public Management has also informed many of the interventions under Public Sector Reform Programme (PSRP). Some studies argue that there are fundamental differences between the post-colonial African model and the Western model of public administration. Jackson claims that these two models are incompatible and writes that "cultural need in Africa to recognize people as having a value in their own right and as part of a social community, which may be in direct contradiction to a predominant Western view in organization, and management theory which sees people as a means to an end within the organization" (2002:1000; see also Jackson, 1999). Whether one agrees or disagrees with Jackson, it should be emphasised that interventions to increase motivation and performance need to address the specific context and the influence of historical, political and cultural and socio-economic factors.

In a review of studies of human resource management interventions in low- and middle income countries, Dieleman et al. found that “health workers' awareness of local problems and staff empowerment, gaining acceptance of new information and creating a sense of belonging and respect.” were important factor in increasing motivation (2009). This finding by Dieleman et al. attests to the importance of the components *autonomy*, *competence* and *relatedness* in the Self-determination theory. In a similar vein, Grindle argues that “[e]ncouraging the development of characteristics associated with positive organizational cultures may be an important way of improving public sector performance where the broader economic, social, and political environment as well as the public sector in general are seriously detrimental to good performance.” (1997:491).

At the same time as performing work guided by a certain degree of intrinsic motivation, a health worker decides on strategies to achieve personal goals, for example in terms of economic output from the work. The degree of conscious planning of strategies and individually shaped trajectories varies from one person to another. Again, it is important to stress that for the vast majority of health workers, the motivation is not intrinsic *or* extrinsic. A combination of both forms of motivation is in play and both can and should be supported. The Joint Learning Initiative states that for many health workers, working in the health sector “is not just a job or a career - it is a vocation.” (2004:18). An issue cutting across the diverse approaches to reasons for low motivation and performance and strategies to increase motivation, is the very important point made the Joint Learning Initiative. The reports states that health workers “must be treated as partners in delivering health, not mere employees.” (2004:22). Our study strongly emphasises the importance of treating health workers as the most important part of the health system. Only through good human resource management can health services be improved.

5.8 Discussion of methods

The study draws on thorough knowledge of the area gained during earlier long-term stays for work and research. A two year long stay in the district from 1992 to 1994 working with the Norwegian Volunteer Service, at the time part of the Norwegian Agency for Development Cooperation (Norad), provided very good possibilities to obtain detailed knowledge of the local area and the country in general. Research experience from the same area in 1998 and 1999 proved to be a very useful asset before embarking on this study. Several of the co-authors of the research papers have similar long-term work- and research related experience from northern Tanzania. Having stayed in the area over an extended period of time or repeated visits to the area and having proper working knowledge of the national language have been important assets in enhancing access to the public discourse on the research topics.

5.8.1 Transferability

Research of good quality may make the research findings from one particular context applicable in a larger context. To assess whether the research is carried out in a way that makes it possible present the results as new knowledge we need to evaluate the research process. Graneheim and Lundman write that research “must be evaluated in relation to the procedures used to generate the findings” (2003:109). Regardless of the concepts used to evaluate the research, it has to withstand a critical scrutiny, what Malterud refers to as “the research project has to withstand systematic attempts of falsification by posing critical questions to the findings and to the research process” (translated from Norwegian) (2011:18). In qualitative research, the question is thus whether the methods applied are adequate to elicit relevant information on the issues studied. The research process lays the foundation for the degree to which the conclusions are valid in another context or setting. This issue is often referred to as *transferability* and can be defined as “[t]he range and limitations for application of the study findings, beyond the context in which the study was done” (Malterud,

2001:484). These general reflections make it necessary to look in detail at the context of the study to assess the transferability of our findings.

Each district in Tanzania has its particular characteristics in term of agricultural practices, livelihood, ethnic composition and a range of other factors. Mbulu District shares many features with the average rural districts in Tanzania. The majority of the population is very dependent on agriculture and the district shares many features in common with other rural districts in terms of the same administrative structure, high disease burden, shortage of health workers and general resource constraints in the health sector. Mbulu District is somehow different from other rural districts in Tanzania in two respects. The ethnic composition is atypical as the district is not populated by Bantu ethnic groups. However, among health workers, a considerable number of the current staff have moved to the district from outside the Iraqw language area and for this reason the national language, Swahili, is the most important language in the health services. The second factor that makes Mbulu District somehow atypical is Haydom Lutheran Hospital being located in the district. However, church-run run hospitals are found in many other Tanzanian districts and the number of hospitals in Tanzania reported above indicates a considerable presence of faith-based, or church-run, hospitals in rural areas. This does however not mean that each district has one hospital of each category. Haydom Lutheran Hospital probably has a more prominent role than many other church-run hospitals. This creates a situation where the dynamics between the different sectors area revealed as people have experience with both sectors. This situation may also create increased concern about the differences between the two sectors. The main issue in terms of the difference in employment between the two sectors, namely the pension funds is however determined by national legislation and thus not influenced by district characteristics.

The relative close travel distance between district hospital and Haydom Lutheran Hospital make it possible to transfer patients that the public sector health sector can not help properly. In terms of patients' decision on where to seek medical treatment, Haydom Lutheran Hospital receives a large number of patients who have bypassed the public health service. The extent of difficult medical cases to handle in the public

sector may thus be lower than in other districts. In terms of working conditions in the public health sector in the district, there are few indications that the public sector health facilities in Mbulu District are better off than other rural districts in the country.

5.8.2 Validity

Two important questions should be asked about the research: 1) have I gained relevant data about my study questions? 2) have I interpreted the data correctly? These two questions touch upon two general criteria used to evaluate the quality of research, *validity* and *reliability* respectively. Albeit primarily used in quantitative research, the reasoning behind the validity and reliability concepts can be drawn upon in assessing the research process also in qualitative research. Validity refers to whether the research has captured relevant information about the study topic. In inductive qualitative studies the aim is not to determine causality but to generate knowledge on how the study phenomenon is perceived by the study participants. Reliability generally refers to whether research will yield comparable results if repeated. With an inductive qualitative data collection approach, the data collection method inevitably compromises the consistency and comparability of the data over time and thus the concept becomes less relevant in the qualitative research employed in our study.

It is important explain the measures and strategies to ensure validity in the research. In our study validity has been tried achieved through employing several different methods – methods triangulation – to collect as broad and comprehensive data as possible to answer the research questions. A combination of IDIs and FGDs was found to be very useful as it allowed for pursuing the research topic in detail with individual research participants in the IDI as well as getting access to information emerging through the interaction between FGD participants. The interview- and topic guides asked questions on the same topics in the IDIs and FGDs respectively. This approach was deliberately chosen to expand the amount of data. The development of the initial interview- and topic guides was informed by a literature review. Each IDI or FGD led to reflection on the applicability of the guides and careful revisions were

carried out. Moreover, the IDIs with local community members and the continuous informal discussion with local people further increased process of revising the guides. Through these various methods, applied with a high degree of flexibility, validity was tried achieved through access to diverse perspectives seen by differently situated categories of health workers, administrators and people outside the health sector.

The data collection was carried out over time, in five distinct phases. Through revisiting the health facilities, in particular the district hospital, good access to data was achieved and the possibility to obtain additional information on issues discussed in the previous phase proved very useful. The long-term experience with the area, including previous qualitative research experience in the area further increased access to data through the language- and cultural competence. The data collection was split in five phases as this was deemed appropriate. An alternative approach could have been a longer period of stay which would allow a more in-depth data collection at one or a few health facilities. Both approaches have their advantages and disadvantages.

The inclusion of health workers at various levels in the public health sector proved useful. An alternative approach, instead of covering the full range of health worker cadres could have been to focus on one cadre, either nursing staff with its various sub-categories, Clinical Officers or Assistant Medical Officers. Through such a focussed approach, more in-depth data could have been elicited on the working conditions and factors relevant for motivation in each cadre. Moreover, this approach could also have facilitated increased access to information on how the cadre is managed in terms legislation on relevant rights and responsibilities.

The concepts of validity and reliability can also be applied with reference to transcription of interviews in qualitative methods. Kvale says that transcripts of recordings are “not the rock-bottom data of interview research, they are artificial constructions from an oral to a written mode of communication” (1996:163). Transcription reliability refers the degree of the correspondence between the oral text and the written text. Transcription validity is more difficult to achieve as it addresses not whether the transcript is verbatim but concerns whether other relevant information

about the data is captured. To ensure transcription validity the transcript must capture also the non-spoken parts of the communication. Transcription validity can be ensured through listening carefully through the corresponding audio recording to ensure that vital information about the research participant's response to the questions is captured. In our research transcription reliability has been tried ensured through involving several people in the transcription process. Transcript validity was tried ensured through the work of listening carefully the audio tapes. This was in particular done where the transcripts indicated that research participants in IDIs or FGDs responded in ways difficult to capture and to express in text.

5.8.3 Reflection on the researcher's position

Data come to be in the interaction between the researcher and the participant, and sensitivity and openness in collecting data are crucial factors for success. Malterud argues that the effect of the researcher(s) on the research setting should be carefully assessed (2001:484). First and foremost, the trust between the researcher(s) and study participant is very important. Moreover, the setting of the IDI or FGD may have impact on the research participants' willingness to speak freely. A setting offering a quiet and relaxed atmosphere is more conducive than a setting with noise or interruptions. If research participants experience intimidation or compromised confidentiality this may strongly influence the quality and depth of data. If a researcher is assisted by other people this may have impact on the data. The role of the research assistant, later research collaborator was discussed above.

The researcher's pre-understanding when collecting and analysing the data inevitably has impact both on the data collected and the analysis. Dahlgren writes that "research is value-bound, and the pre-understanding, expectations, and biases of the researchers must be openly debated" (2004:12-13). Albeit value-free research is held out as a goal, it is generally accepted that all research is influenced by the researcher and the setting of the research. Research participants' interpretation of the role of the researcher is likely to be influenced by the knowledge they have of the researcher.

The church-run hospital had been visited many times before the data collection, and hence several of the research participants knew the researcher. In the church-run hospital, Norwegians have been in central management positions since the hospital was inaugurated. Moreover, there is a continued presence of a considerable contingent of Norwegian expatriates and students at the hospital, hence it is likely that the researcher was associated with other Norwegians. In the public sector district hospital the researcher was to a larger extent perceived as a foreigner collecting research data. The researcher was however always introduced as having lived and worked in the same district earlier, which was natural due to language and cultural knowledge.

The presence of a foreign researcher asking questions about working conditions may have had impact on the issues the research participants brought up. It may also have exaggerated the emphasis on some issues and downplayed other issues. The majority of the research participants put much emphasis on the importance on increased salary and access to allowances adding to the total income. The financial aspects of working conditions together with access to resources at the workplace are probably the most tangible components of the working conditions. Complaints and statements pertaining to the salary may not necessarily concern only the salary level but can be seen as an indication of concerns about other aspects of working conditions. During the course of the data collection it was observed that huge investments were made in the public health facilities but these positive changes were only emphasised by some of the research participants.

5.8.4 Reflections on the use of software for data analysis

Lu and Shulman raise some cautionary notes about using software for analysis of qualitative data. They held that mastering the software may require much time and effort and that the use of software may shift the focus from quality and depth of data to quantity of qualitative data (2008:108). In our research, NVivo (NVivo 7, NVivo 8 and NVivo 9) was found very useful as the researcher had in-depth knowledge of the software before the data collection started. The NVivo software facilitated the

continuous access to audio files and the coding of both audio files and the corresponding transcript. NVivo was also used to manage all kinds of additional data like research notes from IDIs and FGDs, brief summaries from informal discussions as well a range of relevant documents collected. All this material was subject to coding for further use in the data analysis.

It is important to acknowledge possible limitations and even dangers in making qualitative research dependent on such software packages. In order to utilise the features in the software it is vital that the researcher understands that the software is only a tool assisting in the analysis through organising data, exploring data, managing coding and recording analytical steps. Regardless of whether software is used to assist in the analysis it is very important to lift the gaze from the details of coding of the transcripts to search for overarching themes and to reflect on the meaning of the content of the data.

The analysis process in qualitative research by its very nature is at times systematic but at other times chaotic in that it moves between interviews, between levels, in search for major and minor patterns as well as contradictions, ambiguities. The four steps in qualitative research suggested by Malterud (2011:111) were tried followed but applied flexibly as the analytical process to a large degree moved back and forth between these steps. Throughout the research process, from data collection, through data analysis and work of writing the research papers, the data were revisited to look for the broader and overarching issues emerging from data. This reflection proved very useful in combination with a more stringent approach to data analysis.

6. Conclusion

Health systems in low-income countries face considerable challenges in providing good quality services. Many countries experience overall shortages of trained health workers and difficulties in ensuring equitable distribution of health workers. These factors clearly compromise the quality of rural public health services. In this setting the motivation and effort exerted by the available health workers become vital for the quality of health services.

Limited access to formal employment in rural Tanzania makes salaried work very attractive, but health workers in our study experience that the salary does not suffice to meet the financial demands of the household and the larger family. These experiences are found to severely compromise the dedication towards the work. The salary level and additions to the salary are thus very important for motivation. In the same vein, health workers find the future pension benefits to be very important for the reason of securing an adequate standard of living when retiring.

Knowledge about entitled rights and obligations is vital to ensure that the workforce is sufficiently informed about their working conditions. Without this information, confusion, rumours and perceptions of unfairness at the workplace will prevail. At any workplace, a staff member's experience of being supervised in the work and being recognised when having performed well are very important factors to maintain or to increase motivation. This is vital in any setting, but even more so in a low-income context where resources are limited and where the challenges of making ends meet at home is very real and tangible. Health workers' experience of a low salary level combined with perceived unfair treatment at the workplace, influence their strategies and actions relating to the workplace tasks. The serious shortcomings identified and health workers' strategies need to be carefully addressed through better human resource management to improve the quality of health services.

7. Policy implications and future research

Policies to strengthen the health system in Tanzania need to focus on the overall access to resources, improving distribution of qualified health workers and the not the least implementing relevant interventions to increase health workers' motivation. A thorough understanding of health workers' perceptions of their working conditions is vital when devising policies to increase motivation in the health sector in resource constrained settings. Several recommendations can be made on how to increase health workers' motivation:

- Implementation of legislation on working conditions, in particular regarding all aspects of payment and possible additions to the salary, should be carried out with much emphasis on transparency in decision making.
- The difference between the social security funds is a very important factor in health workers' decisions on workplace and requires immediate attention.
- Careful guidance and assistance to the district level in implementing OPRAS could increase its applicability.
- The introduction of a results-based payment alongside OPRAS requires much attention.
- Overall, improved human resource management is a key factor to ensure motivated and well performing health workers in the rural health services in Tanzania.

Future research is needed to increase our knowledge on how to increase health workers' motivation in resource constrained settings. In Tanzania, and other countries implementing result-based payment, the experience with this payment should in particular be carefully addressed. Whether results-based payment yields the expected results without compromising other aspects of the health system needs to be scrutinised through future research.

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