

**PERCEIVED EFFECT OF CORRUPTION ON THE QUALITY OF PUBLIC
HEALTH SERVICES IN MBEYA URBAN DISTRICT, TANZANIA**

AMONNGATA

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE DEGREE OF MASTER OF ARTS IN RURAL
DEVELOPMENT OF SOKOINE UNIVERSITY OF AGRICULTURE.
MOROGORO, TANZANIA.**

EXTENDED ABSTRACT

Corruption is a concern in all sectors of the economy, and it is a critical problem in the health sector. Nevertheless, there is little empirical evidence which shows the way corruption affects the quality of health services. The main objective of this study was to determine the perceived effect of corruption on the quality of public health services. The study was conducted in Mbeya Urban District and it adopted a cross-sectional research design. Quantitative and qualitative data were collected using individual surveys and key informant interviews, respectively. A random sample of 180 individuals of which 91 (50.6%) were male and 89 (49.4%) were female was involved. Quantitative data were analyzed using the Statistical Package for Social Sciences. A Mann Whitney U test was used to compare between perceptions of corruption and respondents' characteristics. In addition, the same test was used to compare between the effect of corruption on quality of health services and respondents' characteristics. The results show that the overall corruption was perceived as an unfavourable phenomenon that negatively affected quality of health services. The results further show that there is a relationship between perceptions of corruption and marital status at 5% level of significance whereby singles perceived higher corruption than the married ones. In addition, a long queue was one of the major factors driving corruption during health services delivery. The result also showed that the quality of health services was perceived to be low. The relationship between age, wealth status and employment type and perceived quality of health services was statistically significant at 5% and 1% levels of significance. The study concludes that the perceived effect of corruption lowers the quality of health services. The study recommends that it is important to improve quality of health services. Generally, findings of the study shed light on the need for further research about the perceived effect of corruption on communication between clients' and health services providers.

DECLARATION

I, **AMONNGATA** do hereby declare to the Senate of Sokoine University of Agriculture that, this dissertation is my own work done within the period of registration and that it has neither been submitted nor being concurrently submitted in any other institution.

Amon Ngata Date

(MARD Candidate)

The above declaration is confirmed;

Dr. Samwel J. Kabote Date

(Supervisor)

COPYRIGHT

No part of this dissertation may be reproduced, stored in any retrieval system, or transmitted in any form or by any means without prior written permission of the author or Sokoine University of Agriculture in that behalf.

ACKNOWLEDGEMENTS

Firstly, I thank God the Almighty for enabling me to accomplish this study. Besides, I express my sincere gratitude to my supervisor, Dr.Samwel J. Kabote for his unforgettable supervision through every stage of my study. I also thank all staff members of the Department of DevelopmentStudies (DDS), Sokoine University of Agriculture (SUA) for the knowledge with which they have provided to me. In addition, I would like to extend my heartfelt gratitude to the Mbeya Urban Council for granting me permission to carry out my study in their area of jurisdiction.

Moreover, I am indebted to Ms Rachel Sandagila,Claud Kyando, Ardolf Tweve and Mr Brighton who assisted me in data collection. I am alsoindebtedto classmates for the valuable comments about this study.

Since it is not possible to mention everyone, I wish to express my sincere thanks to all my friends who helped me in one way or another at different stages of my studies. Their assistance and contribution is highly acknowledged. Lastly, but not least, I would like to thank all my respondents without whom this work would not have been possible. However, any shortcoming found in this study is my fault and should not be attributed to anyone else.

DEDICATION

I dedicate this work first to the Almighty God for his love and guidance. Secondly, to my loving and caring parents Grayson Athuman Ngata and my mother Medelina Hosea Dzilo for the immense sacrifices they made to build a good foundation for my life. Thirdly, to my sister Upendo Grayson Ngata, Anibariki Grayson Ngata, Kesha Grayson Ngata and to my brother Joshua Grayson Ngata. May God bless you abundantly.

TABLE OF CONTENTS

EXTENDED ABSTRACT	ii
COPYRIGHT	iv
ACKNOWLEDGEMENTS.....	v
DEDICATION	vi
TABLE OF CONTENTS.....	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF APPENDICES.....	xii
LIST OF ABBREVIATIONS AND ACRONYMS	xiii
CHAPTER ONE.....	1
1.0 INTRODUCTION	1
1.1 Background Information.....	1
1.2 Statement of the Problem	3
1.3 Justification of the Study.....	4
1.4 Objectives of the Study.....	5
1.4.1 General objective	5
1.4.2 Specific objectives	5
1.5 Research Questions	5
1.6 The Principal Agent Theory	6
1.7 Conceptual Framework	7
1.8 Organization of the Dissertation.....	9
CHAPTER TWO.....	13
2.0 Clients' Perceptions of Corruption in the Health Sector in Mbeya Urban	
 District, Tanzania	13

2.1	Abstract	13
2.2	Introduction	14
2.3	Methodology	16
2.4	Results and Discussion.....	18
2.4.1	Respondents' characteristics.....	18
2.4.2	Types of corruption based on respondents' characteristics	19
2.4.3	Client's perceptions of corruption	20
2.4.4	Factors driving corruption in the health sector	23
2.5	Conclusions and Recommendations	24
	REFERENCES	26
	CHAPTER THREE	30
3.0	Influence of Corruption on Quality of Health Services in Mbeya Urban District, Tanzania.....	30
3.1	Abstract	30
3.2	Introduction	31
3.3	Methodology	33
3.4	Results and Discussion.....	35
3.4.1	Respondent's characteristics	35
3.4.2	Extent to which corruption affect quality of health services based on respondents characteristics	36
3.4.3	Perceived quality of health services	37
3.4.4	Perceived effect of corruption on quality of health services by respondents' characteristics	42
3.5	Conclusions and Recommendations.....	43
	REFERENCES	44
	CHAPTER FOUR	47

4.0	CONCLUSIONS AND RECOMMENDATIONS	47
4.1	Conclusions	47
4.1.1	Clients' perceptions of corruption in the process of receiving health services	47
4.1.3	Perceived quality of public health services	47
4.1.4	Influence of corruption on quality of health services	48
4.2	Recommendations	48
4.2.1	Corruption perceived unfavourable in the health service delivery	48
4.2.2	There is need to improving quality of health services	48
4.2.3	Expansion and construction of new large health facilities	48
	APPENDICES	49

LIST OF TABLES

Table 2.1: Respondents' characteristics in percentages	19
Table 2.2: Respondents' responses on types of corruption based on respondents' characteristics in percentages.....	20
Table 2.3: Respondents' responses on perceptions of corruption in percentages	21
Table 2.4: Respondents' perceptions of corruption by their characteristics	23
Table 2.5: Respondents' responses on factors driving corruption	24
Table 3.1: Respondents' characteristics in percentages	35
Table 3.2: Respondents' responses on the extent to which corruption affects quality of health services.....	37
Table 3.3: Respondents' responses on perceived quality of health services in percentages.	37
Table 3.4: Respondents' responses on perceived quality of health service by respondents' characteristics.....	41
Table 3.5: Respondents' responses on perceived effect of corruption on quality of health services in percentages.....	42
Table 3.6: Respondents' responses on effect of corruption by socio-economic and demographic characteristics.....	43

LIST OF FIGURES

Figure 1.1: Conceptual framework showing perceived effect of corruption on public health services.....	8
Figure 2.1: Respondents' categories on clients' perceptions of corruption	22
Figure 3.1: Respondents' responses on level of quality of health service	40

LIST OF APPENDICES

Appendix 1: Questionnaire for Individual Survey	49
Appendix 2: Checklist of item	53
Appendix 3: Reliability Analysis on Clients' Perceptions of Corruption.....	54
Appendix 4: Reliability Analysis on Perceived Quality of Health Services	55
Appendix 5: Reliability Analysis on Perceived Effect of Corruption on Quality of Health Services	57

LIST OF ABBREVIATIONS AND ACRONYMS

CDO	Community Development Officer
CPI	Corruption Perception Index
DDS	Department of Development Studies
KACC	Kenya Anti-Corruption Commission
LHRC	Legal for Human Rights Centre
N	Population Size
n	Sample Size
PCCB	Prevention and Combating Corruption Bureau
SDGs	Sustainable Development Goals
SPSS	Statistical Package for Social Sciences
SSA	Sub-Saharan Africa
SUA	Sokoine University of Agriculture
UN	United Nations
UNDP	United Nations Development Programme
URT	United Republic of Tanzania

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background Information

The global community recognizes that health is a critical variable for measuring human development as well as human wellbeing (KACC, 2010). Improved health is linked to economic development. It is also one of the key issues in national and international development. For instance, the third goal of the Sustainable Development Goals, focuses on the achievement of universal health coverage which includes financial risks protection, access to quality essential health care services and to safe effective quality and affordable essential Medicare and vaccine for all (Osborn *et al.*, 2015). Although, the global community realizes the significance of good health in economic development, the quality of health services in many developing countries and Tanzania in particular, is always compromised by so many factors one being corruption (Kamuzora, 2005).

Corruption, which is a challenge in the health sector at all levels, can be traced back to 1960s in Tanzania. During the 1960s and 1970s, corruption was viewed as a big challenge of human rights having devastating impact in the health sector. This possibly affected the quality of public health services (Azfar, 2005). Therefore, improving quality of health services can be achieved through fighting corruption effectively.

Corruption occurs when public officials use their position and power for them and their relatives (Vian, 2007). The phenomenon occurs not only in the public health sector, but also in the private health sector. Although, corruption is a global concern, evidence shows that developed countries are less corrupt than developing countries especially in Sub Saharan Africa (Hussmann, 2011). Using Corruption Perception Index (CPI), Tanzania is

consistently ranked among the highly corrupt countries in the world. For instance, in 2008 Tanzania was ranked 102 out of 180 countries (Transparency International, 2011). Therefore, corruption in the health sector is a concern in all countries, but it is a serious problem in developing countries where public resources are used unwisely.

The effort to improve human health for development in Tanzania since independence in 1961 can be seen through the country's development policy and plans (Afrobarometer, 2006). The health policy emanates from the history of health service since independence. Before independence, health services were established in urban areas and were mainly curative. The colonial government did not make any effort to develop health services in rural areas (URT, 1990). After independence, health service plans were considered an integral part of the overall national development plans. The government approved the first five year development plan 1964 – 1969 including the section of health. Furthermore, the second five years development plan 1969 – 1974 was developed after the Arusha Declaration of 1967 which emphasized the policy of self-reliance and equitable distribution and access to various social services, for instance, health services (URT, 1990).

There is a general agreement in literature that corruption, in the health sector, has both negative and positive effects. On the one hand, the positive effects may include: allowing queue-jump of patients, reducing waiting time, increasing access to and provision of quality health services. On the other hand, the negative effects include: reducing resources which are effectively available for health, equity, effectiveness, increases the cost of services, discouraging people to use public services and, therefore, affecting the population's level of health (Hussmann, 2011; Adindu, 2010). What one client views as positive effect may not be the same to another client. Corruption affects public health

service via bribers extorted at the point of health services. This reflects poor relationship between clients and health service providers as explained by the principal agent theory (Pellegrini, 2011). The study was designed to determine the perceived effect of corruption on quality of public health services received by clients in Mbeya Urban District.

1.2 Statement of the Problem

There is little empirical evidence which shows the way corruption affects the quality of health services. This study focused on how corruption affects quality of health services. Corruption, does not only affect the health sector, but also other sectors including procurement, tax administration, police and the judiciary. By 2008, the health sector was ranked third in the list of sectors with highest incidence of corruption in Tanzania (Transparency International, 2011). In 2010, the health sector was ranked second after the police sector (Transparency International, 2013). These results were also reflected in the report by the Global Corruption Barometer in which respondents reported the following sectors as the most corrupt: police (87%), judiciary (86%), health sector (79%), civil service (75%) and the education system (74%) as reported by Transparency International (2013).

The Global Corruption Report points out that corruption leads to the 'blood loss' of the health system. It also results in market distortions and fake drugs, undermines the fight against diseases and also threatens achievements of the national goals, strategies and policies (Transparency International, 2006). Corruption has a direct unconstructive effect on access and excellence of patient service received. Similarly, it contributes to the rising problem of counterfeit of drugs which lead to increased disease resistance (Vian, 2007). In Tanzania, corruption in the health sector can literally be a matter of life, death and higher mortality rates (Kamuzora, 2005). In a study done in Bagamoyo District, 63.6% of patients

interviewed agreed that corruption affects health services (Mallya, 2004). A similar situation was reported in Tanga, where it was observed that 23.6 % of patients interviewed were not satisfied with the quality of health services because of corruption (Maier and Urassa, 1997 cited by Mwakisu, 2005). Therefore, this study aimed at determining the perceived effect of corruption on the quality of public health services in Mbeya Urban District based on their characteristics.

1.3 Justification of the Study

Corruption exists in all types of health service systems. Paying bribes to get privileged access to public health service is one of the common forms of corruption. Health service providers have a wide range of opportunities to fit into place in corruption because they have strong influence over medical decisions, including prescribing medications, determining the length of a hospital stay, ordering tests and referring patients for additional consultations or services (Oye, 2013). In making these decisions, health service providers may act in ways that are not on the patients' best interests.

The Government of Tanzania has committed itself to fighting corruption in all spheres of public services. This commitment had been in place during the reign of the former presidents and it is there at this time of the presiding president. The former President Honorable Benjamin William Mkapa came to power in 1995 and was committed to fighting corruption. He set up a Presidential Commission of Inquiry against Corruption in 1996, known as the Warioba Commission, which undertook an in-depth diagnosis of the problem and made extensive recommendations as to how corruption should be prevented and combated (Afrobarometer, 2006). During the inauguration of the current parliament the presiding President, His Excellency Dr. John Pombe Magufuli made it very clear that in strengthening good governance, the problem of corruption will be dealt with relentlessly.

Despite those efforts to combat corruption, the problem persists particularly in the health sector. This study is in line with third goal of the seventeen Sustainable Development Goals which emphasizes on the need of ensuring healthy lives and promotion of wellbeing for all at all ages. The findings of this study will be useful to the Prevention and Combating Corruption Bureau (PCCB), policy makers and Minister of health, community development, gender, elderly and children.

1.4 Objectives of the Study

1.4.1 General objective

The general objective of this study was to determine the perceived effect of corruption on the quality of public health services using the case of Mbeya Urban District.

1.4.2 Specific objectives

- i. To assess service users' perceptions of corruption in the process of receiving health services;
- ii. To determine factors driving corruption in the public health services in the study area.
- iii. To assess the perceived quality of public health services in the study area; and
- iv. To determine the influence of corruption on the quality of health services in the study area.

1.5 Research Questions

- i. To what extent corruption occurs in the public health services?
- ii. Why do clients engage in corruption when they seek for public health services?
- iii. What effect does corruption have on the quality of health services?
- iv. To what extent the effect of corruption on the quality of health service perceived differently?

1.6 The Principal Agent Theory

The predominant theory of corruption within both political science and economics today is the principal-agent theory. This theory was coined by Stephen Ross and Barry Mitnick in 1973. The theory examines relationships as a tension between the “Principal” who demands a service and the “Agent” who provides it. The agent is responsible for detecting the needs of the patients and subsequently providing the best treatment in terms of quality (Kayode *et al.*, 2013). The agent competence in treating a patient is based on different components like interpersonal skills and ability to transfer information. On the other hand, principal quality of health services is positively related to doctor’s ability to transfer information to the patients.

The theory argues that both principal and agent are motivated by rational self interest. The connection of the theory to this study is how the principal and agent can manage their self interests (Kayode *et al.*, 2013). The problem arises not only just from conflict of interest but also from the privileged access of the principal to information which is the problem of asymmetric information. The agents who have been employed to provide a service will tend to use their superior knowledge for personal or private gains.

The theory has been applied to the public sector, focusing attention on problems of accountability and transparency created by asymmetric information flows between agents and principals, which lead to problems such as corruption in health service delivery (Keil, 2013). The theory has been used by different scholars like Einat Neumann, Shoshana Neumann, Asaju Kayode and Yen Siew Hwa in the context of medical care as well as public health service. It has also been used for the purpose of exposing the impact of corruption on effective public health service delivery. In addition, it has been used to

explain information gap between the principal and agents in service delivery(Kayode *at el.*, 2013).

The theory also guides research in analyzing factors of corruption. In this case, the principal hires the agent to act in such a way that the principal service is easily achieved. The bureaucratic procedures, unethical practice of health services providers, poor services, and social attitude are the factors that facilitate principal to bribe agent. The principal-agent theory is not without criticisms. On one hand, the theory ignores a great amount of organizational complexity, but on another hand, it negatively characterizes an agent's behavior as self-seeking and ignores agent loyalty, satisfaction, and identification with the principal's goals. The theory has been used in this study because it focuses the relationship between clients' and health services providers during services delivery(Keil, 2013).

1.7 Conceptual Framework

The variables that were studied are summarized in Fig. 1.1, and the expected relationships among them are explained thereafter. This conceptual framework is informed by previous empirical studies like Mwakisu (2005) and Azfar (2005). The thinking in this study is that demographic and socio-economic characteristics play double roles. On the one hand, demographic and socio-economic variables can be drivers of corruption, but on other hand, clients can be affected by corruption differently based on demographic and socio-economic characteristics (Mwakisu, 2005; Adindu, 2010). For instance, clients with non-formal education are likely to report more effects of corruption than those with formal education because those with formal education are more likely to have networking. Corruption is also likely to have more effects on those employed in the informal sector than those in the formal sector because those employed in the formal sector are likely to be aware of their rights as well as networking. In addition, women are likely to be affected more than men because of their special health needs (Kamorudeen *at el.*, 2012; Hwa,

2005). Moreover, the poor are also likely to be affected more than the non-poor because the poor have few choices and limited resource.

In the health sector, corruption is likely to be influenced by a number of factors. Long queue, bureaucratic procedures, resource shortage, pressure from medical workers and nepotism may influence corruption in the health sector. These factors are likely to influence corruption in the health services. For instance, long queue is likely to influence bypassing a queue in service provision. In addition, perceptions of corruption are the insurance, time saving, better saving and avoiding restrictions. These perceptions of corruption are expected to influence corruption. For instance, clients perceive that after recovery have to give gift to health services providers for getting better service (Kamorudeen *at el.*, 2012).

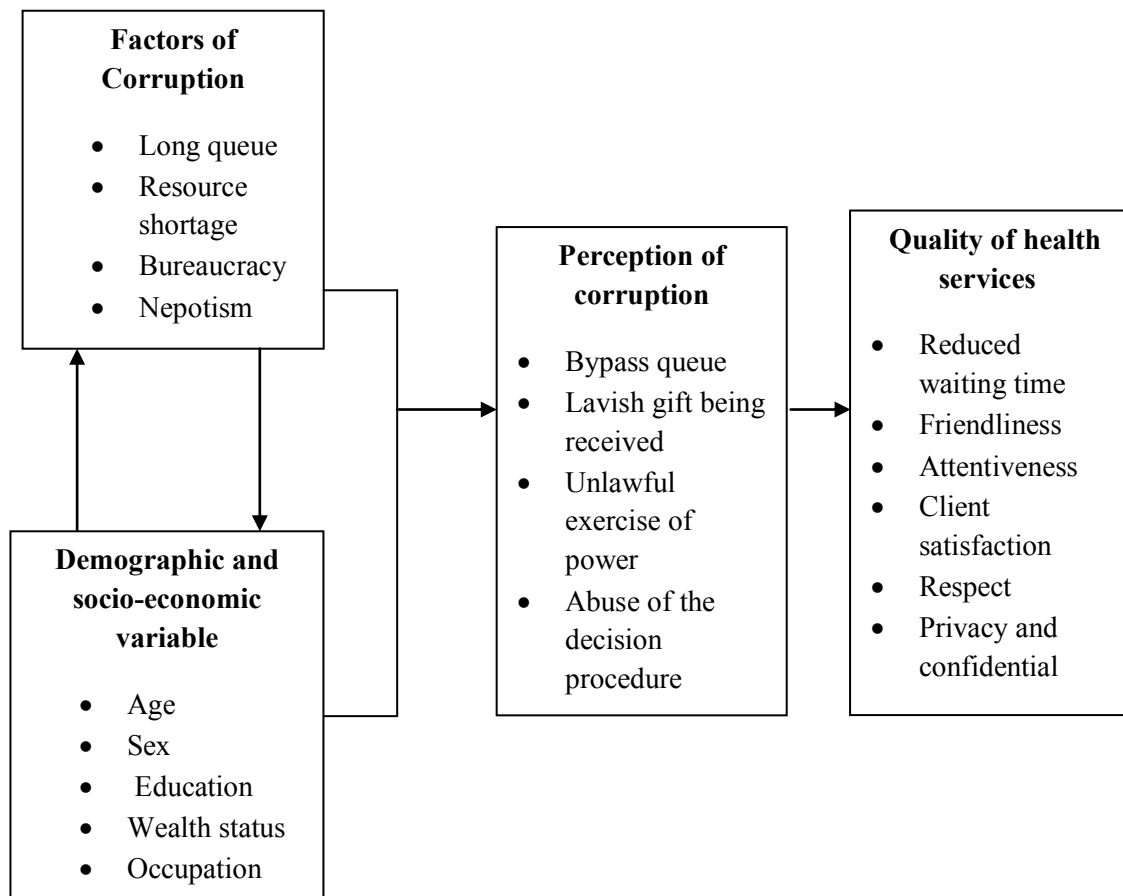


Figure 1.1: Conceptual framework showing perceived effect of corruption on public health services

1.8 Organization of the Dissertation

This dissertation adopted a publishable manuscript format and it is organised into four chapters. Chapter one covers an introduction of the overall theme studied. Chapter two deals with perceptions of corruptions in the health sector, while chapter three focuses on the influence of perceived corruption on the quality of health services. Finally, chapter four covers the overall conclusions and recommendations.

REFERENCES

- Adindu, A. (2010). Students' perception about the effect of corruption on quality of health care. *International Journal of Biological Sciences* 2(7): 122-127.
- Afrobarometer, (2006). Combating Corruption in Tanzania: *Perception and Experience*. Afrobarometer Briefing Paper No. 33. Research on Poverty Alleviation, Dar es Salaam, Tanzania. 8pp.
- Azfar, O, Gurgur (2005). Corruption and the delivery of health and education services. In: *Fighting Corruption in Developing Countries: Strategies and Analysis*. (Edited by Spector, B. I.), Kumarian Press, Bloomfield. pp. 181–212.
- Hussmann, K. (2011). Addressing corruption in the health sector; securing equitable access to health for everyone. *Anti-Corruption Resources Centre* 1: 3 – 9.
- Hwa, S. (2005). Principal-agent relationship in medical care: Eliciting patient's preference in patient-doctor relationship. *Journal Ekomomic* 39:71-88.
- KACC (Kenya Anti-Corruption Commission) (2010). Sectoral perspectives on corruption in Kenya: The case of public health care delivery. Research and policy department directorate of preventive services. 15-20pp.
- Kamorudeen, A. and Bidemi, A. (2012). Corruption in the Nigerian public health care delivery system. *Sokoto Journal of the Social Sciences* 2(2): 9 – 13.
- Kamuzora, P. (2005). Strategies for public sector corruption prevention: experience from public health systems in Tanzania. *Journal of Development Studies* 5(2): 33 – 51.

- Kayode, A., Adagba, S. and Anyio, S. (2013). Corruption and service delivery: The case of Nigeria public service. *Woodpecker Journal of Public Administration* 1(1): 1-6.
- Keil, P (2013). *Principal Agent Theory and its Application to Analyze Outsourcing of Software Development*, Technische Universität München, Institut für Informatik, Boltzmannstr, Germany. pp. 1-3.
- Maier, B. and Urassa, D. (1997). Quality assessment of hospitals in Tanga region. Ministry of health of Tanzania and family health project Tanzania (GTZ).
- Mallya, R. (2004). *Role of cost sharing on quality health care: community and patients perception in Bagamoyo*. A dissertation submitted in partial fulfillment of requirement for degree of master of public health of the University of Dar es Salaam. 34-36pp.
- Mwakisu, S. (2005). *Perceived quality of health care services in Dar es Salaam municipal hospitals: comparison between clients using user fees and National Health Insurance Fund*. A dissertation submitted in partial fulfillment of requirement for degree of master of public health of the University of Dar es Salaam. 1-20pp.
- Osborn, D., Cutter, A. and Ullah, F. (2015). Understanding the transformational challenges for developed countries. [https://sustainabledevelopment.un.org/content/documents/1684SF_-_SDG_Universality_Report_-_May_2015.pdf] site visited on 5th October, 2015.
- Oye, N. D. (2013). Reducing corruption in African developing countries: *The Relevance of E-Governance Greener Journal of Social Sciences* 3 (1):2-10.

Pellegrini, L. (2011). *Corruption, Development and the Environment*. International Institute of Social Studies (ISS), Springer Dordrecht Heidelberg London New York. pp. 1-27.

Transparency International, (2006). *Global Corruption Report: Special Focus: Corruption and Health*. Pluto Press, London. pp. 1-9.

Transparency International, (2011). Global corruption. [<http://cpi.transparency.org/cpi2011/>]site visited on 15 January 2015.

Transparency International, (2013). Global Corruption Barometer. [http://www.transparency.org/policy_research/surveys_indices/gcb] site visited on 15 February 2015.

URT (United Republic of Tanzania), (1990). National health policy. Dar es Salaam, government printers. 1-4pp.

Vian, T. (2007). Review of corruption in the health sector. *Health Policy and Planning*23(2): 1 – 17.

CHAPTER TWO

2.0 Clients' Perceptions of Corruption in the Health Sector in Mbeya Urban District, Tanzania

Ngata, A¹ and Kabote S.J.²

¹MA-Rural Development Student, Sokoine University of Agriculture, College of Social Sciences and Humanities, Department of Development Studies P.O.Box 3024, Morogoro, Tanzania: Email: amonngata@gmail.com

²Senior Lecturer, Sokoine University of Agriculture, College of Social Sciences and Humanities, Department of Development Studies, P.O.Box 3024 Morogoro, Tanzania: Email: samwel.kabote@yahoo.com

2.1 Abstract

Corruption in the health sector is unquestionably a threat to the quality of health services. However, the clients' perception of corruption during health services delivery is not sufficiently explored. This study aimed at assessing clients' perceptions of corruption in the health sector in Mbeya Urban District. Using a questionnaire, data were collected from a sample of 180 respondents where by 91 (50.6%) were males and 89 (49.4%) were females. Furthermore, key informant interviews were used to complement information on perceptions of corruption. A Mann Whitney U test was used to compare clients' perceptions of corruption with respondents' characteristics. The results showed that there was statistically significant difference between perceptions of corruption and marital status at 5% level of significance. Single respondents perceived higher corruption in the health sector compared to the married ones. In addition, long queue was the major factor driving corruption during health service delivery. The study concludes that marital status influenced

perceptions of corruption during health service delivery. Based on the conclusion, the study recommends that taking into account the differences of respondents' characteristics, it is crucial to reduce corruption in the health sector. In addition, expansion and construction of health care facilities is important to reduce the problem of long queue during health services delivery.

Key words: *Corruption, perception, health services, respondents characteristics*

2.2 Introduction

Corruption is a serious problem in the world. It affects health service and other social services. It is also argued that corruption is not simply a problem of the indiscipline officials, but the failure in delivering the objectives of good governance (UN, 2016; Gaal *et al.*, 2006). Corruption is one of the key underlying factors that seriously undermine the quality of good governance in both developing and developed countries. The lack of good governance generally implies weak institutions, ineffective checks and balances, inadequate regulatory and legal frameworks, and poor enforcement mechanisms which are all factors that incite corruption (UN, 2016; Olken, 2009).

Fighting corruption in the health sector is a complex challenge. The UNDP (2011) reports absenteeism, theft of medical supplies, informal payments, weak regulatory procedures, opaque and improperly designed procurement procedures, diversion of supplies in the distribution system for private gains and embezzlement of health care funds as common corrupt practices in many developing countries. In addition, the burden of corruption in the health sector mostly affects the poor, due to their limited access to resources (Vian, 2010; Women's Dignity Project, 2004).

Tanzania's efforts on combating corruption date back to 1968 with the creation of one of the oldest anticorruption commission in Africa (Bertelsmann Foundation, 2014). The country's anti-corruption efforts were strengthened in 1995 when President Benjamin

Mkapa, declared war against corruption (Cooksey, 2011) and took a variety of steps to fight it. In the previous 10 years, efforts to combat corruption have gained the attention of national governments, development partners and Civil Society Organizations. Thus, war against corruption has become one of the priorities of the Government of Tanzania. In 2005, for example, the permanent commission of inquiry was, through an Act of Parliament, transformed into a Commission for Human Rights and Good Governance (Afrobarometer, 2006). Despite the government's anti-corruption efforts, the country continues to suffer from rampant corruption. The majority consider corruption in the public sector a very big problem in Tanzania (Wike and Simmons, 2015; Maeda, 2013). Corruption is likely to damage the ability of the health care system to deliver high quality and effective services to the people who can benefit most.

Previous studies (Jandosova *et al.*, 2003; URT, 2007; SIKIKA, 2010; Oduro, 2014; Kayode *et al.*, 2013) have identified corruption in the public health system as a complex problem which threatens health service delivery, equity and outcomes as well as reducing effective availability of resources for health. Again, it lowers the quality, equity and effectiveness of health care services. According to URT (2007), corruption is one of the social evils of the health system because it causes unnecessary sufferings to patients and their relatives and costs lives of majority of people.

There are three major channels through which corruption can adversely affect the provision and delivery of health services. Firstly, corruption drives up prices and lowers the level of government output and services, including the provision and financing of the health care services. Secondly, it reduces investment in human capital and thirdly, it reduces government revenues, which in turn lower the quality of public services (Dridi, 2013; Gupta *et al.*, 2000; Vian, 2007; Şahin *et al.*, 2009). Corruption is a cultural

phenomenon because it depends on how a society understands the rules and what constitutes a deviation. Based on the fore mentioned information, some questions remain unanswered including how do people perceive corruption during health services delivery? Secondly, what makes people continue giving corruption in the health sector?

2.3 Methodology

This study was conducted in Mbeya Urban District in Mbeya Region. The District has one referral hospital, one regional hospital, and 15 health centers. The district was selected for this study because it is leading regarding the incidence of corruption in Mbeya Region (Sulley, 2010). The sampling procedures involved purposive selection of three wards out of thirty six wards including Isyesye, Itezi and Uyole. The wards were selected purposively based on the evidence that it implemented the Tanzania Family Health Project. In each ward, two streets were randomly selected namely Mwantengule, RRM, Gombe, Gombe Kusini, Hasanga and Ibala making a total of six streets. In each street 30 individual clients were randomly selected making a sample size of 180 respondents. The study employed a cross-sectional research design. According to Babbie (2007), the design allows data collection at a single point in time and it is most appropriate for sample descriptive interpretations as well as determination of relationships between and among variables. The study design was considered appropriate because of time limit and resources available for data collection (Casley and Kumar, 1988). Data collection methods included individual survey and key informant interviews. Quantitative data were collected using a structured questionnaire. Key informant interviews were used to explore perceptions of corruption and factors facilitating corruption. The sampling unit was individual clients. The questionnaire was used to collect information on client's perceptions of corruption and factors driving corruption. Quantitative data were analyzed by using Statistical Package for Social Sciences (SPSS).

The analysis of the clients' perceptions of corruption was done using frequency distribution. The Mann Whitney U test was used to compare median differences between client's perceptions of corruption and respondents' characteristics including sex, main occupation, age, marital status and wealth status. The factors driving corruption were analyzed using frequency distribution.

The study used six statements to measure clients' perceptions of corruption. The respondents were asked to respond whether they strongly disagreed (1), disagreed (2), were undecided (3), agreed (4) or strongly agreed (5) on each item of the scale. If one had a favourable response towards each of the 6 statements, one would have scored 6 to 17 scores; if one had neutral perception towards each of the 6 statements, one would have scored 18 scores; if one had unfavourable towards each of the 6 statements, one would have scored 19 to 30 scores. The responses were grouped into three categories to reduce repetition of words, strongly agree and agree were regrouped into agree, strongly disagree and disagree were regrouped into disagree while neutral was treated as a separate entity. Reliability analysis was done so as to assess internal consistence of the scale. In this study, client's perceptions of corruption had acceptable internal consistency with a Cronbach's alpha coefficient of 0.741 (Appendix 1). According to George and Mallery (2003) an alpha value of 0.7 and above is acceptable.

Data analysis also involved assessment of household wealth in order to categorize the sample into poor and non-poor. According to Simon (2003), a wealthier household is a household having the following assets: radio, bicycle, television, houses with iron sheet roofs, and houses with cement floors, houses with cement/burnt bricks walls, cattle, phone and car. Therefore, this study adopted these items as indicators of wealth. Based on the wealth index median of 13, respondents were grouped into two groups. Those below the

median were taken as poor while those above the median were considered as non-poor. The formula used to quantify wealth was developed (Hortland 1993 cited by Simon, 2003) as follows:

$$WET_i = \sum (y_{ij}/Y_{max}) \quad (i = 1, 2, \dots, x, j = 1, 2, \dots, n)$$

Where;

WET = wealth index

y_{ij} = number of an individual asset (radio, bicycle, television, houses with iron sheet roofs, and houses with cement floors, houses with cement/burnt bricks walls, cattle, phone and car)

Y_{max} = maximum number of that asset in the sample

X = number of items considered as indicators for wealth

N = sample size

2.4 Results and Discussion

2.4.1 Respondents' characteristics

Table 1.1 presents respondents' characteristics. The results show that half of respondents (50.6%) were males. The results also show that majority (90.1%) of the respondents were in the 20 to 45 years age group. The proportion of respondents in the 46 years and above was relatively small. With regard to respondents' education level, the majority had either secondary or primary education. This observation indicates that literacy rate of the majority of the respondents was high. This higher literacy rate implies that most of the respondents were able to read and write (URT, 2003). Education in developing countries is the most important tool for enhancing people's ability to fight poverty and build awareness on various interventions including health services (Mallya, 2008). In addition, the majority (45.6%) of respondents were peasants and were poor (69%). Furthermore, 43.9% of

respondents received health services at regional hospital possibly because the study was conducted in urban areas.

Table 2.1: Respondents' characteristics in percentages (n = 180)

Variables	Category	Frequency	Percent
Sex	Male	91	50.6
	Female	89	49.4
Age (years)	20-45	155	90.1
	46 and above	17	9.9
Education level	No formal education	36	20.0
	Primary	48	26.7
	Secondary	65	36.1
	Tertiary	31	17.2
Main occupation	Farmers / peasant	82	45.6
	Businessman / women	59	32.8
	Public servant	39	21.7
Marital status	Single	90	50.0
	Married	90	50.0
Wealth status	Poor	125	69.4
	Non poor	55	30.6
Place of health services	Regional hospital	79	43.9
	Dispensary	39	21.7
	Health center	31	17.2
	District hospital	19	10.6
	Referral hospital	12	6.7

2.4.2 Types of corruption based on respondents' characteristics

Table 2.2 shows types of corruption as reported by the respondents. The results show that a relatively large proportion of males reported informal payment than females. Melgar *et al.* (2010) also reported that women, in Uruguay, are less likely to report informal payments. Those who were self-employed and who had formal education were more likely to report informal payments and theft of medical supplies than other groups of

respondents. This implies that the self-employed and those who had formal education were more likely to be victims of corruption during health services delivery. This is consistent with Tverdova (2003) who found that the educated are more likely to perceive types of corruption. In addition, those who were married reported informal payment while youth reported theft of medical supplies and misuse of government property than other types. Surprisingly, the poor reported informal payments, theft of medical supplies and misuse of government property. This implies that poor clients often rely heavily on services provided by governments. The result is inconsistent with Tverdova (2003) multicountry study which reports that the wealthier are involved more in types of corruption than the poor.

Table 2.2: Respondents' response on types of corruption based on respondents' characteristics in percentages (n=180)

Variable	Absenteeism of health service providers	Theft of medical supplies	Informal payments	Nepotism	Embezzlement of health care funds
Male	6.7	13.3	22.4	4.2	3.6
Female	5.5	15.8	17.0	5.5	6.1
Self employment	9.7	24.2	30.9	7.9	5.5
Formalemployment	2.4	4.8	8.5	1.8	4.2
Single	2.4	13.9	11.5	2.4	3.0
Married	9.7	15.2	27.9	7.3	6.7
Non formal education	3.0	4.2	4.8	2.4	0.0
Formal education	9.1	24.8	34.5	7.3	9.7
Youth age	4.8	20.0	22.4	5.5	7.3
Elderly age	7.3	9.1	17.0	4.2	2.4
Poor	7.9	21.2	27.9	7.9	5.5
Non poor	4.2	7.9	11.5	1.8	4.2

2.4.3 Client's perceptions of corruption

Table 2.3 presents perceptions of corruption. The result showed that, with exception of the responses of fourth and sixth statements, the rest agreed with the indicators used to

measure perceptions of corruption. It is clear from the results presented in Table 2.3 that 68.9% of the respondents agreed that bribery controls health services delivery. The result is in line with Mauro (2004) who also reported that bribery determines health services in Uruguay. Moreover, more than two-thirds (66.7%) of the respondents agreed that bribes help to receive information on the process of health services. Furthermore, the results showed that 75.5% of the respondents agreed with the statement that corruption reduces long health services procedures which are too costly and time wasting. This implies that corruption speeds up the process and clients get required services faster and easier. However, the majority of respondents (67.8%) disagreed with the statement that corruption gives fair health treatment among the clients. In addition, the majority of the respondents (53.9%) disagreed that unofficial payment guarantees reliability of the services.

Table 2.3: Respondents' responses on perceptions of corruption in percentages (n=180)

Statement	Agree	Neutral	Disagree
Bribery control health services delivery	68.9	5.0	26.1
Bribes help to receive information on the process of health service	67.7	10.6	21.7
Corruption reduces long health service procedure which are too costly and time wasting	75.5	6.1	28.3
Corruption gives fair health treatment among clients	25.5	6.7	67.8
Corruption helps to reduce the existing uncertainty of health services	63.3	10.6	26.1
Unofficial payment guarantee reliability of services	36.7	9.4	53.9

Figure 2.1 shows three categories of client's perceptions, which are favourable, neutral and unfavourable. These categories of client's perception were established on the basis of the scores. The results showed that 51.1% of the respondents showed unfavourable responses

regarding perceptions of clients on corruption. This implies that corruption was perceived negatively with respect to health services delivery. These results correspond to those reported by Nikoloski (2013) who found that perceptions of corruption were unfavourable towards the health service delivery. Information from key informants revealed that corruption in the health sector was unfavourable phenomenon. One key informant emphasized by saying: *“corruption is unfavourable phenomenon in the health service delivery and prevents services demanded by patients such as diagnosis; medicines, intensive care and this may increase the chance of adverse events such as death of a baby or mother”*.

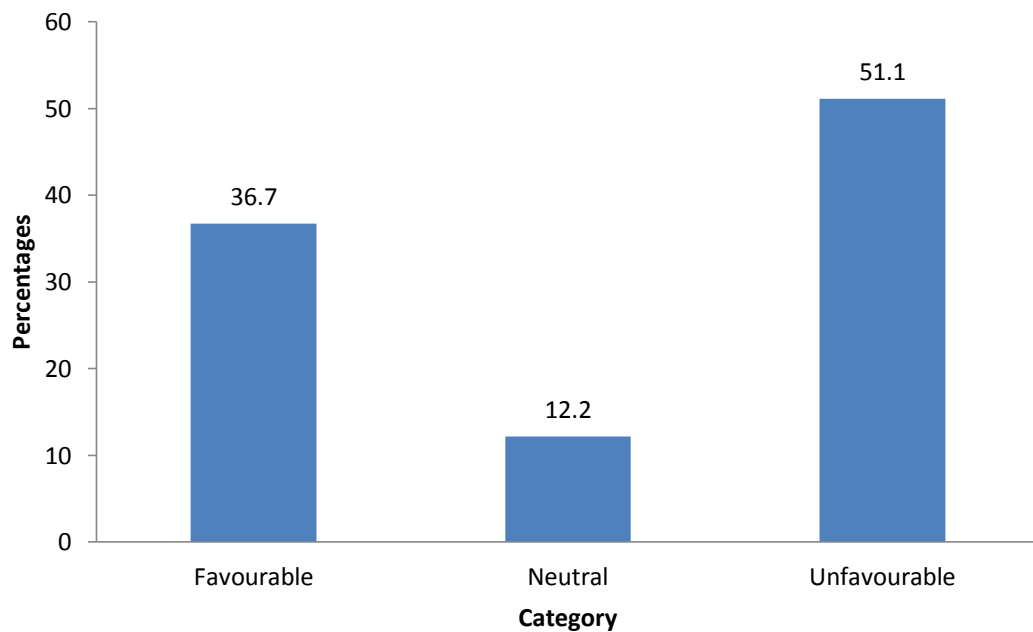


Figure 2.1: Respondents' categories on clients' perceptions of corruption

Table 2.4 presents respondents' perceptions of corruption by their characteristics. The results show that there was significant difference between marital status in their perceptions of corruption at 5% level of significance. Single respondents were perceived to be likely to involve themselves in corruption than the married ones. The rest respondents' characteristics were not significant at 5% level of significance. This finding is comparable

to observations made by Melgar (2010) who found that those people who are single reported higher levels of corruption than the married ones. This result is inconsistent with Tverdova (2003) who found that married perceived higher level of corruption in the health sector.

Table 2.4: Respondents' perceptions of corruption by their characteristics (n=180)

Variable	n	Median	U	W	Z	P-value
Male	91	20				
Female	89	19	3879.5	7884.5	-0.487	0.626
Youth age	107	20				
Elderly age	73	18	3828	9606	-0.226	0.821
No formal education	27	18				
Formal education	153	19	1974.5	13755.5	-0.365	0.715
Self employment	141	19				
Formal employment	39	20	2562.5	3342.5	-0.651	0.515
Single	58	20				
Married	122	18	2870	4581	-2.0499	0.04**
Poor	125	19				
Non poor	55	19	3380	4920	-0.179	0.858

Note: ** denote significant at five percent

2.4.4 Factors driving corruption in health services delivery

Table 2.5 shows respondents' responses on factors driving corruption. The results show that the most driving factor was to avoid long queue followed by pressure from medical workers. This means that long queue was a major factor driving corruption during health service delivery. This could be due to shortage of health service providers and overcrowding of patients compared to admission capacity of health facilities. One of the key informants revealed that long queue is the major factor that drives corruption during health services delivery. Key informants emphasized by saying: "*There is one thing which perpetuates corruption, namely a long queue. When there are too many patients corruption is likely to happen*". It was argued that when there are too many patients' in the

queue, each one of them get anxious about whether or not he/she will be attended by the health service providers. This situation prompts the patients to search for means of ensuring that he/she is attended.

Table 2.5 Respondent's response on factors driving corruption (n=180)

Factors driving corruption	Frequency	Percent
Wanted to avoid a long queue	46	25.6
It was a pressure from medical workers	29	16.1
Quest to get good quality health services	19	10.6
Poor responsibility among medical workers	33	18.3
Wanted to avoid long bureaucratic procedures	19	10.6
Poor living standards among medical workers	22	12.2
Poor access to information about my health service rights	12	6.7
Total	180	100

2.5 Conclusions and Recommendations

The study found that an informal payment was the common type of corruption which exists regarding respondents characteristics. Consequently, informal payments presented considerable problems during health services delivery because it negatively affects the overall functioning of the health services system. In addition, the perceptions of corruption as measured by the indicators used were unfavourable. Moreover, respondents' characteristics influenced perceptions of corruption in the health sector. For instance, marital status influenced perceptions of corruption whereby there was significant difference between married and single regarding perceptions of corruption. The study also concludes that long queue was the major factor driving corruption during health services delivery.

The study recommends that informal payments in the health services delivery appear less important, but require policy attention to government, non-governmental organisations,

civil society, health services providers and clients or individuals so as to combat them in the health sector. In addition, taking into account respondents' characteristics would help in changing perceptions of corruption in the health sector. Similarly, the government, non-governmental organisations, civil society and other actors, should invest in expanding and construction of new health facilities with spacious facilities and employ more qualified staff. This will help to solve the problem of long queue in the health services delivery and reduce corruption in the health sector.

REFERENCES

- Afrobarometer (2006). Combating Corruption in Tanzania: *Perception and Experience*. Afrobarometer Briefing Paper No. 33. Research on Poverty Alleviation, Dar es Salaam, Tanzania. 8pp.
- Babbie, E. (2007). *The Practice of Social Research*. Oxford University Press, Cape Town, Southern Africa. 92pp.
- Bertelsmann Foundation, (2014). *Tanzania Country Report*. [<http://www.btiproject.De/uploads/txjpdnloads/BTI2014Tanzania.pdf>]site visited on 16 April 2016.
- Casley, D. J. and Kumar, K. (1988). *The Collection Analysis and Use of Monitoring and Evaluation of Data*. The International Bank for Reconstruction and Development, Washington DC, USA 174pp.
- Cooksey, B. (2011). The investment and business environment for gold exploration and mining in Tanzania. [*Africa power and politics*.<http://www.institutions-africa.org/filestream/20121217-theinvestment-and-business-environment-for-gold-explorationand-mining-in-tanzania>]site visited on 15/4/2016.
- Dridi, M. (2013). Corruption and Economic Growth: *Journal of Business Studies Quarterly*4(4):1-32.
- Gaal, P., Belli, P., McKee, M. and Szocska, M. (2006). Informal payments for health care: Definitions, distinctions, and dilemmas. *Journal of Health Politics, Policy and Law* 31(1): 251-293.

- George, D. and Mallery, P. (2003). *SPSS for Windows Step by Step: A simple Guide and Reference. 11.0 Update* (4th ed.). Boston: Allyn and Bacon. 123pp.
- Gupta, S., Davoodi, H. and Tiongson, E. (2000). Corruption and the Provision of Health Care and Education Services. IMF working paper/00/116. 33pp.
- Jandosava, J., Bailugelova, N., Jandasova, F. and Kunitsa, S (2003). Perceptions of Corruption in Kazakhstan by Parliamentarians, Public officials, private business and civil society. United Nations Development Programme, Almaty. 4-10pp.
- Tverdova, Y. (2003). Corruption and voting in Senegal: Evidence from experimental and survey research. *American Journal of Political Science* 47 (1): 91-109.
- Kayode, A., Adagba, S. and Anyio, S. (2013). Corruption and Service Delivery: The Case of Nigeria Public Service. *Woodpecker Journal of Public Administration* 1(1): 1-6.
- Maeda, K. (2013). Who Perceives Corruption? Income, Development, and Forms of Corruption. Tokyo Metropolitan University. 7-12pp.
- Mauro, P. (2004). The persistence of corruption and slow economic growth. *IMF Staff Papers* 51 (1): 1-18.
- Mallya, E. J. (2008). The role of income and employment strategies in alleviating urban poverty. *Journal of the Open University of Tanzania* 1: 124 – 136.

- Melgar, N., Rossi, M. and Smith, T. (2010). The Perception of Corruption.[<http://www.iss.org>]site visited on 22nd April, 2016.
- Nikoloski, Z. and Mossialos, E. (2013). Corruption, inequality and population perception of healthcare quality in Europe. *Journal of BMC Health Services Research* 10(3): 2-4.
- Oduro, F. (2014). Assessing Citizens' experiences and perceptions of health service delivery in Ghana. Working paper no.42. 30pp.
- Olken, B (2009). Corruption perceptions vs. corruption reality.*Journal of Public Economics* 93: 950-964.
- Şahin, I, Özbek, M., Güran, C. and Tosun, U. (2009). Corruption in the health sector: ministry of health professionals' perceptions of corruption.*TODAİE's Review of Public Administration* 3(4): 123-139.
- SIKIKI (2010). *Petty Corruption in Health Services in Dar es Salaam and Coast Regions*. E and D Readership and Development Agency: Jamana Printers. Dar es Salaam, Tanzania. 12-23pp.
- Simon, M. (2003). Adoption of Rotational woodlot Technology in Semi-Arid Areas of Tanzania: The Case of Tabora Region. A thesis Submitted in Partial Fulfillment of the Requirements for The Degree of Doctor of Philosophy of Sokoine University of Agriculture. Morogoro, Tanzania. 76-79pp.

Sulley, C. (2012). The 2010 general elections in Mbeya Urban constituency: Actors and processes. *Journal of Politics and Law* 5 (4): 4-12.

UNDP (2011). Fighting Corruption in the Health Sector Methods, Tools and Good Practices.

[<http://www.undp.org.tt/News/UNODC/Anticorruption%20MethodsandTools%20in%20Health%20final.pdf>] site visited on 12 April 2016.

UN (United Nations), (2016). Measuring corruption in Africa: The international dimension matters - African Governance Report IV. [www.uneca.org] site visited on 17 April 2016.

URT (United Republic of Tanzania), (2003). United Republic of Tanzania, United Nation population Fund Integration of population variable in a development Planning, Part II Trainees Manual, Demographic training Unit, University of Dar es Salaam. 60-72pp.

URT (United Republic of Tanzania), (2007). Tanzania Governance Report 2006-2007. 128pp.

Vian, T. (2007). Corruption in the health sector.

[<http://www.bu.edu/actforhealth/corruptionInHealthforce/Reader/pdf>] site visited on 15 April 2016.

Wike R. and Simmons, K. (2015). Health Care, Education are Top Priorities in Sub-Saharan Africa. [www.pewresearch.org] site visited on 17 April 2016.

Women's' Dignity Project, (2004). *Poor people's Experiences of Health services in Tanzania*. A Literature Review. 33pp.

CHAPTER THREE

3.0 Influence of Corruption on Quality of Health Services in Mbeya Urban District, Tanzania

Ngata A¹ and Kabote S.J.²

¹MA-Rural Development Student, Sokoine University of Agriculture, College of Social Sciences and Humanities, Department of Development Studies, P.O.Box 3024, Morogoro, Tanzania: Email amonngata@gmail.com

²Senior Lecturer, Sokoine University of Agriculture, College of Social Sciences and Humanities, Department of Development Studies, P.O.Box 3024 Morogoro, Tanzania: Email: samwel.kabote@yahoo.com

3.1 Abstract

Corruption in Tanzania is a national concern which could disrupt health sector goals for quality health services. Yet, there is little empirical evidence on how corruption affects quality of health services. This study aimed at assessing the influence of corruption on the quality of public health services in Mbeya Urban District. The study adopted a cross-sectional research design, and a total of 180 respondents were involved. A Mann Whitney U test was applied to compare the median differences between the perceived quality of health services and respondents' characteristics. The results showed that there was significant difference between sex and employment status regarding the extent to which corruption affect quality of health services at 5% level of significance. The results also

showed that there was a significant difference between age, employment status and wealth status regarding the perceived quality of health services at 5% and 1% level of significance. In addition, the results showed higher proportion of respondents who perceived quality of health services as low. The study concludes that corruption affects the quality of health services to a greater extent. In addition, the quality of health services was generally reported to be low. Based on the conclusion, the study recommends that taking into consideration of differences of respondents' characteristics, it is important so as to improve the quality of health services.

Key words: *Quality of health services, corruption, effect of corruption, Tanzania*

3.2 Introduction

The concept of quality health services is complex to explain, since it is embedded in users' expectations, needs and preferences as well as perspectives (Mwakisu, 2005). No consensus exists across countries or cultures on the definition of quality or how it should be measured. Different cultures have different values and priorities. For some the quality of health services means the provision of staff and facilities, and to other means equity and compassion, or optimum clinical outcomes (URT, 2011).

The quality of health service is a much discussed issue, both in the developed and in the developing countries. Many countries have realised that quality must be achieved by improving the efficient and effective use of the existing resources and not necessarily spending more (URT, 2007). Quality means performance according to standards, the correct way at the right time. However, in health care, quality is considered as a degree of performance in relation to a defined standard of interventions known to be safe and have the capacity to improve health within the available resources (Akter *et al.*, 2010; URT, 2011). This study defined quality of health services as doing the right thing (getting the

healthservices you need), at the right time (when you need it), in the right way (using the appropriate test or procedure), to achieve the best possible results.

Corruption is viewed as the strongest enemy of any country's development effort worldwide. The Legal and Human Rights Centre (LHRC, 2013) shows that corruption and abuse of power or office have remained as critical challenges to African countries and Tanzania is not exceptional. Adindu (2010) argued that organisations of all sizes, public or private are vulnerable to corruption; but the impact may vary from one country to another depending on governance structures, tolerance to corrupt practices, and strength of anti-corruption instruments. The transparency International defines corruption as the abuse of entrusted power for private gain, in public and private sector (Transparency International, 2004). This study takes corruption as a form of dishonest or unethical conduct by a person entrusted with a position of authority in the health service delivery chain, to acquire personal benefit.

The provision of health care in Tanzania has pre- and post- independence history. The pre-independence health services were predominantly urban-based with the exception of mission health facilities that catered for rural-remote areas. The post-independence period experienced redistribution policies, which embarked on a large-scale programme for ensuring access to health facilities as close as possible to the entire populace (URT, 2007; Iqbal, 2009). However, there is a growing concern about the perceived quality of such services due to lack of reliable and efficient service delivery platform, knowledge and competence of the providers, their effects on satisfaction, future use intentions and quality of life (Akter, 2010; Senerath *et al.*, 2006).

The United Republic of Tanzania in its Quality Improvement Framework in Health Care (2011-2016) acknowledges that corruption is rampant in the health sector and is one of the

major barriers in providing quality health services (URT, 2011). Furthermore, other studies conducted in Tanzania have pointed out that corruption is a major hindrance in the delivery of quality public health services and ensuring equity in accessing health services by all citizens particularly the poor people (URT, 2007; SIKIKA, 2010; URT, 2011; UN, 2016). The fight against corruption in the country has been a struggle and there have been institutional and legal transformation, but corruption is challenging developmental objectives in various plans including the health sector (LHRC, 2013).

Works of literature reveal that the extent, nature and effects of corruption vary dramatically from one culture to another and among the people (Melgar *et al.*, 2010). Therefore, the effect of corruption on quality of health services cannot be generalized. Understanding the quality of the services and effects of corruption on quality of public health services in Mbeya Urban District is critical because corruption remains higher in the District (Sulley, 2010). This chapter fills into these voids focusing on effect of corruption on quality of health services.

3.3 Methodology

The study was conducted in Mbeya Urban District in Mbeya Region. The district was selected purposively because it has been implementing Tanzania Family Health Project focusing on improving the quality of health service (Atherton, 2013). Yet, the district is reported to have highest incidence of corruption in the region and therefore creating worries on quality of health services (Sulley, 2010). The study adopted a cross-sectional research design that allows data to be collected at a single point in time (Bailey, 1998). The design is also good for classifying the study population and to select a sample and contact the respondents to find out necessary data (Kumar, 2005). The method of data

collection included household survey. Quantitative data were collected using household questionnaire.

A multi-stage sampling technique was adopted. The technique was done under two main stages. The first stage involved purposive selection of wards based on evidence of community involvement in Tanzania Family Health Project. Thus, three wards were purposively selected, namely: Isyesye, Itezi and Uyole. Secondly, in each ward two streets were randomly selected making a total of six streets. A sample of 180 individuals was selected randomly, 30 from each street. A sub sample of 30 respondents is the bare minimum for studies in which statistical data analysis regardless of the population size (Bailey, 1994).

Individual survey was used to collect data whereby a structured questionnaire was used. The data were analysed by using Statistical Package for Social Science (SPSS). Firstly, frequency distributions were computed. The Mann Whitney U test was used to compare the median difference between overall perceived quality of health services and respondents' characteristics. The Mann Whitney U test was also used to compare the median difference between overall perceived effect of corruption on quality of health services and respondents' characteristics.

The scale was used to measure the perceived quality of health services among respondents under this study, and the scale had 17 statements. Every respondent was asked to respond whether he/she strongly disagreed (1), disagreed (2), was undecided (3), agreed (4) or strongly agreed (5) on each item of the scale. Therefore, overall 17 to 50 represented low quality, 51 represented moderate quality, and 52 to 85 represented high quality. The responses were grouped into three categories to reduce repetition of words, strongly agree and agree were regrouped into agree strongly disagree and disagree were regrouped into disagree while neutral was treated as a separate entity. Reliability analysis was done so as

to assess internal consistence of the scale. In this study, the perceived quality of health services had acceptable internal consistency with a Cronbach's alpha coefficient of 0.817 (Appendix 2).

3.4 Results and Discussion

3.4.1 Respondent's characteristics

Table 3.1 presents respondents' characteristics. The results show that more than half of respondents (50.6%) were males. The results also show that slightly greater than two-fifths of respondents (45.6%) were in the 21 to 30 years age group. This means that the proportion of respondents in the 21 to 30 was relatively high.

Table 3.1: Respondent's characteristics in percentages (n = 180)

Variables	Category	Frequency	Percent
Sex	Male	91	50.6
	Female	89	49.4
Age	21– 30	82	45.6
	31 – 40	52	28.9
	41 - 50	28	15.6
	51 - 60	18	10.0
Main occupation	Farmers / peasant	82	45.6
	Businessman / women	59	32.8
	Public servant	39	21.7
	Farmers / peasant	82	45.6
Marital status	Never married	58	32.2
	Married	90	50.0
	Separated	14	7.8
	Widow/widower	18	10.0
	Married	90	50.0
Education level	No formal education	36	20.0
	Primary	48	26.7
	Secondary	65	36.1
	Tertiary	31	17.2
Wealth status	Poor	125	69.4
	Non poor	55	30.6
Place of health services	Regional hospital	79	43.9
	Dispensary	39	21.7

Health center	31	17.2
District hospital	19	10.6
Referral hospital	12	6.7

About 45.6% of the respondents were farmers/peasants and a half of respondents were married. With regards to respondents' education level, 36.1% had secondary education. Majority of the respondents (69.4%) were poor and more than two-fifths of respondents received health services at regional hospital possibly because the study was conducted in urban areas.

3.4.2 Extent to which corruption affects quality of health services based on respondents characteristics

Table 3.2 presents results on the extent to which corruption affected the quality of health services. The results show that corruption affected quality of health services to a greater extent. There was a significant association between sex and employment status regarding the perceived quality of health services at 5% level of significance. More male respondents and the employees in the formal sector significantly reported that corruption affected quality of health services to a greater extent. This can be interpreted that male respondents and employees in the formal sector were more likely to be victims of corruption during health services delivery. This implies that male respondents and employees in the formal sector were more likely to be involved in corruption compared to other groups.

Table 3.2: Respondent's responses on the extent to which corruption affect quality of health services (n=180)

Variable	To a greater extent	To some extent	To a small extent	Not a problem at all	Don't Know / not sure	P-Value
Male	66(72.5)	20(22)	5(5.5)	0(0)	0(0)	0.042*
Female	52(58.4)	25(28.1)	6(6.7)	2(2.2)	4(4.5)	
Self employment	88(62.4)	40(28.4)	10(7.1)	2(1.4)	1(0.7)	
Formal employment	30(76.9)	5(12.8)	1(2.6)	0(0.0)	3(7.7)	0.016*
Single	35(60.3)	15(25.9)	7(12.1)	0(0)	1(1.7)	
Married	83(68)	30(24.6)	4(3.3)	2(1.6)	3(2.5)	
Non formal education	16(59.3)	7(25.9)	3(11.1)	0(0.0)	1(3.7)	0.705
Formal education	102(66.7)	38(24.8)	8(5.2)	2(1.3)	3(2)	
Youth age	70(65.4)	26(24.3)	8(7.5)	1(0.9)	2(1.9)	
Elderly age	48(65.8)	19(26)	3(4.1)	1(1.4)	2(2.7)	0.897
Poor	81(64.8)	34(27.2)	7(5.6)	1(0.8)	2(1.6)	
Non poor	37(67.3)	11(20)	4(7.3)	1(1.8)	2(3.6)	

*Note: numbers in brackets are percentages and * denote significant at five percent*

3.4.3 Perceived quality of health services

Table 3.3 shows respondents' responses on the perceived quality of health services. The results show that respondents' responses agreed with almost all the statements that were used to measure the perceived quality of health services. It is obvious from the results presented in Table 3.3 that 87.7% of the respondents' agreed with the statement that patients are waiting for a long time to get health services. This because that there is a large number of patients compared to the number of health services providers and diagnosis tools. The result is comparable with Mahlangu (2009) who reported that patient waiting time had increased in South African public hospitals. Generally, all these reports imply

that the quality of health services is a widespread challenge not only in Tanzania, but also in other Sub-Saharan Africa countries.

Table 3.3: Respondents' responses in the perceived quality of health services in percent (n=180)

Statement	Agree	Neutral	Disagree
Patients are waiting for a long time to get health service	87.7	2.2	10.0
Demand of tips before services builds trust between health workers and patients	42.2	10.0	47.8
Patients are denied their rights due to practices of friendliness	64.4	8.9	26.7
Only rich patients receive high respect and favour from health service providers	76.1	8.3	15.5
Patients financial resources are depleted to get attentiveness from service providers	57.7	20.6	21.7
Patients are satisfied with the services provided at the health care center	42.8	17.8	39.4
Health service providers pay more attention to patients privacy	55.6	10.0	34.4
Patients get the necessary treatment according to their sickness	52.2	12.2	35.5
Patients are not satisfied with the services provided	72.8	16.6	10.6
Patients kept waiting for a short time to get health service	43.3	8.3	48.4
Patients lose faith to health workers due to the demand of tips before services	62.7	15.0	22.2
Patients get their right due to the practices of friendliness	48.9	7.8	43.3
Poor patients are disrespected from health service providers	68.9	8.3	32.8
Health service providers give attentiveness to the patients regardless of financial resources	20.6	12.2	67.2
Patients privacy are not paid attention by health services providers	71.1	7.8	21.1
To get the necessary treatment patients must pay more than it is required	59.5	12.2	28.3
Professionals tend to claim to have provided services which they did not provide to the patents	53.4	16.1	30.6

Moreover, the majority of respondents (64.4%) agreed with the statement that patients were denied their rights due to practices of friendliness. Unsurprisingly, only the rich patients received high respect and favour from health services providers. About (73%) of the respondents agreed that patients were not satisfied with the services provided. This result is in line with Ahmad *et al.* (2001) who reported that the overall patients' satisfaction on the quality of health services was relatively low. However, this is contrary to a study done at Muhimbili National Hospital in Dar es Salaam, whereby a high proportion of patients were satisfied with the quality of health services (Muhondwa, 2008). In fact, it is generally accepted that patients' satisfaction is related to the quality of health services as reported by Leonard (2008) in a study done in Arusha Tanzania. Therefore, focusing on the Tanzanian context, satisfaction is directly associated with the quality of health services. Three-quarter (75%) of the respondents disagreed with the statement that health services providers give attention to the patients regardless of the financial resources. This implies that the attention from health services providers was determined by financial incomes of the patients. However, majority (71.1%) of the respondents agreed that patient's privacy and confidentiality were not paid attention to.

Fig. 3.1 presents levels of perceived quality of health services. The perceived quality of health services was categorised into three levels which were low, moderate and high quality. The results show that a high proportion of respondents perceived low quality of health services. That means the overall perception on the quality of health services was low. This result is in line with the studies conducted by different authors who show lower levels of the overall quality of health services in Ghana (Kumariat *et al.*, 2009; Batool, 2005; Baba, 2004).

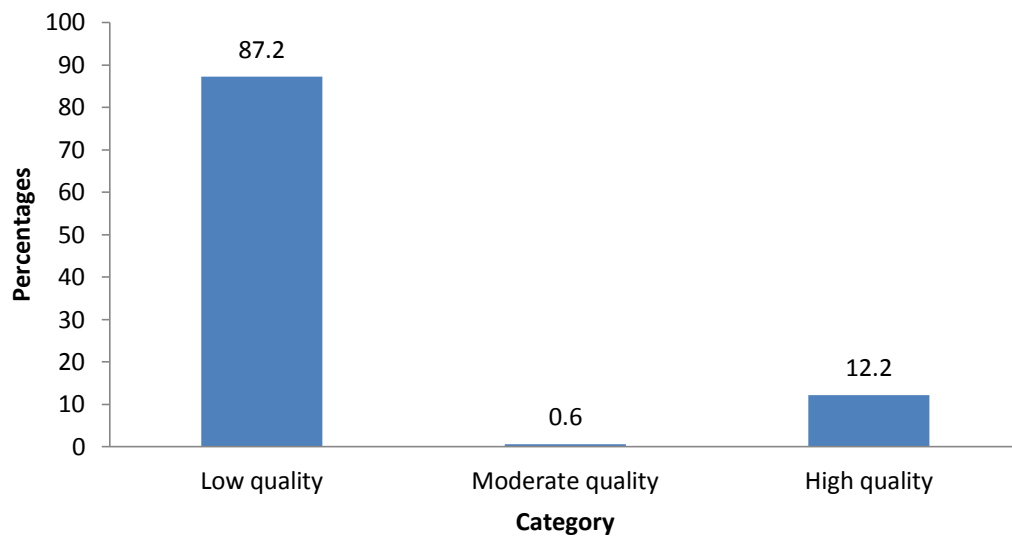


Figure 3.1: Respondents' responses on levels of quality of health service

Table 3.4 presents the perceived quality of health services based on respondents' characteristics. The results show that there was a significant relationship between age, employment status and wealth status regarding the perceived quality of health services at 5% and 1% levels of significance. This means that the poor, elderly and employees in the formal sector perceived to receive low quality of health services than others. This can be interpreted that the mentioned groups were more likely to rely on health services provided by the government. This implies that the majority of mentioned groups received low quality services. This study is comparable to an observation made by Pastory (2013) who found that the quality of health services is sometimes determined by patient's age and wealth status. Therefore, the quality of health services is influenced by patient's age and wealth status.

Table 3.4: Respondents' responses on the perceived quality of health service by respondents' characteristics (n=180)

Variable	n	Median	U	W	Z	P-Value
Male	91	40				
Female	89	40	4038.5	8224.5	-0.055	0.956
Youth age	107	40				
Elderly age	73	39	3462.5	6163.5	-2.275	0.023*
Non formal education	27	40				
Formal education	153	40	1948.5	2326.5	-0.826	0.409
Self employment	141	40				
Formal employment	39	39	2458.5	12469.5	-1.781	0.050*
Single	58	38.5				
Married	122	41	3276	10779	-1.414	0.157
Poor	125	39				
Non poor	55	40	2962.5	10837.5	-2.6	0.009**

Note: *, ** denote significant at one percent and five percent respectively

Table 3.5 presents perceived effects of corruption on quality of health services. The results showed that respondents' agreed with almost all the statements that were used to measure the perceived effect of corruption on quality of health services. A total of 78.9% of the respondents' agreed with the statement that corruption leads to lack of drugs, equipment or others materials. This can be interpreted that corruption affects the availability of drugs, equipment and other materials during health services delivery. This result is in line with Adindu (2010) who reported that corruption reduces availability of drugs and medicine needed for patients' services in the public health service. In addition, 83.4% of the respondents reported that corruption caused poor quality health services and 73.8% of the respondents agreed that corruption can cause the patients to die due to poor quality health care. This implies that corruption in the health sector can increase chances for patients' death due to poor quality of services. Moreover, slightly less than three-quarters of the respondents agreed that corruption lead patients' condition to get worse due to delay

of services and 81.1% of the respondents agreed that corruption leads patients to get improper treatment. This implies that corruption increases chances of delaying services to patients. Furthermore, 81.1% of respondents agreed with the statement that corruption can leads to lack of motivation and interest in caring patient.

Table 3.5: Respondents' responses on the perceived effect of corruption on the quality of health services in percentages (n=180)

Statement	Agree	Neutral	Disagree
Leads to lack of drugs, equipment or other materials	78.9	1.7	19.4
Leads to poor services	83.4	3.9	12.8
Patients die or maimed due to poor quality care	73.8	6.1	20.0
Charges are made high in order to cover expenses	55.6	13.9	30.8
Patients condition get worse due to delay of service	73.9	7.8	18.3
Patients do not get proper treatment	81.1	3.9	15.0
Workers lack motivation and interest in patient care	81.1	3.9	15.0
Patients distrust the health system	42.3	11.7	46.1
Doctors and nurses respect patients during delivery of services	44.4	9.4	46.1
Doctors treat patient in a genuine interest during delivery of service	42.8	12.8	44.4

3.4.4 Perceived effect of corruption on quality of health services by respondents' characteristics

Table 3.6 presents the perceived effect of corruption on the quality of health services by their respondents' characteristics. The result shows that there was no significant difference between respondents' characteristics and the perceived effect of corruption on the quality of health services. This result can be interpreted that there is no relationship between the perceived effect of corruption on the quality of health services and respondents characteristics. This implies that it is generally impossible to prove the effect of corruption on the quality of health services.

Table 3.6: Respondents' responses on the effect of corruption by socio-economic and demographic characteristics (n=180)

Variable	n	Median	U	W	Z	P-Value
Male	91	22				
Female	89	22	3893	7898	-0.448	0.654
Youth age	107	22				
Elderly age	73	12	3394.5	6095.5	-1.491	0.136
Non formal education	27	21				
Formal education	153	22	1986	2364	-0.319	0.750
Self employment	141	22				
Formal employment	39	23	2528.5	12539.5	-0.769	0.442
Single	58	23				
Married	122	22	3025	10528	-1.573	0.116
Poor	125	22				
Non poor	55	22	3319	4859	-0.369	0.712

3.5 Conclusions and Recommendations

Generally, the study found that corruption affects the quality of health services to a greater extent with regard to respondents' characteristics. The study concludes that the quality of health services used was perceived to be low. For instance, because of waiting for a long time, patients were not satisfied with services provided. Moreover, the elderly, the poor and the employees in the informal sector perceived to receive low quality of health services than other respondents. Again, corruption was perceived to be high. For instance, corruption led to lack of drugs, equipment and other materials. It also led to poor quality of health services and patient's condition got worse due to delay of services. In addition, there was no significant relationship between the perceived effect of corruption on the quality of health services and the respondents' characteristics. It is recommended that the indicators falling under quality of health services, for instance, waiting time, privacy and confidentiality, respect, satisfaction and attentiveness should be addressed.

REFERENCES

- Adindu, A. (2010). Students' perception about the effect of corruption on quality of health care. *International Journal of Biological Sciences* 2(7): 122-127.
- Ahmad, I., Nawaz, A., Khan, S., Khan, H., Rashid, M.A. and Khan, M. (2001). Predicators of patient satisfaction. *Gomal Journal of Medical Sciences* 9(2):183–188.
- Akter, S., D'Ambra, J. and Ray, P. (2010). User perceived service quality of m-Health services in developing countries. 18th European Conference on Information Systems, Pretoria, South Africa: University of Pretoria. pp. 1-12.
- Atherton, F., Mbekem, G. and Nyalusi I. (2003). Improving service quality: Experience from the Tanzania family health project. *International Journal for Quality in Health Care* 11(4):353–356.
- Baba, I. (2004). Experiences in quality assurance at Bawku hospital eye department, Ghana. *J. Comm Eye Health*. 17-31pp.
- Bailey, D. (1998). *Methods of Social Research*. Free Press Collier Macmillan publisher New York Qualitative and Quantitative Approaches. Sage Publication, London. 585pp.
- Batool, Z., Afzal, A. and Hussain, S. (2005). Perceptions of the beneficiaries of basic health units in rural areas. *Journal Agriculture Social Science* 1:62-3.
- Iqbal, A. (2009). Perceptions of quality of care for serious illness at different levels of facilities in a rural area of Bangladesh. *Journal of Health Population and Nutrition* 27(3): 396-405.

- Kumar, R. (2005). *Research Methodology: A step by step: Guide for beginners*. Pearson Education, Melbourne, Australia. 165pp.
- Kumari, R., Idris, M.Z., Bhushan, V., Khanna, A., Agarwal, M. and Singh, S.K. (2009). Study on patient satisfaction in the government allopathic health facilities of Lucknow District, India. *Indian journal of Community Medicine* 34:35-42.
- Legal for Human Rights Centre, (2013). Tanzania Human Rights Report. [<http://www.humanrights.or.tz/downloads/tanzania-human-rights-report-2013.pdf>] site visited on 22nd April, 2016.
- Leonard, K. (2008). Is patient satisfaction sensitive to the changes in the quality of care? An exploitation of the Hawthorne effect. *Journal of Health Economics* 27(2):444–459.
- Mahlangu, Q. (2009). Health Budget speech tabled by MEC for Health and Social Development, Ms Qedani Dorothy Mahlangu', in South African Government information. [<http://www.info.gov.za/speeches/2009/09080614251002.htm>] site visited on 17 may 2016.
- Melgar, N., Rossi, M. and Smith, T. (2010). The Perception of Corruption.[<http://www.iss.org>]site visited on 22nd April, 2016.
- Muhondwa, P., Mwangu, M. and Mbembati, A. (2008). Motivation of health care workers in Tanzania; a case study of Muhimbili National Hospital. *East Africa Journal of Public Health* 5 (1): 7-15.
- Mwakisu, S. (2005). *Perceived Quality of Health Care Services in Dar es Salaam Municipal Hospitals: Comparison between Clients Using user Fees and National Health Insurance Fund*. A dissertation submitted in partial fulfillment of requirement for degree of master of public health of the University of Dar es salaam. 1-20pp.

- Pastory, W. (2013). Ageism in Tanzania's health sector: *A Reflective Inquiry and Investigation*4(1): 400-410.
- Senarath, U., Fernando, D. and Rodrigo, I. (2006). Factors determining client satisfaction with hospital-based prenatal care in Sri Lanka. *Tropical Medicine and International Health* 11(9): 1442–1451.
- SIKIKI (2010). Petty corruption in health services in Dar es Salaam and Coast regions. E and D Readership and Development Agency: Jamana Printers. Dar es Salaam, Tanzania. 09-20pp.
- Sulley, C. (2012). The 2010 general elections in Mbeya Urban constituency: Actors and processes. *Journal of Politics and Law*5 (4): 4-12.
- Transparency International, (2004). The Information Challenge: Transparency International and Combating Corruption by Mr. Jeff Lovitt, Director of Communications –Transparency International Presented at the 4th Training Seminar of the OLAF Anti-Fraud Communicators' Network (OAFCN): Deterring Fraud by Informing the Public24-25-26 November 2004.
- United Nations, (2016). Measuring corruption in Africa: The international dimension matters - African Governance Report IV. [www.uneca.org] site visited on 17th April 2016.
- United Republic of Tanzania, (2003). *National Ageing policy*. Dar es Salaam: Government Printers. 4-10pp.
- United Republic of Tanzania, (2007). *The Ministry of Health and Social Welfare Tanzania (MOHSW) Dar-es-Salaam Tanzania*. Quality Improvement of District Health Services. 128pp.
- United Republic of Tanzania, (2011). *Ministry of Health and Social Welfare*.the Tanzania quality improvement framework in health care 2011 – 2016. 76pp.

CHAPTER FOUR

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

4.1.1 Clients' perceptions of corruption in the process of receiving health services

The first objective of this study was to assess clients' perceptions of corruption in the process of receiving health services. The study concludes that perceptions of corruption were high. Secondly, respondents' characteristics influenced the perceptions of corruption in the health sector. For instance, those who were single perceived high corruption than the married ones. However, men and women showed similar perceptions.

4.1.2 Factors driving corruption during health services delivery

The second objective was to determine factors driving corruption during health services delivery. In this objective, the study concludes that long queue was one of the major factors driving corruption during health service delivery. In addition, shortage of health service providers constrained by large number of patients also drives corruption on the side of the clients.

4.1.3 Perceived quality of public health services

The third specific objective was to assess the perceived quality of health services. The study concludes that the quality of the health services was perceived to be low. Clients had to wait for a long time to get service; patients were not satisfied with the quality of services provided. There was a significant difference between age, employment status and wealth status with perceived quality of health services. The elderly, the poor and self employees in the informal sector perceived low quality of health services than their counterparts.

4.1.4 Influence of corruption on quality of health services

The fourth objective of this study was to examine the influence of corruption on the quality of health services. The study concludes that corruption that occurred during health service delivery caused low quality of health services regardless of the respondents' characteristics.

4.2 Recommendations

4.2.1 There is need to increase clients awareness that corruption is unfavorable

It is recommended that the government; non-governmental organisations and civil society should increase awareness to clients that corruption is unfavorable in the health services delivery. This would help to reduce level of corruption in the health services delivery.

4.2.2 There is need to pay attention on clients socio-demographics characteristics

It is recommended that these socio-demographics characteristics differences like age and marital status matters to improve quality of health service delivery at the point of care. In achieving a better understanding of these socio-demographics characteristics there is need to the design fair policies that effectively drive change in national healthcare systems.

4.2.3 Expansion and construction of new large health facilities

It is recommended that the government; non-governmental organisations, civil society and individuals should invest in expanding and constructing new large health facilities with more spacious facilities and employment of more qualified staff. This would help to address the problem of long queues during health services delivery.

APPENDICES

Appendix 1: Questionnaire for Individual Survey

Section 1: Demographic and Socio-Economic Characteristics

1. Year of birth.....
2. Sex 1. Male [], 2. Female []
3. Name of street.....
4. Name of ward.....
5. Education level 1. Primary [], 2. Standard 7 [], 3. Secondary [], 4. Tertiary [] 5. Informal [], 6. Others
6. Years of schooling.....
7. What is your main occupation?
 1. Farmer/Peasant [], 2. Businessman/women [], 3. Public servant []
 4. Other specify.....
8. What is your marital status? 1. Never married [], 2. Married [], 3. Separated [], 4. Widow/widower []
9. Where do you mostly get health services?
 1. District hospital [] 2. Dispensary [] 3. Health center [] 4. Others specify.....
10. Give number for each of the following items owned by your household (2016)

	Items owned by household number	Number
1	Number of radios	
2	Number of televisions	
3	Number of telephones	
4	Number of cars	
5	Number of motorcycles	
6	Number of bicycles	
7	Number of rooms under cement floors	
8	Number of cattle	
9	House built with cement/burnt bricks	

Section 2: Clients' Perceptions of Corruption

11. Do you think corruption occurs at the point of health services? 1= Yes 2=No
12. If yes, what types of corrupt practices are common in your area? 1= Absenteeism of health service providers, 2=Theft of medical supplies, 3=Informal payments, 4=Nepotism, 5=Embezzlement of health care funds, 6=Other (specify)
13. On the following statements, I am going to ask you about your perception towards corruption in the health service. You are required to Strongly Agree (**SA**), Agree (**A**), Undecided (**UD**),and Disagree(**DA**) Or Strongly Disagree (**SD**) for each of these statements.

Statements	SA	A	N	D	SD
i. Bribery control health services delivery	1	2	3	4	5
ii. Bribes help to receive information on the process of health service	1	2	3	4	5
iii. Corruption reduces long health service procedure which are too costly and time wasting	1	2	3	4	5
iv. Corruption gives fair health treatment among clients	1	2	3	4	5
v. Corruption helps to reduce the existing uncertainty of health services	1	2	3	4	5
vi. Unofficial payment guarantee reliability of services	1	2	3	4	5

Section 3: Factors driving corruption

14. If you have been involved in any form of corruption with medical workers in the previous 12 months, what was the major motive behind? [Tick only one major motive]

S/N	Motive for being involved in corruption	Yes	No
i	Wanted to avoid a long queue		
ii	It was a pressure from medical workers		
iii	Quest to get good quality health services		
iv	Poor responsibility among medical workers		
v	Wanted to avoid long bureaucratic procedures		
vi	Poor living standards among medical workers		
vii	Poor access to information about my health service rights		

Section 4: Perceived Quality of Health Services

15. For your opinion, how does corruption affect the quality of health services?

1= to a greater extent, 2= to some extent, 3= to a small extent, 4= not a problem at all, 5= don't know/ not sure, 6= other (specify)

16. On the following statements, you are asked on the quality of health services received. You are required to Strongly Agree (SA), Agree (A), Undecided (UD), and Disagree (DA) Or Strongly Disagree (SD) for each of these statements.

	STATEMENT	SA	A	N	DA	SD
i	Patients are waiting for a long time to get health service	1	2	3	4	5
ii	The demand of tips before services builds trust between health workers and patients	1	2	3	4	5
iii	Patients are denied their rights due to practices of friendliness	1	2	3	4	5
iv	Only rich patients receive high respect and favour from health service providers	1	2	3	4	5
v	Patients' financial resources are depleted to get attentiveness from service providers	1	2	3	4	5
vi	Patients are satisfied with the services provided at the health care center	1	2	3	4	5
vii	Health service providers pay more attention to patients privacy	1	2	3	4	5
vii	Patients get the necessary treatment according to their sickness	1	2	3	4	5
viii	Patients are not satisfied with the services provided	1	2	3	4	5
ix	Patients kept waiting for a short time to get health service	1	2	3	4	5
x	Patients lose faith to health workers due to the demand of tips before services	1	2	3	4	5
xi	Patients get their right due to the practices of friendliness	1	2	3	4	5
xii	Poor patients are disrespected from health service providers	1	2	3	4	5
xiii	Health service providers give attentiveness to the patients regardless of financial resources	1	2	3	4	5
xiv	Patients privacy are not paid attention by health services providers	1	2	3	4	5
xv	To get the necessary treatment patients must pay more than it is required	1	2	3	4	5
xvi	Professionals tend to claim to have provided services which they did not provide to the patients	1	2	3	4	5

Section 5: Perceived Effect of Corruption on Quality of Health Services

17. On the following statements, you are asked about the perceived effect of corruption on the quality of health services received. You are required to Strongly Agree **(SA)**, Agree **(A)**, Undecided **(UD)**, and Disagree **(DA)** Or Strongly Disagree **(SD)** for each of these statements.

	STATEMENT	SA	A	N	DA	SD
i	Leads to lack of drugs, equipment or other materials	1	2	3	4	5
ii	Leads to poor quality care	1	2	3	4	5
iii	Patients die or maimed due to poor quality care	1	2	3	4	5
iv	Charges are made high in order to cover charges	1	2	3	4	5
v	Patients' condition get worse due to delay of service	1	2	3	4	5
vi	Patients do not get proper treatment	1	2	3	4	5
vii	Workers lack motivation and interest in patient care	1	2	3	4	5
viii	Patients distrust the health system	1	2	3	4	5
ix	Doctors and nurses respects patients during delivery of services	1	2	3	4	5
x	Doctors treat patient in a genuine interest during delivery of service	1	2	3	4	5

Thank you for your participation

Appendix 2: Check list of item

-
1. How do you perceive corruption in public health service? (*Record similarities and differences in terms of perceptions from different participants. Consensus of the group should also be recorded. Quotations are essential*)
 2. Why do clients engage in corruption when seeking health services? (As above)

Thank you for your participation

Appendix 3: Reliability Analysis on Clients' Perceptions of Corruption

Statement	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Bribery control health services delivery	15.81	26.791	.535	.313	.688
Bribes help to receive information on the process of health service	15.85	27.793	.516	.321	.694
Corruption reduces long health service procedure which are too costly and time wasting	15.78	27.914	.484	.282	.703
Corruption gives unfair health treatment among clients	15.32	31.044	.316	.146	.748
Corruption helps to reduce the existing uncertainty of health services	15.74	28.627	.483	.255	.704
Unofficial payment guarantee reliability of services	15.55	27.523	.538	.308	.688
Reliability Coefficients for Item 6	Cronbach's Alpha			Standardized Items	
	.741			.741	

Appendix 4: Reliability Analysis on Perceived Quality of Health Services

Statements	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Patients are waiting for a long time to get health service	39.55	111.456	.660	.570	.794
The demand of tips before services builds trust between health workers and patients	39.13	125.591	.082	.245	.826
Patients are denied their rights due to practices of friendliness	39.01	114.424	.480	.347	.804
Only rich patients receive high respect and favour from health service providers	39.42	114.613	.540	.520	.801
Patients financial resources are depleted to get attentiveness from service providers	38.82	116.236	.464	.306	.805
Patients are satisfied with the services provided at the health care center	38.27	121.761	.185	.359	.822
Health service providers pay more attention to patients privacy	38.58	118.011	.320	.255	.813
Patients get the necessary treatment according to their sickness	38.58	117.173	.365	.344	.811
Patients are not satisfied with the services provided	38.89	116.709	.390	.397	.809
Patients kept waiting for a short time to get health service	38.25	118.144	.279	.398	.817
Patients lose faith to health workers due to the demand of tips before services	38.98	115.212	.432	.439	.806

Patients gets their right due to the practices of friendliness	38.74	113.915	.424	.355	.807
Poor patients are disrespected from health service providers	39.04	112.585	.565	.494	.799
Health service providers give attentiveness to the patients regardless of financial resources	38.75	112.892	.539	.438	.800
Patients privacy are not paid attention by health services providers	38.79	115.732	.397	.352	.809
To get the necessary treatment patients must pay more than it is required	38.81	114.426	.467	.430	.804
Professionals tend to claim to have provided services which they did not provide to the patents	38.75	113.295	.497	.384	.802
<hr/>					
			Cronbach's' alpha Standardized Items		
Reliability Coefficients for Item 17			.817	.822	

**Appendix 5: Reliability Analysis on Perceived Effect of Corruption on Quality of
Health Services**

Statement	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Leads to lack of drugs, equipment or other materials	20.87	51.558	.527	.427	.786
Leads to poor quality care	21.06	53.583	.505	.306	.789
Patients die or maimed due to poor quality care	20.69	52.484	.513	.389	.788
Charges are made high in order to cover charges	20.26	54.552	.388	.215	.802
Patients condition get worse due to delay of service	20.76	53.996	.492	.412	.790
Patients do not get proper treatment	20.95	53.109	.566	.500	.783
Workers lack motivation and interest in patient care	20.61	52.496	.545	.374	.784
Patients distrust the health system	20.33	53.263	.441	.329	.796
Doctors and nurses respects patients during delivery of services	19.76	52.473	.422	.337	.799
Doctors treat patient in a genuine interest during delivery of service	19.87	52.396	.481	.421	.791
Cronbach's Alpha Standardized Items					
Reliability statistics		.808		.812	