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EFFECTS OF CO-PAYMENT ON HEALTH CARE SERVICE AT AKUSE GOVERNMENT HOSPITAL, LOWER MANYA-KROBO DISTRICT, EASTERN REGION

BY

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DECLARATION

I, Nana Aso Boateng, hereby declare that apart from references to other people's works which have been duly acknowledged, this dissertations has been written independently by me and has not been submitted for the award of any degree in any institution.

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DATE

DEDICATION

This work is dedicated to Almighty God for the strength to carry on, to Madam Elizabeth Ama Adoma Taylor my mother, who passed on 23rd March , 2017 for her love and encouragement and to my entire family for always being there for me throughout the period of this study.

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LIST OF ACRONYMS

CHAG	Christian Health Association of Ghana
EU	European Union
GNA	Ghana News Agency
NGO	Non- Governmental Organization
NHIS	National Health Insurance Scheme
NHIA	National Health Insurance Authority
NHIC	National Health Insurance Council
OPD	Out-Patients Department
PBS	Pharmaceutical Benefit Scheme
PMTCT	Prevention of Mother-To-Child Transmission
SSNIT	Social Security & National Insurance Trust
UHC	Universal Health Coverage
US	United States
VAT	Value Added Tax
WHO	World Health Organization

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DEFINITION OF OPERATIONAL TERM(S)

Balance billing: It is a policy where the physician or the health provider is allowed under the law to charge an extra fee for the difference between what the client's health insurance chooses to reimburse and what the provider chooses to charge.

Co-payment: This is a payment made by an individual who has health insurance; usually at the time a service is received to offset some of the cost of care (MedicineNet.com, 2015).

ABSTRACT

Background: Copayment is a sum of money that a client with health insurance is mandated to pay at each visit to a health facility or when purchasing medicine although under Act 852 0f 2012 it is unacceptable .The study aimed to assess the effects of co-payment on health care at Akuse Government Hospital. The study sought to determine reasons for co-payment, effects of co-payment on health care providers and effects of co-payment on clients.

Method: The study adopted a mixed method approach using both quantitative and qualitative survey. The study used descriptive and inferential analysis to generalize the findings; the combination provided a better understanding of the research problem. Data was gathered by administering questionnaire which comprised both open and close ended questions. Sample of 400 clients were used for the cross-sectional study and 10 Heads of Departments were purposively selected and interviewed for the qualitative study. The quantitative data was analyzed using Stata Version 14.0 after entering all data into Microsoft Excel and Nvivo were used to analyze themes of in-depth interview for qualitative data.

Results: Out of the 400 clients studied, 93% admitted that co-payment made access to health care more expensive, impoverished the poor and gave financial and psychological burden on those with chronic diseases and the elderly who often access health care. However, health care providers confirmed that introduction of co-payment had helped the hospital to accrue more funds to meet operational cost and render quality service to clients.

Conclusion: Co-payment is illegal in Ghana but so far as the NHIA delays reimbursement of funds, the health facilities will also be compelled to practice it to meet operational cost. The ripple effect is then shifted on clients who have to pay more for services and since most of them cannot afford health care may use unorthodox means of health care that will be detrimental to

their health and defeat the purpose for which NHIS was established.

CHAPTER ONE

INTRODUCTION

1.1 Background

The cost of health care has been the challenge for most developing countries like Ghana, it was therefore not surprising that in 2003, the then Government of Ghana through an act of parliament (Act 650) established the National Health Insurance Scheme with the exclusive purpose to deliver equitable access and economic coverage for basic health care amenities to Ghanaians (Republic of Ghana, 2003). Health insurance was thus, seen as an important mechanism for health care in a developing country such as ours. The aim was to potentially intensify use of the health service and better protect the populace against huge health expenditures, a preferred option to user fees (Yawson, Nimo, & Biritwum, 2013).

Studies conducted in five African countries; Ghana, Kenya, Nigeria, Tanzania and Uganda confirmed that about 50% (17) out of the 33 health insurance schemes, either imposed reimbursement ceilings or co-payment deductibles. They also found that although almost all the 99% (32) health insurance programmes covered inpatients as well as outpatient medicines, there was some element of cost sharing by the consumers, which defeats the purpose for which these schemes were set up in the first place (Carapinha,et. al 2010).

Over the years, the health financiers have adopted certain measures on their services that had negatively affected some of the operations of some health facilities. In order to ensure smooth running of such health facilities, they have resorted to co-payment to compliment the services rendered. According to Dr. Gilbert Buckle, co-payment is an alternative solution for service

providers to stay in operation. (Ghana News Agency, 2013) Co-payment serves to shift some of the burden of health care from the financier to the user who has already pre-financed through premiums and taxes (ShungKing, 2011). Studies have shown that, however minimal the amount paid out of pocket, this goes a long way to affect outcome of health service delivery (Russell & Doggett, 2015). Again studies conducted by Shung-King (2014) in 15 EU states confirmed that, the outcome of health status of those who co-pay are often poor as this acts as a barrier for accessing healthcare. This is however different from 'balance billing' which allows physicians or health facilities to charge a fee from patients in addition to the fee paid by Medicare in the US and health insurance in some developed countries (Le Roy & Holtz, 2011 and Immigrants, 2016).

Co-payment is practiced in over 70% of health institutions in Ghana although not endorsed by law. These health institutions are both government and privately owned. The challenge is despite all the complaints in the media about the negative effects of co-payment, there seems to be no action to stop this act which is negating the purpose for which NHIS was established. NHIS which is a pro-poor policy is not aiding the poor populace as well as the elderly with chronic illnesses that have no choice but to access health care often. This issue of co-payment where clients are asked to pay for services that should have been free of charge is also affecting clients' confidence in NHIS (Ghana News Agency, 2015). The issue of co-payment therefore has its social implications on the impoverished community as well as economic burden on dependents.

This study served to impress on policy makers to ensure that access to basic health care does not become the preserve of the privileged few who can afford, thereby defeating the purpose of a pro-poor policy. Again, the financiers of health may have to streamline their products well

so that health care providers will not resort to desperate measures that will affect health service delivery.

1.2 Problem Statement

Globally, access to health care is of great concerns to all governments. The implementation of NHIS in 2004 was therefore acknowledged by Ghanaians as one of the best domestic social intervention to equitable and universal basic health for her resident (Owusu-Sekyere & Bagah, 2014).

In recent times, administrative measures from health financiers as a way of checking fraud and moral hazard like over-prescription as confirmed by ShungKing (2011), has resulted in delayed reimbursement, imposed ceilings on reimbursed funds, co-payment deductibles and delayed review in product prices despite inflation have clearly affected the operations of the health care providers. These reasons compelled such institutions to resort to co-payment to meet operational cost and to pay off debtors (Amo, Ansah-Adu, & Simpson, 2013).

Whereas in developed countries like Australia, Germany and Sweden the increasing ageing population put a lot of financial burden on health care thus, other insurance companies come in to offset extra cost as indicated by Russell & Doggett (2015) in their studies in the form of co-payment, in Africa and Ghana in particular the issues are entirely different because clients pay at the point of service delivery. This defeats the purpose for which NHIS a pro-poor social intervention was established in Ghana; to deliver equitable access and economic coverage for basic health care services to all residents in Ghana. Access to health care is gradually becoming the preserve of the rich in the society. Co-payment worsens inequalities and

adversely affects health in people especially among the low socioeconomic class (Qingyue, Liying, & Beibei, 2011). Studies conducted at an emergency department at a US hospital over 2 year period, confirmed there was 25-30% in reduction in Out Patients Department (OPD) attendance and 23% declined hospitalization due to co-payment burden (RossDegnan, et.al., 2012).

The practice of co-payment in some health facilities in Ghana does not only affect quality of health care but also affects subscribers' confidence in NHIS as stated by Mr. Sebastian Alagpulinsa Upper East Regional Director of NHIA (Ghana News Agency, 2015). These may lead to delay in seeking early treatment due to the extra cost incurred, economic burden on already poor populace, psychological stress of financial hardship on the elderly with chronic illnesses, decreased access to health care and seeking less cost effective forms of health care with herbalist and chemical sellers with resultant complications (Russell & Doggett, 2015).

Clients who accessed health care services at Akuse Government Hospital co-pay on all services rendered at the facility. The outcome apart from the economic burden on these clients who expect free service delivery is the challenge of treatment failures, lack of confidence in the insurance system and late reporting to the facility with resultant complications due to patronage of chemical shops, herbal medicines and prayer camps for solutions to health problems.

Co-payment is illegal in Ghana although there have been instances where officials of NHIA have issued threats of defaulters facing severe punishment but this has been over-looked. Mr. Kwadwo Antwi Boasiako Public relations officer at Mampong NHIA summarized this as being unethical, irreligious and inhuman for patients who already are in a state of agony and

psychological discomfort must not be made to pay for service already paid for (Ghana News Agency, 2012).

The outcome of this study provided information on effects of co-payment on the healthcare provider and patients' policy so that pragmatic measures can be implemented to stop co-payment to promote equity in health care.

1.3 Objective of the study

1.3.1 General Objective

The general objective of this study is to assess effect of co-payment on health care providers and patients at Akuse Government Hospital

1.3.2 Specific Objectives

The specific objectives of the study are:

1. To determine the effect of co-payment on health care providers
2. To determine the reasons for co-payment by health care providers
3. To determine the effects of co-payment on patients

1.3.3 Research Question

What are the effects of co-payment on health care providers and clients?

1.4 Justification

Co-payment negates the purpose for which NHIS was established in 2003. Social health insurance schemes are established to provide financial protection against ill health and to bridge

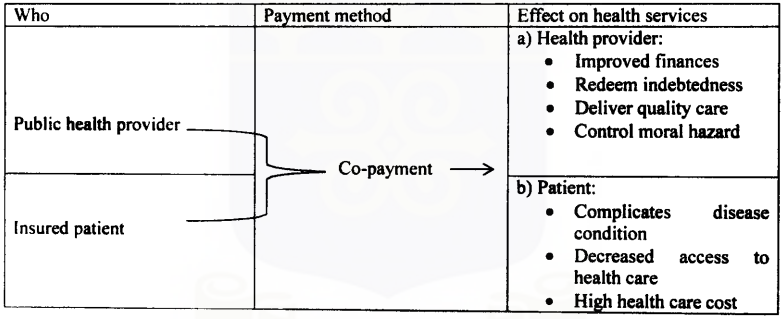
the equity gap between the poor and the rich but the reverse is now true because the poor who cannot afford are now being exploited due to the issue of co-payment. This leads to decreased access to health care, financial burden on the impoverished people and late reporting to health facilities with complications. Understanding the negative effects of co-payment on health care providers and on the patients especially on their health outcomes will inform policy makers to implement practical measures to ensure this challenge is reduced to guarantee equitable access to basic health care for people. Knowledge on effects on co-payment may inform financing schemes to look for alternative strategies to properly finance NHIS to make health care more accessible to all in spite of one's socioeconomic background. From health systems perspectives, effects of co-payment helped ensure health facilities operate efficiently in rendering cost-effective care to clients. The results from this study serve as evidence-based knowledge on effect of co-payment. It is anticipated that, the outcome of the study will serve as a reference for researchers and be will used by students who would like to further research on this topic in Ghana.

1.5 Conceptual framework on effect of co-payment on health services

The conceptual framework in Figure 1 depicted the effects co-payment has on clients and health care providers. Co-payment for health services was caused by delayed reimbursement, imposed ceilings on reimbursed funds and delay in review of products prices despite inflation. Funds for smooth running of health facilities become insufficient and also health care providers become indebted to suppliers so most health facilities operate at a loss. Health care providers in a bid to meet operational cost and to pay off their creditors are compelled to make clients co-pay for services rendered.

The effects of copayment led to, delay in seeking treatment thus, leading to extra cost incurred, stress of financial hardship especially on the elderly with chronic illnesses, economic burden on the poor populace, decreased access to healthcare and client seeking less cost effective forms of health care with their resultant complications. The outcome was poor health service delivery to clients who otherwise should have been provided with equitable access and financial coverage to basic health care service.

Figure 1: Conceptual framework of the effect of co-payment on health services



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presented a review of literature on effects of co-payment on health care service. It was divided into four sections: section 2.1 gives brief history of health financing in Ghana, 2.2 highlights reasons health facilities ascribe to co-payment though illegal, 2.3 gives effects of co- payment on health care providers and 2.4 presents effects on clients.

2.2 Historical background of health financing in Ghana

Post-independence Ghana, health services was financed with a subsidized tax structure that delivered free public health services to the populace. In the 1970's due to economic stagnation, this health system gradually became financially unsustainable resulting in shortages of drug other medical logistics and deteriorating quality of care. Initially the government established low consumer fees for hospital services to discourage undue use and recover cost. Following the implementation of structural adjustment program in 1983, the Rawlings' government developed and extended user fees in the public health services in a system that became named as "cash and carry", an out-of-pocket payment system (Blanchet, Fink & Osei-Akoto, 2012).

Dorledzie (2015) confirmed that user fee system enhanced operating profits for some facilities however put so much financial burden on the poor in the society that it seemed practically impossible for the poor to access basic equitable and quality health care as well as averting adherence to long term among those in the low socio-economic class and the vulnerable in the society (Sarpong et al., 2010). Utilization to health care decreased with time as more and more

people could not afford cost of health services. In the early 1990's, other forms of health funding were initiated by some Non- Government Organizations (NGO) and these were community-based health insurance schemes however these became unsustainable and could not cover majority of the community members. The "cash and carry" system became very unpopular among Ghanaians due to service cost (Owusu-Sekyere & Bagah, 2014).

Many developing countries have appreciate they could depend on user fees health payments to finance their health care systems because most of the people are from low to middle income status. Realistic proof by World Health Organization stipulates that user fee health payment is the least efficient and most discriminatory way of financing healthcare and deters people from accessing medical care and may worsen poverty. There is therefore, an increasing effort internationally and in the Africa region in particular, to ease financial barriers to quality health care generally, but with specific prominence on high priority services and those in the susceptible groups (Gobah & Zhang, 2011).

Attaining universal health coverage (UHC) means fulfilling policies to ensure the populaces obtain the needed health services without suffering any financial hardship. Most significantly, UHC is a important and frequently lucrative part in any policy to address poverty and societal discrimination; these were key stakes of the after 2015 sustainable development agenda. An UHC system that is effective involves several key components such as; human resource that is adequately skilled and well resourced, well equipped health facilities fully provided with essential drugs and other supplies and sufficient financial resources to the populace, irrespective of their socio-economic background which will enable them to obtain desired services without or minimal financial hardship (All, 2015).

Globally, governments have gradually accepted that for UHC to succeed public financing mechanisms holds the key. Government revenues come from two main avenues and these are through taxes and donations, social health insurance contributions. These mechanisms involve pooling of funds through pre-financing for equitable distribution so as to ensures that the healthy and wealthy cross-subsidize the costs of health services for the sick and the underprivileged, which is pivotal in achieving UHC (All, 2015).

Universal coverage ensures that there is generation of health care resources symbolizes equity in access and assures security for financial risk. Every country wishes to move towards a system of universal coverage regardless of the source of financing for the health system, made them decide for pre-financing and risk-pooling of resources as a basic standard in safeguarding financial-risk. In acknowledgment of the significance of universal coverage for nations compelled the WHO recommending the 2010 World Health Report to address measures of financing for universal health coverage (DeVries, Li & Oza, 2013).

The National Health Insurance Scheme (NHIS) was established in 2003 by the then Government of Ghana was an Act of Parliament (Act 650 of 2003) with the single goal to offer equitable access and financial coverage for basic health care services to people resident in Ghana without paying out-of- pocket before accessing necessary care at the point of use (NHI Memorandum Bill 2003). The act was however replaced by National Health Insurance Act 2012 (Act 852) that instituted the National Health Insurance Authority to remove administrative challenges, increase productivity and ensure more effective management (Republic of Ghana, 2012).

Sources of funding under the Act involved a combination from public and private sources

which include; 2.5% Social Security & National Insurance Trust (SSNIT) contributions, 2.5% was from value added tax (VAT) on goods and services that attracted VAT, resources assigned to the fund from parliament, money added to the deposit from assets made by National health Insurance Council (NHIC), premiums from individuals, donations, grants and other voluntary contributions made to the NHI fund into a central pool (Republic of Ghana, 2003). Health insurance in Ghana has been pre-financed by individuals through taxes and premiums. Clients who access health facilities therefore expect to have free medical care without paying for cost. In the recent past, the issue of co-payment although illegal in Ghana is being practiced by most private as well as public health institutions to ensure that these facilities can operate to deliver services to the clients. The health financiers (NHIA) have devised certain measures to check moral hazards and fraud such as over-prescription and over-use of services which are good administratively however, delay in reimbursement, reimbursed ceilings on products and delayed price review in the face of inflation have negatively affected the operations of most health facilities and they have also resorted to co-payment in order to meet cost (ShungKing, 2011).

2.3 Reasons for co-payment in health care service

WHO (2010) further alleged that in Ghana administrative lapses impends sustainability of the national Health Insurance scheme. The financial sustainability of the NHIS in Ghana is threatened by a number of factors. These factors include over-prescription, very substantial benefit package to cover 95% disease burden, unproductive referral system due to which patients are unable to seek care from advanced level facilities and under-developed checking systems within the NHIS (ShungKing, 2011). In order to curtail some of these lapses, imposed ceilings on reimbursed (ShungKing, 2011) funds compel health providers to institute co-

payment to compliment care rendered.

Clients who accessed healthcare facilities expect to enjoy free services if their insurance are valid but the issue of moral hazard and its implications have led to unpredicted outcome of co-payment. Co-payment a fee of money that a client with health insurance is mandated to pay at the time of each visit to a health facility or when purchasing medicine (Merriam Webster Learners' Dictionary, 2016). This helps to shift some of the burden of health care from the financier to the user who has already pre-financed through premiums and taxes (ShungKing, 2011).

Delayed reimbursement in insurance claims which has been one of the many reason of co-payment was confirmed in the study by (Amo et al., 2013). The results established that of all service providers, most of scheme managers (95.2%) and the NHIA settled that payment of claims were occasionally delayed. Most of the respondents specified that, among some of the reasons for the delays were lack of funds, lack of staff, and burdensome claim handling processes. The scheme operators also disclosed that, the main reason for delay settlement of claims was lack of funds and government subsidies that were irregularly paid. The outcomes proved that the delay in paying claims was not as a result of an accounting system error as envisaged but basically due to lack of funds.

Some of the challenges related to health insurance are moral hazard and fraud. Since insured clients in NHISs with a Third Party Payment mechanism do not accept the cost of health care at the time of service, the prevalence of moral hazard can increase as clients may recognize the care as free and use other services that may be pointless. Those providing the health care can also view the insurer as having better commercial capacity and thus may see it as better chance

to deliver services that are inclusive, but which may not be therapeutically needed (Le Roy & Holtz, 2011).

Individuals who use covered healthcare services usually pay an out-of-pocket user fee in the form of a fixed copayment, a percent coinsurance, and or a deductible sum. Copayments, coinsurance and deductibles appeal for a percentage of the actual costs for healthcare services to be subsidized by the individual accessing the services as a mode of distribution the financial risk. Copayments, coinsurance, and deductibles also may be used as a instrument to encourage individuals to use medical resources that are essential at a time. Healthcare services that are not a covered value are either paid in full by the client receiving the service or end up being written off as a bad debt by the providing institution (Navarro & Cahill, 2008).

In a study at Winneba Municipal Hospital reported that financial support from the government to the hospital had reduced since the introduction of NHIS. In 2008, over 70% of total hospital revenue was from the NHIS but delays in payment considerably strained the hospital's finances and delivery of drugs and supplies. To ensure the smooth running of the hospital they had to resort to co-payment (Yawson et al., 2013).

Health insurance financiers as one of their core duties is to check fraud in their products and the use of imposed ceiling on reimbursed funds is use to check over used of product as well as over- prescription. This measure although has its positive effect of saving cost places financial burden on the service provider who has already served the client. The service provider, in a bid not to operate at a loss surcharge the client in the form of co-payment on the services rendered (ShungKing, 2011).

Yawson, Nimo & Biritwum (2013) in their study at Winneba Municipal Hospital

recommended that since moral hazard, limited government financial support and delayed NHIS funds were critical challenges to the facility's operations, innovative measures to limit moral hazard like reward mechanisms for non-frequent visits and introduction of co- payments for multiple visits should be implemented.

In Ghana the unstable nature of the economy means inflation keeps fluctuating all the time and this affects the finances of health care providers due to delayed in products price review. The health providers who operate at a loss resort to co-payment to be able to pay off suppliers and operational cost (Yawson et al., 2013). Studies conducted in US on benefits of co-payment in social health insurance revealed, the recommendation for co-payment is also an effective instrument to control moral hazard. The study associated diverse properties of one tier system and three-tier system for the Medicare recipients, and found that the quantity of generic drugs use was developed in three-tier system group than one-tier system group he established that a small co-payment for prescription service was a effective mechanism to regulate the cost and promote in financing Medicaid prescription drug program (Finkelstein, 2015).

A critical study into the health reform in the US emphasized financial incentives for providers and consumers to promote the use of effective health services and discourage the use of slightly effective or unsuitable services. Evidence on the influences of financial motivations proved lessons for policymakers that consumer incentives affect their choices as most private and public insurance plans use financial incentives to constrain consumer demand for care. This strategy is premised on the idea that, consumers will make better decisions about seeking care and using cost-effective services when they bear responsibility for a portion of the cost. In fact, study has shown that cost sharing including deductibles, coinsurance, and copayments does affect health care use and expenditures. However, cost sharing can have vital negative

effects on health, and high cost sharing may eventually have little impact on total costs (Bernstein, Chollet, & Peterson, 2010).

In US for instance, it was noted that, the market for medical care which varies from other markets in large part because third-party imbursement leads to insured consumers being less sensitive to costs than if they had to pay for health care out of their pockets .The outcome is, health insurance value arrangements usually include patient cost sharing in the form of deductibles, coinsurance and copayments that necessitates consumers to pay some costs of care out of pocket until attaining a out- of-pocket maximum About 50% of Americans acquire health insurance coverage through their employers and over the last 15 years, employers have reacted to rising health care spending and insurance premiums by shifting more costs to workers through higher premiums, reduced welfares and more patient cost sharing (Reschovsky, Contreary, & Smith, 2016). Financial sustainability of the scheme remains a big challenge to insurance management given the increasing demand for health insurance and its consequent increase in health care service utilization. Thus delay in price reviews and the effects of inflation drive health providers to practice co-payment (Owusu & Moses, 2014).

2.4 Effects on health care providers

Ki-Bong et al., (2016) assessed the changes in the utilization of medical services resulting from the outpatient co-payment scheme in Korea. It revealed that the inpatient utilization decreased gradually during the period of the study. They concluded that the outpatient co-payment policy was effective for reducing the number of outpatient visits. Although introduction of co-payment could not control the cost per outpatient visit and inpatient utilization of the facility the fact that out- patient attendance reduced over the period goes to

buttress that point.

Yawson et al.,(2013) in their study at Winneba Municipal Hospital recommended that since moral hazard, inadequate government financial support and delayed NHIS funds were critical challenges to the facility's operations, innovative measures to limit moral hazard like reward mechanisms for non-frequent visits and institution of co- payments for multiple visits should be implemented.

The Executive Director of Christian Health Association of Ghana Dr. Gilbert Buckle confirmed co- payment was real and might be an alternate solution for health service providers to stay in operation. He therefore encouraged NHIS to reduce financial burden of beneficiaries and also provide financial sustainability to service providers' because under-payment and delayed payment of cost of services had negatively impacted on service providers. He cautioned that this has led to businesses to fold up and will not auger well if we want to meet the health needs of the people. He again revealed, unpredictable foreign exchange rate and inflation as some of factors influencing the cost of medicines or drugs provided to patients he thus, appealed to the NHIS to respond promptly to the financial needs of the service providers to stay in business so that they can offer quality services to clients (Ghana News Agency, 2013).

An on-line survey done in Portugal on some Physicians and some health care professionals revealed that they alleged that access to healthcare had become more challenging. 58% said that access had deteriorated and 16% said that it had become much more difficult with patients choosing to decline preventive care and having problems in accessing medical exams and in adhering to treatments. According to the same group of physicians, users mostly conveyed

challenges in paying co-payments and transportation. 16% referred to very recurrent complaints regarding co- payments and 43% referred to frequent complaints for transportation. 27% of them reported very frequent complaints from patients and 43% frequent grievances. Among the Primary Health Care professionals, the sentiments were related. This team alleged there was an increase in the difficulties experienced by patients in paying for transportation About.70% perceived an increase or great increase in patients reporting difficulties on co-payments 76.9% expressed an increase or great increase in accessing medical examinations. About 72% felt that difficulties in access had increased or greatly increased in this area. According to health care professionals, patient complaints about healthcare services greatly concentrated on co-payments (Rodrigues & Schulmann, 2014). In the US, studies conducted in health care cost incentives revealed that, the federal government's role as the principal health care financier also has a variety of influential effects on reimbursements to health care providers. These effects manifests in both the public and the private sector. Within the public sector, the problem of "dual eligible" about 9 million Medicare beneficiaries under years who are also qualified for Medicaid as well have been known to present funding challenges to both programs, not to mention organization of care complications for the beneficiaries themselves. These challenges arise because of the incentives to engage in "cost- shifts" between the two programs. A nursing home dealing with a expensive patient who is reimbursed via Medicaid might seek to transfer such a patient to a hospital, which is reimbursed by Medicare. The hospital, for the very same reasons, might seek to transfer its own costly patients to a nursing home. This imaginary example is only one of a host of methods that health care providers cost shift within the two programs to save cost (Troy, 2014).

The diverse and compound reimbursement procedures initiate different stakeholder incentives,

varying use of healthcare procedures and practices, and different patient outcomes. Even within a single reimbursement system, a multitude of reimbursement policies, required processes, and payer institutions creates operational intricacy for physicians and their professional staff, which ultimately affects patient care delivery procedures and outcomes. The task environment focus of existing healthcare study suggests a need to understand established environment experiences, natures, and impacts of reimbursement processes. The study further proves the seemingly simple operational nature of reimbursement processes, yet also reminds researchers how diverse institutional environments, built to realize different healthcare aims, can lead to similar levels of massive systems difficulty (Lee, et. al 2016).

2.5 Effects on clients

Russell & Doggett, (2015) in her studies in Australia confirmed that inequity is compounded in health services when clients have to pay at the point of service delivery. This can rather be challenging for people with low income status who want to access health. Periods of illness often coincide with reduced earning capacity and other additional expenses, up-front costs for unexpected illnesses can impact adversely on people, even when rebates are provided at a later stage. This can lead to people delaying or failing to access the care they need, resulting in the development of more serious health problems which are often more costly to the client as well as the health care provider.

Another effect is financial burden on the poor populace, where the average burden increased considerably in all areas. Finding has to be seen in the background of the fact that rural people already suspended or avoided medical consultation at higher rates than people in the metropolises. While 17% of those in Major cities had missed a medical service or medication in

the past year due to cost, the percentage increased with remoteness to over 20% in district areas and to almost 35% in isolated areas (Ki-Bong et al., 2016).

Studies done in Korea showed that, beneficiaries, who were healthy with higher amount of income, were not affected by co-payments. However, those beneficiaries who were poor and suffering from chronic diseases appeared to use less medical services, which affected their health negatively. For example, when low income patients suffering from severe high blood pressure were supposed to pay the part of their medical costs of co-payments, mortality rate increased by 14%. Thus, the effects of Copayments on the health of patients diverse, this was based on socio-economic characteristics or their vulnerability to chronic diseases, or disease severity (Choi & Lee, 2015). Baum et al., (2016) in their studies on 581 clients at an emergency department in a United States hospital found out that 30.2% (175) of people who came in said they will not access emergency service if they had to co-pay and 23% (134) said they will refuse hospitalization. These responses prove that co-payment at the point of care deters clients from accessing health care. DeViries, Li, & Oza, (2013) also raised concerns in their study about co-payment causing disparities for patients in the lower economic status class due to decreased access to health.

One of the challenges in developing an inclusive policy on co-payments is the lack of comprehensive data on the impact of co-payments on consumers. However, there is evidence that the existing system of co-payments is creating barriers to access among some groups of consumers especially those with chronic conditions. In a study undertaken by the Chronic Illness Alliance in Australia, they found that the costs of both medication and associated needs are a major contributor to hardship for all people with chronic illness, irrespective of income levels. This study also established that some people with chronic illness spend major amounts

of their incomes on medication in order to remain independent (Doggett, 2009).

Russell & Doggett, (2015) cataloged a drawback of user co-payments is that they have tendency to be less equitable than other forms of health funding and therefore reduce the overall equality of our health system against the impoverished populace. Current research has shown a multifaceted relationship exists between over-indebtedness and ill health. Financial difficulties may result from the cost of health care, but illness and infirmity and a lack of social safety nets may also lead to economic distress. As one study noted, "over-indebtedness leads to illness and illness leads to over-indebtedness". In the United Kingdom, ill health or disability accounted for 5% of households in financial challenges in 2002. In Germany, over-indebtedness and private bankruptcy were found to cause psychological stress as financial burden created its own illness (Emami, 2010). In 2008 more than one million Australians aged 15 and over delayed seeing their General Practitioners due to extra cost paid for consultation. Again, clients who were less than 45 years were more likely postpone medical appointments due to copayment. Once Australians were compelled to make health choices based on how much it will cost it was proven that Medicare is not accomplishing the promise of affordable healthcare. The Australian Medical Association indicated that the suggestion for a standard co- payment of $6 for visits to the doctor would likely increase the number of Australians postponing visits to the doctor (Baker, 2014).

Again, in 2009 11.3 million patients left the doctor's surgery with a prescription for medication at an extra. The cost of medication can deter some patients from having their prescriptions filled at all. It has been reported that a 33.3% of Australians alleged the cost of prescription medications to be a 'moderate to extreme' burden. Australian Bureau Statistics data show that in 2008 almost one in ten people delayed purchasing or did not purchase the medication they

had been prescribed due to cost (Baker, 2014).

Studies conducted in a US hospital have revealed that, insured individuals are progressively bearing a greater percentage of healthcare costs through higher deductibles and copayment. The proportion of adults considered as underinsured based on the part of medical expenditures relative to income has increased by almost 80% since 2003. Low-income individuals are more likely to bear the burden of higher healthcare costs. Among susceptible populations, increased patient copayment reduces both non-essential and essential healthcare use, resulting in increased hospitalizations and dwindled use of essential medications. Low economic status and those chronical ill patients are most at risk for having increased rates of adverse outcomes, and racial and ethnic minorities may also be overly affected (Lewey, et. al2015).

It is broadly recognized that a strong financial base is prerequisite for an effective health care delivery system. Currently, Governments in sub-Saharan Africa are facing serious financial constraints in their attempts to provide basic health services to their people (Owusu & Moses, 2014). Co-payment can only be an option if is well structured like in developed countries in a form of co-insurance so that users do not have to pay at service point (Russell & Doggett, 2015).

A study to evaluate the German system of co-payment revealed that, persistent high unemployment in Germany might be partly as a result of high contribution rates and this reduces revenues of the social health insurance companies adding further pressure on the contribution rates. To curtail this, the German government introduced five major healthcare reforms in the 1990s to stop contribution rates from further rising. Despite these efforts average contribution rates increased from 13.2% in 1995 to 14.3% in 2003. In 2004 another health care

reforms most controversially discussed in the public – was the introduction of copayments for doctor visits in order to reduce health care costs by creating an incentive to avoid unnecessary doctor visits. Since then, each patient had to pay a flat rate of 10 euros per quarter once she visits a doctor (Augurzky, Bauer & Schaffner, 2006).

The Australian government and the states work in partnership with indigenous communities in order to close long-standing health gaps through a range of programs and targeted health care funding. Extra subsidies for services, training programs, and outreach services are also directed to people in rural areas, and a safety net is in place to improve access to care for low-income people. The reporting framework of the National Health Performance Authority requires government service providers to report on measures of equity and access, including reporting targeted toward particular groups such as indigenous Australians. The Australian Institute of Health and Welfare publishes regular reports on indigenous Australians as a way of evaluating their health state (Mossialos, et. al, 2015).

Again the study showed that in Germany, the social health insurance finances approximately 58% of the total health expenditures of 240 billion euros. Essentially social health insurance is compulsory for all employed workers. However, when the salary exceeded a certain threshold, the individual had a choice whether to remain in the social health insurance system or to select an alternative private health insurance. Independently of their salary, civil servants and self-employed can always choose between social and private health insurance. This was encouraged so that low income earners can remain with the social insurance system to lessen the financial burden on the social insurance system (Augurzky et al., 2006).

Some degree of cost sharing can limit demand for services to help hold overall spending in

check, but substantial cost sharing can reduce access to needed care, particularly for people with low or modest incomes. And cost sharing not only can discourage use of services that may be of little value in terms of health outcomes but also care that is important to maintaining health and preventing chronic conditions from worsening. As such, cost sharing is a relatively blunt tool to encourage patients to make well-informed care decisions (Reschovsky et al., 2016).

In Australia studies revealed that, pharmaceutical costs are an additional, often hidden, economic barrier to accessible health care among Aborigines. Furthermore, some Indigenous people lack of confidence or familiarity with using pharmacies to purchase medicines further compounded their poor access to essential medication. The elimination of co-payments on medications in some parts of Australia has helped to improve access to medications for Indigenous Australians. A 1999 amendment to the National Health Act called 'the $100 Scheme' allowed approved remote and very remote areas to bulk-purchase and dispenses pharmaceuticals to Aboriginal clients without requiring co-payments. This approach has improved access to otherwise unaffordable medications. The Co-payment Measure introduced in July 2010 under the Indigenous Chronic Disease Package complements the $100 Scheme by improving access to Pharmaceutical Benefits Schemes (PBS) medications for, Indigenous Australians with, or at risk of, chronic disease in urban and rural areas. The first monitoring and evaluation report indicates that, in 2010–11, the number of people accessing the PBS co-payment measure under the Indigenous Chronic Disease Package exceeded expectations (Ware, 2013).

Three studies conducted by (Akazili et al., 2014) specifically addressed the issue of equity in financing in Ghana that was highly informative to both Ghana and Nigeria as it used empirical

analyses of households and other sources, coupled with well-established methods to determine the amount of evolution in different categories of revenue growing. The overall finding was that financing is progressive because of the major role of taxes. The NHIS levy was found to be mildly progressive in the formal sector due to NHIS deductions. Informal sector NHIS contributions, however, were found to be reverting. In spite of the development of the NHIS payments, 45% of total health expenditure was confirmed as being regressive. At the time of the analysis, NHIS premiums only accounted for 5% of total health care funding. The study also recommended for measures to expand the informal sector, possibly through a greater reliance on taxation, and the prepayment pool needs to increase in order to enhance budgetary allocations (Odeyemi & Nixon, 2013).

2.6 Conclusion

Co-payment in Ghana is illegal but this phenomenon is being practiced in the health sector by some health care providers as a means to meet operational cost. Financial security mechanisms such as NHIS are established to offer protection against health care expenditure and to eliminate health care discrepancies between the rich and the poor regarding access to quality health care. This literature conveys that although co-payment has its benefits of checking fraud and moral hazards, its disadvantages outweighs the benefits in a developing country such as ours. It must be noted that, the idea behind its implementation in some health facilities has nothing to do with the benefits but to meet operational cost and to pay off debts as a result of delayed reimbursement, reimbursed ceilings on products and inflation.

Again, most of the studies conducted looked at the benefits of co-payment as a legal policy to

check moral hazards and fraud in order to reduce unnecessary use of health care due to the growing aged population and chronic diseases impact on social insurance schemes and to know the measures to put in place to make health care more accessible in developed countries like Germany, Sweden and Holland. Little or no studies have been done on effects on health care providers and clients. This study will thus, focus on the effect of co-payment on health care service in a hospital to inform policy on the best way to look at our health financing system so that health care will indeed be accessible to all in spite of the individual's socioeconomic background.

Co-payment was introduced in Akuse Government Hospital in the latter part of 2015 to meet operational cost especially payment of salaries of non-mechanized staff that was in months of arrears, to offset indebtedness to suppliers and to acquire logistics to offer better services to clients who patronize the facility. A practice, though not supported by law, its implementation was necessary to meet cost and for smooth running of the facility due to several months of delayed reimbursement from NHIA.

CHAPTER THREE

METHODS

3.1 Introduction

This chapter summarizes methods used in this study. It covered the research design, study area, study variable, sample population, sampling technique, research instrument, data management, analysis of data and ethical issues.

3.2 Study design

This was a mixed-methods study using cross-sectional design to recruit 422 NHIS clients and in- depth interview with 10 selected heads of departments in the study area. Quantitative and qualitative approaches were used to collect data from the respondents.

3.3 Study area

The study was conducted at Akuse Government Hospital, located at Lower-Manya Krobo District. The District is one of the 26 districts in the Eastern Region and located in the north eastern part of Accra in Ghana. Akuse has an estimated population 26,788 (as projected from the 2010 census) and the natural growth rate is stable. The district has three 4 health facilities namely, Akuse Government Hospital, Atua Government Hospital, St. Martins De Porres' Catholic Hospital and Kpong Health Centre. There are other private health facilities including clinics and maternity homes through-out the districts.

The Akuse Government Hospital started operation in 1911 and serves as a referral hospital from health centers, CHPS compounds, Clinics and private hospitals in and around the district. It has the following departments; Out-Patient Department, Medical, Surgical, Maternity, Antenatal &

postnatal Care, Family Planning, Theatre, Eye, X-Ray, Voluntary counseling and Testing, Prevention of Mother- to Child Transmission (PMTCT), Psychiatric, Pharmacy, Laundry and Mortuary. The hospital has a bed capacity of 70 and operates 24-hour services. Payment to health service delivery is by health insurance and out-of-pocket. Attendance at OPD for 2015 was 44,512. 40,877 (92%) were insured, a mean of 3,406 per month and a daily mean of 112. The staff strength in the hospital is 165. Majority of the client (92%) who access the facility are on NHIS and as the hospital's policy, they all co-pay for services rendered at the point of service delivery since September, 2015.

3.4 Study population

There were two study populations for this study namely, clients and health care providers. Clients: This included all OPD clients with valid NHIS card, which were above 18years, accessing health care at Akuse Government Hospital and were willing to take part with in the study period. Health care providers: These were selected Heads of Departments of Akuse Government Hospital.

3.5 Sampling

Clients: Participants were enrolled using a systematic sampling technique. From the records of daily attendance at the OPD and using the folder numbers of the clients every third person who fell into the inclusion criteria was determined as eligible to participate. The number selected was used as a reference in selecting the remaining clients. A total of 40 clients were selected daily over a period of 10 days until the total sample was achieved. Clients who happened to participate in the study and were re-visiting the facility during the period of the study were replaced with the next prospective client.

Health care providers: Ten Heads of Departments were purposively selected to get complementary views for better understanding and validation. This was done by selecting the first-two head of departments that reported early on the days of data collection for ten days.

Inclusion criteria: Clients who were above 18 years with valid NHIS card who accessed the health facility during the study period and were willing to participate in the study.

Exclusion criteria: Clients who were above 18 years with valid NHIS card but did not want to take part in the study or too sick to take part in the study.

3.6 Sample size estimation

Client: The following formula by Cochrane, (2011) was used to arrive at the sample size for the clients. A total insured client population of 40,877 was used.

The sample size was calculated using the Cochran Formula:

$$N = Z^2 \times p\,(1-p)/d^2$$

p is the prevalence among the population thus 0.5, A confidence level (Z) of 95% with represent a z-score of 1.96 and an allowable margin of error (d) = 0.05

$N = 1.96^2$

$1.96^2 \times 0.5\,(1-0.5)\,/0.05^2$ N= 384.16

Computed figure 384 will be adjusted by 10% for inconsistences and incompleteness arriving at a sample size of 422 for the clients.

Health care providers: Ten Heads of Departments were selected for in-depth interview for the qualitative study.

3.7 Study variables

The description of the study variables is presented in a Table 1. Table 1 further described the components of effects of co-payment on clients and health care providers.

Table 1: Description of study variables

Variable	Description
Dependent	1.Effect on health service delivery(Positive or Negative) 2.Effect on clients (Positive or Negative)
Independent (health care provider)	Background characteristics ➢ Age ➢ Sex ➢ Educational status ➢ Position Effects ➢ Slows operations of the hospital ➢ Indebtedness ➢ High treatment cost ➢ Poor service delivery
Independent (clients)	Background characteristics ➢ Age ➢ Sex ➢ Highest level of education ➢ Occupation ➢ Religion Effects ➢ Decrease access to health ➢ Financial burden ➢ Health care cost ➢ Complication of disease condition

3.8 Data collection procedure

Clients: A structured interview questionnaire was administered to the clients. The questionnaires had closed and open-ended questions which provided with predetermined

options data that was used to collect from only outpatients who have valid NHIS cards and are above 18 years. The researcher introduced herself and politely to prospective respondent and explained the purpose and benefits of the study. Those who could read and understand were provided with consent form and who could not read, the consent form was read and explained to them in a language they could understand. Thereafter, those who agreed to participate in the study were asked to endorse the consent form and those who declined to be part of the study were replaced by the next available and consenting individual. Data collection was carried out by the researcher herself with the help of two trained assistants. The questionnaires were administered to clients with valid NHIS cards and in a friendly situation. At the end of each data collection day, discussions were be held with the two research assistants to discuss the filled out questionnaires and cross-checked to ensure completeness.

Health care providers: In-depth interview was conducted with the 10 selected heads of departments using an Interview Guide and responses recorded. Ten departmental heads were purposively selected and interviewed using an interview guide made up of themes from the specific objectives. The in-depth interview was recorded and transcribed verbatim.

3.9 Data collection tool

Clients: A structured questionnaire was used for the data collection from clients. The questionnaire was divided into three sections according to the conceptual framework issues namely; Section A: Socio-demographic information and Section 2: Effects on clients.

Health care provider: A structured interview guide was used and divided into three sections namely; Section 1: Socio-demographic information, Section 2: Reasons for co-payment on

health care service and Section 3: Effects on healthcare providers

3.10 Data Processing

Quantitative data: All answered questionnaires were examined critically to ensure completion and consistency. Descriptive statistics (e.g. mean, frequency, proportions) was used to summarize data collected using STATA Version 14 (Stata Corp LP, College Station, TX, USA). Charts and tables were used to present results.

Qualitative data: All qualitative data was transcribed, translated to English, and coded using N vivo software. The in-depth interview transcripts were reviewed and a codebook developed based on the study's objective and emerging themes in the data. A content thematic analysis approach was then used to identify the common responses.

3.11 Data Analysis

3.11.1 Background characteristics of clients and health care provider

The background characteristics of clients and health care providers will be obtained by cross tabulating the following variables – sex, age, marital status, education level, occupation and religion for clients. For health care providers, the cross-tabulation will be for age, sex and duration of work using STATA Version 14.

3.11.2 Determination of effect of co-payment on health service

Using the 5-point Likert scale, health care provider were asked to rate 4 statements as: (1)"Strongly disagree" (2)"Disagree" (3)"Not sure" (4)"Agree" (5)"Strongly agree" in respect for the effects of co-payment. These responses were then used to develop a scoring range for the effect of co-payment on health care provider (i.e. positive or negative effects) as shown in

Table 2. The total composite score was obtained by multiplying the responses (i.e. 5) by the number of questions (i.e. 5) giving a value of 25. The total scores were then be used to determine the dimension of positive and negative effect on health care provider with the corresponding range of 5-12 being negative and 13-25 described as positive in Table 2. The result was then displayed graphically using charts and graphs in Microsoft Excel. Relevant quotes from the in- depth interviews were used to support the ratings on the effect of co-payment.

Table 2: Composite Co-payment Effect on health care service

Dimension	Scale	Score Range
Effect of co-payment on health care service	(1) Strongly disagree (2) Disagree (3) Not sure (4) Agree (5) Strongly agree	5-25
Composite score	Negative effect	5-12
	Positive effect	13-25

3.11.3 Determination of reasons for co-payment by health care providers

Audio-recorded qualitative data was transcribed and translated verbatim in English. Emerging themes on the reasons for co-payment were identified and used as verbatim quotes. Where appropriate, the reasons were cross-tabulated with age, sex and duration of work.

3.11.4 Determination of effect of co-payment on clients

Using the 5-point Likert scale, clients will be asked to rate 7 statements as:(1)"Strongly disagree" (2)"Disagree" (3)"Not sure" (4)"Agree" (5)"Strongly agree" in respect for the effects of co-payment. These responses were used to develop a scoring range for the effect of co-payment on clients (i.e. positive or negative effects) as shown in Table 3. The total composite

score was obtained by multiplying the responses (i.e.5) by the number of questions (i.e. 7) giving a value of 35. The scores were then used to determine the dimension of positive and negative effect on clients with the corresponding range of 5-17 being positive and 18-35 described as negative as in Table 3. The results were then displayed graphically using charts and graphs in Microsoft Excel. The Fisher's exact test was used to test the difference in composite scores between men and women and other relevant socio-demographic characteristics of the clients.

Table 3: Composite Co-payment Effect on Clients

Dimension	Scale	Score Range
Effect of co-payment on clients	(1) Strongly disagree (2) Disagree (3) Not sure (4) Agree (5) Strongly agree	5-35
Composite score	Positive effect	5-17
	Negative effect	18-35

3.12 Quality control

In order to ensure that the questions are clear to participants, two Field Workers were trained for two days on the aim of the research, how to identify and select potential respondents and on how to administer the questionnaires while ensuring data quality.

The questionnaire was pretested at a hospital in the Lower Manya -Krobo Municipal which had a similar setting as the study area so that ambiguity can be corrected. Twenty questionnaires were administered during the pre-testing period and the responses were analyzed manually. Items on the questionnaire were made very precise and clear and given to a colleague for proof reading. Feedback on the length of the questionnaire, the clarity of language/expression, the sequence of sections and questions, the strategy of ensuring high response rate, was elicited

during the pre-test. The experience gained from the pre-testing study helped the researcher to appreciate and plan for the challenges she was likely to face in the field during the final administration of the questionnaire. Data was entered by trained personnel on field after every daily collection. Each questionnaire was coded to prevent double entries and for easy access for corrections.

3.13 Ethical consideration

Ethical clearance was first sought from the Ghana Health Service Ethics Review Committee of the Research and Development Division. Permission to carry out the study was obtained from the Eastern Regional Health Director. The Lower Manya-Krobo Municipal Director of Health Services was informed before data was collected.

3.14 Voluntary consent

Participants were informed about participation being voluntary. Details of the study including the purpose of the study were explained to participants and they were allowed to ask questions for clarification.

3.14 Confidentiality

Case numbers were used to identify participants to ensure anonymity and confidentiality. In addition, data collected were treated with utmost confidentiality.

3.15 Privacy

Privacy of participants was ensured during the study. The questionnaires and interviews were conducted in an area to ensure privacy for the participants, research assistant and the principal investigator.

3.16 Voluntary withdrawal

Participants were also informed of their right to withdraw from the study at any time if they so wished. A written consent form was obtained from eligible participants who agreed to participate in the study. For those who could not read or write, they were allowed to thumb-print.

3.17 Conflict of Interest

The participants were assured of no conflict of interest in conducting of the study.

3.18 Potential risk

The research did not pose any risk to either the study population or community.

3.19 Benefits of study

The result of the study was beneficial to both the population and the community in diverse ways. The study provided the study population information about the effects of co-payment.

3.19.1 Compensation

Respondents were not given any form of compensation, be it monetary or non-monetary.

3.20 Data storage/security and usage

The completed questionnaire was assessed for appropriateness of data. Each questionnaire was serialized to prevent double entries and for easy access for corrections. The questionnaires were kept under lock and key. The Principal Investigator was the only one to have access to the data. Softcopies were stored on an external drive. Data solely used for this study.

3.21 Assurance for academic purpose

Findings from this study were included in the dissertation proposal submitted in partial fulfillment of the requirement for the awarded of MPH degree. Results from this study are made available to appropriate policy makers.

CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter of results is divided into four sections. Section one, presents information on socio-demographic characteristics of respondents interviewed; section two, describes effects of co-payment on health care service; section three, describes the reasons for co-payment on health care service and section four describes effects of co-payment on clients.

4.2 Socio-demographic characteristics of respondent

4.2.1 Clients' socio-demographic characteristics

The response rate was 94.7% (400). Of the 400 participants, 58.5% (234) were females. About 31.5% (126) were between the ages of 25 and 34 years, 29.7% (119) were between the ages 15 and 25 years, 17.5% (70) were between ages 35 and 44 years, 9.7% (39), 7.0% (28) were between the ages 55 and 64 years and 14.0% (18) were above 65years. The proportion of participants with formal education were (89%) 356, 27% (110) completed JHS, 25.8% 103 had their education up to SHS/Vocational/Technical and Tertiary levels respectively and 44 (11%) had no formal education. Those married were 54.3% (217), 34.8% (139) single, 6% (24) divorced and 5% (20) widowed. About 161(40.3%) were self-employed, 20.5% (80) students/apprentice, 18% (72) unemployed and 4.5% (18) had retired. Most of the participants 80.8% (323) were Christians, 14.8% (59) were Muslims, 3.0% (12) Traditionalist and 1.5% (6) belonged to other religions not specified.

Table 4: Distribution of clients' demographic characteristics

Variables	Number (400)	Percentage (%)
Sex		
Female	234	58.5
Male	166	41.5
Age		
15-24	119	29.8
25-34	126	31.5
35-44	70	17.5
45-54	39	9.7
55-64	28	7.0
65+	18	4.0
Education		
No Education	44	11.0
Primary	40	10.0
JHS	110	27.5
SHS/Vocational/Technical school	103	25.8
Tertiary	103	25.8
Marital Status		
Single	139	34.8
Married	217	54.3
Widowed	20	5.0
Divorced	24	6.0
Occupation		
Unemployed	72	18.0
Self-employed	161	40.3
Formal sector employee	67	16.8
Student/Apprentice	82	20.5
Retired	18	4.5
Religion		
Christian	323	80.8
Islamic	59	14.8
Traditional	12	3.0
Religions not specified	6	1.5
Total	400	100.0

4.2.2 Health care providers' socio-demographic characteristics

Among the10 selected Heads of Department interviewed, most of them 50% (5) had worked more than 10 years, 30% (3) had worked between 5 and 10 years and 20% (2) had worked less than 5 years in the facility. Eighty percent (8) were females, 60% (6) were nurses and the rest were a medical officer, a midwife, a physician assistant and a pharmacy technician.

Table 5: Distribution of health care providers' demographic characteristics

Variable	Number	Percentage (%)
Years worked in facility		
<5	2	20
5 – 9	3	30
>10	5	50
Sex		
Female	8	80
Male	2	20
Age (years)		
30 – 39	5	50
40 – 49	3	30
50+	2	20
Position		
Doctor	1	10
Midwife	1	10
Nurse	6	60
Pharmacist	1	10
Physician Assistant	1	10
Duration of work		
< 5 years	3	30
5 - 9 years	2	20
≥ 10 years	5	50
Total	10	100

4.3 Effects of co-payment on health care providers

All the providers explained that co-payment had a positive effect on health care services as shown in Table 6. Again, Table 6 shows that, the main effects were; improved funds to meet operational cost (98%), redeem indebtedness (94%) and control moral hazards (92%).

Table 6: Health care providers' response on health services

Indicator	Total Score(50)	Percentage (%)
Improved finances	49	98
Redeem indebtedness	47	94
Expensive essential care	39	78
Logistics to deliver quality care	45	88
Control moral hazard	46	92

4.4 Reasons for co-payment on health care service

The ten (10) selected heads of department had fair ideas about the reasons co-payment is being practiced in the facility. These reasons were categorized under these themes; delayed reimbursed funds, imposed ceilings on products, lack of funds to meet operational cost and inadequate logistics to deliver quality care.

4.4.1 Delay reimbursement of NHIS fund

All the respondents had this to say about delayed reimbursement of funds. These are some of their assertions:

> "We heard that they decided to start because National Health Insurance was not reimbursing them on time and secondly the amounts that were quoted for the various charges were far below how much the hospitals purchased the items for instance for the drugs aspect, patients were made to pay some amount because the NHIS amount paid to the facility were not up to even the cost price of the items.

And the drugs credited on the open market, they did not have the money to pay them on time so it was becoming a burden to them so they started the co-payment for the hospital to be able to run" (Physician Assistant, Consulting Room IV IDI 008 L.20).

"To some extent yes, because the hospital needs money to run effectively, the patient can't come to the hospital and there are no drugs and reagents for lab tests and all that because Health Insurance delayed their payments. The hospital must run and so these are the ways that we can keep the hospital running. So to that extent for me it's okay, but if the Health Insurance can pay on time then I believe the hospitals can do away with the co-payment, it will solve the problem that way. It depends on the National Health Insurance" (Nurse, Female Ward IDI 004 L16).

"Okay my understanding is every facility is run with money or the basis of the running of the company or facility is finances, and then this is a case where you render services and then it takes you one, if my memory serves me right, as at now the payment that has been made is for last year April or May. So imagine a company rendering services to clients for about a year without any form of support from the NHIA that is the National Health Insurance Authority has to pay, how do you expect the facility to survive? You would have to find ways and means, because apart from the drugs and services rendered the hospital will have to pay for electricity bills and where do we find that money but from the same NHIS. Apart from all these there is something we call bad debt for instance if

accident cases happen you have to render services to the client irrespective of the availability of the relatives as to whether they have NHIS or not. So imagine if such patients are transferred all this becomes bad debt. This is all I can say about co-payment". (Pharmacy Technician, Pharmacy, IDI 007 L.24).

4.4.2 Imposed ceilings on products

Five of the respondent gave imposed ceilings on products as one of the reasons for co-payment. These were some of their statements;

"Yes I think I have a little idea. The National Health Insurance does not pay realistic costs of the drugs that we stock here in our pharmacy. So for instance if we run out of Paracetamol and masses goes to medical stores to get it at GHS1.00, National Health pegs its payment plan at GHS1.00 But if we run out of Para we now have to go out to the open market to get it but because demand is high at that point they tell you theirs is going for GHS1.50, the hospital will stocks up and buys the Para. Ideally no one is supposed to pay when they go to the pharmacy when they are registered on the NHIS with a valid NHIS card. The hospital has incurred an extra cost of GHS0.50 procuring these drugs and we can't be giving it to them at the Health Insurance rate because at the end of the year or so they will only pay the agreed upon charge they have for it. So the GHS0.50 has to be paid for by someone and the hospital cannot bear that cost. So when you come to the hospital and you're insured you pay the GHS0.50 for the Para and also if you come without insurance you'll have to pay GHS1.50 for the same Para". (Medical Officer, Consulting Room II IDI 003).

> "We heard that they decided to start because National Health Insurance was not reimbursing them on time and secondly the amounts that were quoted for the various charges were far below how much the hospitals purchased the items for instance for the drugs aspect, patients were made to pay some amount because the NHIS amount paid to the facility were not up to even the cost price of the items. And the drugs credited on the open market, they did not have the money to pay them on time so it was becoming a burden to them so they started the co-payment for the hospital to be able to run" (Physician Assistant, Consulting Room IV L20)

4.4.3 Lack of funds to meet operational cost

All the respondents agreed lack of fund to meet operational cost as a reason co-payment was being practiced in the facility. These were some of their allegation:

> "To some extent yes because the hospital needs money to run effectively. The patient can't come to the hospital and there are no drugs and reagents for lab tests and all that because Health Insurance delayed their payments. The hospital must run and so these are the ways that we can keep the hospital running. So to that extent for me it's okay, but if the Health Insurance can pay on time then I believe the hospitals can do away with the co-payment, it will solve the problem that way. It depends on the National Health Insurance" (Nurse, Female ward IDI 004 L16).

> "Okay my understanding is every facility is run with money or the

basis of the running of the company or facility is finances, and then this is a case where you render services and then it takes you one, if my memory serves me right, as at now the payment that has been made is for last year April or May. So imagine a company rendering services to clients for about a year without any form of support from the NHIA that is the National Health Insurance Authority has to pay, how do you expect the facility to survive? You would have to find ways and means, because apart from the drugs and services rendered the hospital will have to pay for electricity bills and where do we find that money but from the same NHIS. Apart from all these there is something we call bad debt for instance if accident cases happen you have to render services to the client irrespective of the availability of the relatives as to whether they have NHIS or not. So imagine if such patients are transferred all this becomes bad debt. This is all I can say about co-payment" (Pharmacy Technician, Pharmacy, IDI 007 L 24)

4.4.4 Adequate logistics to deliver quality care

All the respondents alleged that co-payment enable the facility to have adequate logistics to deliver quality care. These were some of their reports;

"The main reason then had to do with the delay in the National Health Insurance Scheme paying the hospital's claims which have been sent to them. The main reason came about when the hospital was not having enough money to run because of the delay in payment of the claims by the

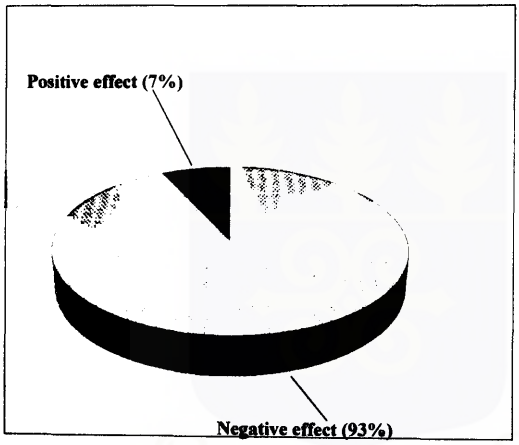
National Health Insurance Scheme. So it was suggested that the patients be made to pay half so that the hospital will be able to continue to render the services and it was also realized that the amount being paid by the Health Insurance was not enough to be able to cater for the service we render for the patients so that necessitated the start of the co-payment system, that's what I remember. Also the high cost of providing service resulted in patients being asked to pay for part of the service rendered to them" (Nurse, Male Ward, IDI 002 L22).

"This co-payment is about all patients even including health workers who come to this facility they pay, something small, in support of the hospital. If I should go further this co-payment matter came about because the Health Insurance was not paying the facility on time, and most of the time when the clients come they don't get the medications or treatments they're supposed to get. They are sometimes given prescriptions to go outside which sometimes worries them a lot so management had the idea that if that is the case then we should put that into practice and actually all health workers in this facility agreed to that and this time we're not having this problem of lack of medicines again" (Nurse, VCT/DOT Unit, IDI 010 L20).

4.5 Effects of co-payment on clients

As shown in Figure 2, 93% (372) of the respondent agreed that co-payment had a negative effect on them and 7% (28) said it had positives effect on them.

Figure 2: Proportions of effects of co-payment among clients



As shown in Table 7, Fisher's exact test to assess the association between effects of co-payment and the variables showed that there was no statistically significant association except for religion.

Table 7: Association of effects of co-payment with demographic characteristics of clients

Variables	Effects		Fisher's exact
	Negative	Positive	P-value
Sex			0.326
Female	215 (53.75)	19 (4.75)	
Male	157 (39.25)	9 (2.25)	
Age			0.713
18 – 24	108 (27.00)	11 (2.75)	
25 – 34	116 (29.00)	10 (2.50)	
35 – 44	66 (16.50)	4 (1.00)	
45 – 54	38 (9.50)	1 (0.25)	
55 – 64	26 (6.50)	2 (0.50)	
65 +	18 (4.50)	0 (0.00)	
Education			0.471
No Education	39 (9.75)	5 (1.25)	
Primary	39 (9.75)	1 (0.25)	
JHS	100 (25)	10 (2.50)	
SHS/Vocational/Technical school	97 (24.25)	6 (1.50)	
Tertiary	97 (24.25)	6 (1.50)	
Marital Status			0.795
Single	131 (32.75)	8 (2)	
Married	200 (50)	17 (4.25)	
Widowed	18 (4.50)	2 (0.50)	
Divorced	23 (5.75)	1 (0.25)	
Occupation			0.415
Unemployed	68 (17)	4 (1)	
Self-employed	149 (37.25)	12 (3)	
Formal sector employee	65 (16.25)	2 (0.5)	
Student/Apprentice	73 (18.25)	9 (2.25)	
Other	17 (4.25)	1 (0.25)	
Religion			0.037
Christianity	301 (75.25)	22 (5.50)	
Islam	57 (14.25)	2 (0.5)	
Traditional	10 (2.50)	2 (0.5)	
Other	4 (1)	2 (0.5)	

As shown in Table 8, the main effects of co-payment on clients were; health care being expensive to the poor (62.2%), financial and psychological stress on the elderly and those with chronic diseases (55.0%), decreased access to health care (38.8%), access to health care based on ability to pay rather than a need (36.8%) and Clients seeking health care elsewhere like chemical shops, herbalist (36.5%). However, 71.5% (286) clients still had confidence in NHIS and 83% (332) would recommend the health facility to relatives and friends.

Table 8: Clients' response to effects on co-payment

No.	Indicator	Number that selected Agreed and Strongly Agreed	Percentage (%)
1.	Access to health care based on ability to pay rather than a need	147	36.8
2.	Financial and psychological stress on the elderly and those with chronic diseases	220	55.0
3.	Clients seeking for health care elsewhere	146	36.5
4.	Health care expensive to the poor	247	62.2
5.	Decreased access to health care	155	38.8

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This study sought to determine effects of co-payment on health care providers at Akuse Government Hospital, reasons of co-payment on health care service and effects of co-payment on clients/patients who access health care services at Akuse Government Hospital.

5.2 Effects of co-payment on Health care providers

The effects of co-payment on health care providers were impressive, the responses were unanimous. About 98.0% strongly agreed that co-payment had helped to improve the finances of the facility so they can now meet operational cost. Dr. Gilbert Buckle confirmed in a news publication in 2013 that co-payment was real and might be an alternate solution for health service providers to stay in operation (GNA, 2013). Almost all the health providers interviewed confirmed that, co-payment had greatly helped the hospital to render care to the clients and meet operational cost.

Ninety-two percent of the respondent strongly agreed that with co-payment the health facility was now able to pay their suppliers, in order to reduce pressure from their debtors as reported by Yamson et al (2013). The health facilities are able to procure logistics in order to render quality care to clients accessing health. To ensure the smooth running of the hospitals, facilities had to resort to co-payment thus, co-payment shift cost from the provider to clients to enable the facility to run its services as confirmed by Troy (2014).

The study also revealed that co-payment reduced hospital attendance over time, but studies by Ki-Bong et al (2016) revealed otherwise. They concluded that the outpatient co-payment policy

was effective for reducing the number of outpatient visits. Yamson et al. (2013) in their study at Winneba Municipal Hospital also recommended co-payment as an innovative measure to limit moral hazards in those who visit hospitals frequently because they are insured.

5.3 Reasons for Copayment at Akuse Government Hospital

The study established delayed reimbursed NHIS funds as the primary reason for the practice of co-payment in the health facility. Amo et al 2013 in their studies established that all service providers (100%), majority of scheme operators (95.2%) and the NHIA agreed that payment of claims sometimes delayed due to basically lack of funds from government. The scheme operators also disclosed that, the main reason for delay settlement of claims was lack of funds due to irregular payment of subsidies from government.

Some of the responses from the in-depth interviews also supported this reason. They confirmed that, delayed reimbursed greatly affected the operations of the hospital so the hospital management were compelled to institute co-payment to enable the hospital have enough funds to meet operational cost.

Again, another reason for co-payment was the imposed ceiling on products that affected the finances of the health facility in rendering quality care. Shung-King (2011), in her study alleged that in order to control moral hazards like over-prescription, NHIS may impose ceilings on products which indirectly affects the finances of the facility where care was given. Among the responses given by all the health providers was the fact that, NHIS product prices were below the hospitals' approved prices so although monies were sometimes paid, they were far below expectation so co-payment helped to salvage this situation.

Another reason for introduction of co-payment in the health facility was the hospital's

indebtedness to suppliers due to lack of funds to meet operational cost. Yamson et al.(2013) in their studies confirmed that Winneba Municipal Hospital in 2008, since over 70% of total hospital revenue was from the NHIS, delayed payment considerably strained the hospital's finances and delivery of drugs and supplies. To ensure the smooth running of the hospital they had to resort to co-payment.

The health providers revealed in their interviews that, since the central medical stores could not meet all the demands of health care facilities, the hospitals sometimes bought logistics from the open market, lack of funds meant the hospital became indebted to suppliers. Co-payment thus, helped to redeem their debts to be in good standing with suppliers.

Again, inadequate logistics to render quality care was another reason for the practice of co-payment in the facility. Dr. Gilbert Buckle, confirmed co-payment was being practiced because unpredictable foreign exchange rate and inflation as some of factors influencing the cost of medicines or drugs provided to patients he thus, appealed to the NHIS to respond promptly to the financial needs of the service providers to stay in business so that they can offer quality services to clients (Ghana News Agency, 2013).

Almost all the health providers confirmed that, before the introduction of co-payment there were inadequate logistics to render quality care so sometimes client had to buy some essential drugs from chemicals stores or go to do basic laboratory investigations at private facilities. With the institution of co-payment, now the hospital can afford to give basic health care to the clients at one shop.

The study also revealed that introduction of co-payment had made health care rather expensive and reduced hospital attendance over time. This assertion confirmed an on-line survey conducted by Rodrigues & Schulmann, (2014) in Portugal on some Physicians and Health care

professionals. Most clients 71.9% believed that, difficulties in access had increased or greatly increased in this area.

According to health care professionals, patients' complaints about healthcare services greatly focused on copayments. Some of the responses from the in-depth interviews also confirmed that clients sometimes complained about the extra money paid at each service point and with time this had dwindled attendance to the hospital.

5.4 Effects of Co-payment on clients/patients

Majority of the respondents, 93% (372) interviewed alleged that, co-payment had some adverse effect on them. Access to health had become more of a client's ability to pay rather than a need as established by Russell & Doggett (2015). This can lead to people delaying or failing to access the care they need, resulting in the development of more serious health problems which are often more costly to the client as well as the health care provider.

The study confirmed the assertion that patients and the elderly with chronic diseases experienced psychological and financial distress (55%) as revealed in Russell & Doggett studies in 2015. Again they noted in their study that "over-indebtedness leads to illness and illness leads to over-indebtedness" to drive home a point that co-payment impoverished these group of people. Choi & Lee (2015) also confirmed the effects of co-payments on the health of patients were diverse and these were based on socio-economic characteristics or their susceptibility to chronic diseases and severity of the disease which more often than not have psychological stress on the clients as well. In Germany, Emami (2010) found in his studies that psychological stress as a result of financial burden created its own illness.

The study revealed that, some insured clients (36.5%) are compelled to seek healthcare

elsewhere because they do not have additional monies to pay as alleged by Ware (2013). His studies in Australia publicized that, pharmaceutical costs are an additional, often hidden, economic barrier to accessible health care among Aborigines. The elimination of co-payments on medications in some parts of Australia has helped to improve access to medications for Indigenous Australians so that they can access health care at the facility level. Choi & Lee (2015) again confirmed in their work that, recipients who were poor and suffering from chronic diseases appeared to use less medical services, which influenced their health.

Most of the respondents (62.2%) agreed with Ki-Bong et.al. (2016) that co-payment had made health care more expensive due to its financial burden on the poor in the society. Low-income individuals are more likely to bear the burden of higher healthcare costs as revealed in Lewey, Shrank, Avorn, Liu, & Choudhry (2015) in their studies in a United States of America hospital. Russell & Doggett, (2015) again catalogued that co-payment impoverished the populace especially the poor and vulnerable.

Some of the respondents (38.8%) agreed that co-payment decreed their financial access to health. Clients had to pay extra for health care although they had pre-financed NHIS through their taxes and premiums as noted by DeViries, Li & Oza (2013). Baum et. al., (2016) also alleged in their study that out of 581clients 30% (175) claimed they will not access emergency care if they had to co-pay whilst 23% (134) refused admission. Baker (2014) confirmed that the Australian Medical Association stated that the proposal for a standardized co- payment of $6 for visits to the doctor would likely increase the number of Australians delaying visits to the doctor. Reschovsky et al. (2016) also confirmed in their work that cost-sharing reduces access to the needed health care especially those of low and modest incomes.

Contrary to the Ghana News Agency (2013) publication that people may lose interest in the

NHIS, most 72% of the respondents thought otherwise, they alleged it was better than the "cash and carry" system which the scheme replaced. Again, respondent had faith in the health facility and majority of them 83% were willing to recommend the hospital to friends and family

CHAPTER SIX

6.1 CONCLUSION

The study was conducted to assess the effect of copayment on health care providers and clients at Akuse Government Hospital. The study revealed that effects of co-payment had different effects on health care providers and clients. Co-payment had a positive effect on health care providers as they were now able to meet some operational cost, pay suppliers it was indebted to, the facility had adequate logistics to ensure efficient care and to control hazards. However, co-payment negatively affected most of the clients (93%). Delayed reimbursements, imposed ceilings on funds, delayed review of products prices in the face of inflation led to copayment which eventually accounted for decreased attendance to the health facility. The reduction in OPD attendance as confirmed in various studies was ironically seen as a way to control moral hazards. Co-payment also led to psychological and financial stress to the chronically ill who often access health care hence healthcare becoming expensive. Nonetheless, clients still had confidence in NHIS and were willing to recommend the facility to others for their health care needs.

6.2 RECOMMENDATIONS

The following recommendations are made based on the findings of the study.

- As far NHIS delayed reimbursing funds to health facilities, they would be compelled to institute co-payment to keep the operations of the health facilities going and shift the cost on clients thus prompt payment will help stop this illegal practice.
- The effects of co-payment was more felt on the clients who had to pay extra for services rendered leading to health care being more expensive especially to the poor, those with

chronic diseases and the elderly who often access care. Prompt payment of claims will thus curtail co-payment and make health care accessible to all.

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