

**MOTIVATION OF HEALTH WORKERS AND QUALITY OF HEALTH SERVICE
DELIVERY IN NWOYA DISTRICT: A CASE STUDY OF HEALTH CENTRE THREES**

BY

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Declaration

I, Prisca Patricia Akello, declare that this research report has never been presented before for an award of any degree in any University or other institution. I take full responsibility regarding any opinion, error or omission contained herein.

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Approval

This research report on the topic “Motivation of Health Workers and Quality of Health Service Delivery in Nwoya district; A case study of health centre III’s,” was written by Prisca Patricia Akello and has been approved by us as supervisors for examination.

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Dedication

I dedicate this work to my parents Mr. and Mrs. Okeny David, who have always been my source of inspiration. I also dedicate this work to all the district officials and health workers in the health centre IIIs who tirelessly work to protect the health of the venerable communities in Nwoya district.

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List of abbreviations

HCIIIs- Health Centre threes

HWs- Health Workers

QHSD- Quality of Health Service Delivery

PEM – Public Expenditure Monitoring

MOH – Ministry of Health

NDA-National Drug Authority,

NMS- National Medical Stores

HSDs-Health Sub Districts (HSDs)

GoU- Government of Uganda

HCs-Health centers

PHC-Primary Health Care

NHP- National Health Plan

PRDP-Poverty Reduction Development Plan

HSSP- Health Sector Strategic

HIV- Human Immune virus

ABSTRACT

The study on the relationship between motivation of Health Workers (HWs) and quality of health service delivery (QHSD) was carried out with the aim of determining the effect of motivation of HWs on the QHSD in HCIIIs of Nwoya District. The specific objectives of the study were to establish the effects of financial incentives, non financial incentives and supervision on the QHSD in HCIIIs in Nwoya District. Both quantitative and qualitative research methods were used in the study to thoroughly address all aspects of the topic to achieve a high degree of validity, credibility, research utility and enrich the nature of research. The findings of the first objective of the study showed that financial incentives have a positive effect and a moderately positive relationship on the QHSD therefore it was concluded that financial incentives have a fundamental non-compromising effect on QHSD when availed in a timely and regular manner hence, a deliberate effort by government and partners should be made to ensure that budget allocations for health worker salaries and allowances are revised to motivate HWs in Health centre IIIs. More to that, findings in the second objective revealed that non financial incentives have a positive effect and significant relationship between all non financial incentives on QHSD concluding that, absence of non-financial incentives was a discouragement to all health workers because it acted as a baseline in determining the QHSD therefore, an urgent effort by the government, Health sub district must be made to ensure that all the necessary non financial incentives are availed. Lastly, the research findings of the third objective revealed that supervision had a positive effect and a strong positive relationship on the QHSD. It was concluded that support supervision encouraged HWs to become efficient and effective in performing their duties, therefore, the ministry of health, the Nwoya district supervision team and partners should to continuously offer support supervision to improve the QHSD.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The key constraint to achieving the intended health service delivery package in Sub Saharan Africa and Uganda in particular is the absence of properly motivated trained workforce operating in dilapidated health facilities, crippling the already fragile health systems, (Willis-Shuttack, Bidwell, Thomas, Wyness & Blaauw et al.; 2008). This study was aimed at finding out the relationship of financial and non financial incentives of Health Workers (HWs) and Quality of Health Service Delivery (QHSD) in Nwoya District. This chapter covers the background of the study, the statement of the problem, general objective, specific objective, research questions, conceptual framework, significance, justification, scope and operational definition of the study.

1.2-Background to the Study

1.2.1-Historical Background

Motivation of HWs and health service delivery is a never-ending complex global subject which constantly evolves because employees' needs are constantly evolving due to the imprecise and unpredictable nature of human motivation, even the best treatment may not be good enough to ripe the expected morale from health workers (Hughes & Kerr, 2000).

There is a growing need to strengthen health systems in many developing countries of the Sub Sahara in order to attain the quality of health service delivery, (Agyepong, 1999), however the

key problem is how best to motivate HWs and which incentives and incentives system are fundamental for effective, efficient and sustainable progress.

Previous studies of African health systems have identified the most important human resources tools to manage job satisfaction in order of importance are materials, salary, training, working environment, supportive supervision, living conditions, and recognition, (Hagopian, Zuyderduin, Kyobutungi, & Yumkella , (2014).

However, a systematic reality in many developing countries is that public service incentives are so weak that they do not reflect the skills, training and seniority of management positions, (UNDP, 2006). Many Ugandan HWs are mostly dissatisfied with their jobs, specifically about their compensation and working conditions. About one in four would like to leave the country to improve their outlook, including more than half of all physicians. Urgent strategies should be developed to strengthen human resources for health in Uganda by focusing on salary, working conditions, facility infrastructure, management, and workforce recognition, (Hagopian, et al, 2014).

The delivery of health service in Uganda is undertaken through a National Health System comprising of all institutions, structures and actors whose actions have a primary purpose of achieving and sustaining good health, The Office of the Auditor General report, (2006).

Uganda was one of the countries with the best health indices and a vibrant health care system in Africa between 1962-1971, however, the two decades of civil unrest led to the collapse of health systems resulting in deterioration of the health service delivery, (Carlson, 2004) & 'strategic framework',(2007).

According to contemporary sources, the general health status in Uganda, as well as the quality of health services is poor and the current condition presents a situation of poor health and a dysfunctional health care system is a result of a worsening during the 1990s. The government undertook an extensive decentralization of the whole public sector and the adoption of a new national health policy expending considerable funds in making these reforms work (Anders, (2004). The government undertook the National Health Plan, Poverty Reduction Development Plan (PRDP), Health Sector Strategic Plan (HSSP) I and II were undertaken to improve the health outcome indicators but progress has stagnated since the late 1990s due to low financial and non financial incentives accorded to health workers, (Carlson, (2004)

In answering the questions of how to best motivate HWs in using financial and non financial incentives, regular and reliable support supervision could be a means to promote efficient, effective and equitable health service delivery to improve health worker morale by finding out and addressing their key pressing issues of interest and concerns in Northern Uganda, (Management Sciences for Health, (2006)

Nwoya District is a new district which was carved out of Amuru District in 2010 with three government Health Centre Threes (HCIIIs) at Sub-County level serving a population of approximately 20,000 offering preventive, promotive, out-patient curative, maternity, inpatient health services and laboratory services. The conditions described of incentives of HWs and quality of service delivery are similar to those of HCIIIs in Nwoya District as illustrated in the PEM survey, (2009)

1.2.2 Theoretical Background

This study is modelled around the two-factor theory also known as Herzberg's motivation-hygiene theory and dual-factor theory advanced by a psychologist Frederick Herzberg who theorized that job satisfaction and job dissatisfaction act independently of each other and could not be measured on the same continuum. He published the theory on work motivation in 1959. The two factor theory was highly controversial at the time it was published and was claimed to be the most replicated study in this area laying a platform for numerous other theories and frameworks in human resource development (Herzberg, 1987).

The Herzberg two factor theory distinguished between motivators which were;- challenging work, recognition, responsibility that give positive satisfaction, arising from intrinsic conditions of the job itself, such as recognition, achievement, or personal growth and Hygiene factors such as status, job security, salary, fringe benefits, work conditions) that do not give positive satisfaction, though dissatisfaction resulted from their absence. These are extrinsic to the work itself, and include aspects such as company policies, supervisory practices, or wages/salary.

The theory is food for thought to all Human Resource Managers since it cuts across all organisations and employees regardless of their size and purpose.

The relevance of Herzberg's Theory for Human Resources Management (HRM) is that it clarifies whether the problem being addressed is mainly one of job satisfaction or one of job dissatisfaction, and in selecting the appropriate personnel management strategies. For example attending to salary levels and working conditions will primarily reduce job dissatisfaction and therefore increase staff retention. The theory explains that, to improve motivation and increase

staff performance, attention should be given to motivating incentives, for example by increasing the individual's sense of achievement and to demonstrate recognition of that achievement.

The study adopted the Two-factor theory by Herzberg because it presented considerable empirical evidence to confirm the motivation-hygiene theory and his arguments are typical and similarly covers all the three variable of study which is financial, non-financial and support supervision of employees. Therefore, keen interest had to be accorded to it under the topic of study to fully explore and understand the effects of financial, non-financial and support supervision of HWs on the quality of service delivery in HCIIIs in Nwoya District

1.2.3 Conceptual background

The study looked at three variables namely the independent variable, dependent variables and moderating variable. The independent variable was the motivation of HWs and the dependent variables was QHSD. Motivation referred to a psychological process which exerts and maintains an individual's degree of willingness and effort towards delivering quality health services to clients or patients, (UNDP, 2006). The motivation of HWs was the independent variable consisted of financial and non financial incentives. The financial incentives were salary and allowances. The non financial incentives were career development, health centre structure, continuing education, recognition, resource availability (drugs, equipment for diagnosing illness)

The dependent variable were quality of service delivery which comprised of time management in terms of opening the HCIII to start work, time of closing HCIIIs and time taken to attend to patients. It also comprised of health worker client relationship in which the respect of clients and

politeness of HWs were being examined. In addition to the dependent variable, accuracy in diagnosis of illness in which the right diagnosis made by HWs of patient illness and the right prescriptions made to patients by HWs was studied. The strength of motivation of HWs had a direct influence on the QHSD in HCIIIs.

Support supervision as a moderating variable had remarkable effect on quality of service delivery as it involved the senior staff providing professional support for their lower cadre by guiding, checking and identifying gaps in their work, giving feedback and setting measures of improving the health service delivery in the HCIIIs. This significantly helped to improve the QHSD in areas where standards of service were being compromised, (Dieleman, Cuong, Anh & Martineau, 2003). It is against this concept that this study was carried out to find out the relationship of motivation of HWs and the QHSD in the HCIIIs of Nwoya District.

1.2.4 Contextual background

Nwoya district is one of the Northern Uganda districts which have experienced over 20 years of violent armed conflict characterized by death, destruction and suffering denying the region from accessing quality health service delivery. Even after the return of a magnitude of the majority of the displaced inhabitants of Nwoya district to their abandoned homes for over 20 years in 2006 when peace returned to the northern part of the country, they were faced with abandoned and dilapidated health centres with high disease prevalence. The health services delivery in Nwoya district was crippled requiring a lot of policy amendments and budget restructuring to be done by the government of Uganda for it to catch up with the rest of the districts in the rest of the country.

HCIIs in Nwoya district are under a health sub-district initiated to enhance performance of HWs and health systems with core functions to handle obstetric emergencies and supervise lower level health facilities. However, the working conditions of HWs in Nwoya district are often very difficult, characterized by poor infrastructure, lack of staff accommodation, inadequate equipment and supplies, work overload and inadequate remuneration. These poor working conditions in the district do not attract and motivate staff to stay on job. The morale of the HWs is low often resulting in to poor attitude towards clients, absenteeism and low productivity.

The quality of care provided in HCIIs is perceived as poor and the utilization of health services is low since the Health seeking behaviour of the greater majority of people is poor and they preferred to go to a private clinic as their first option when ill than rely on public inadequately equipped HCIIs, (Matsiko, 2010, PEM survey, (2007) & HFO Uganda, 2010). It is against the above context that the independent, dependent and moderating variables of the study were underpinned for study.

1.3 Statement of the problem

Uganda's health sector has been constrained to fulfill its mandate in delivering high quality health services to patients due to low motivation of HWs at HCIIs as depicted in, (Economic research policy; 2010) which has led to the low quality of health service delivery.

The current situation of QHSD in HCIIs in Nwoya District which has been a great topic of discussion among health consumers cannot go unturned since on average 3 out of 9 HWs resign

in HCIIIs in Nwoya district due to low salary levels, lack of accommodation, medical supplies, equipment, trainings and continuous education and support supervision of staff, (PEM Survey, 2007). The QHSD in Nwoya was below the expected as 30% of patients returned from health centers without receiving proper diagnosis and treatment of illness due to lack of essential drugs, equipments, poor time management by HWs at HCIIIs, inadequate skills and poor relationship between HWs and patients worsened by inadequate support supervision of HWs by the district health team. As a consequence, medical services offered at HCIIIs were not implemented as planned, (HFO Uganda, 2010) & (UBOS report, 2004) implying a state of low QHSD in place.

Unless the issues of low motivation of HWs are carefully identified, addressed and support supervision of HWs carried out regularly, the QHSD will remain poor, stagnant and may never curve upwards, (Economic Policy Research, 2010). The above problem therefore prompted the researcher to study the relationship between motivation of HWs with a focus on financial and non financial incentives and the quality of health service delivery which also focused on time management, health worker client relationship and accuracy of diagnosis of illness in Nwoya District.

1.4 General objective of the study

The purpose of this research was to determine the effects of motivation of health workers on the quality of health service delivery in HCIIIs in Nwoya District.

The specific objectives of the study were;

1. To establish the effect of financial incentives on the quality of health service delivery in Health centre IIIs in Nwoya District?
2. To establish the effect of non-financial incentives on the quality of service delivery in health centre IIIs in Nwoya District.
3. To identify the effect of support supervision on the quality of health service delivery in health centre IIIs in Nwoya District?

Research Questions

1. What is the effect of financial incentives on the quality of health service delivery in health centre III in Nwoya District?
2. What is the effect of non-financial incentives on the quality of health service delivery in health centre III in Nwoya District?
3. What is the relationship between supervision of health workers and quality of health service delivery in Health centre III in Nwoya District?

1.5. Hypothesis of the Study

1. There is no relationship between financial incentives and the quality of health service delivery.
2. There is no relationship between non-financial incentives and the quality of health service delivery.

3. There is no relationship between support supervision of health workers and the quality of health service delivery.

1.6 Conceptual Framework

Below is the conceptual frame work of the research study, illustrating the relationship between motivation of health workers and the quality of health service delivery. The motivation of health workers in the conceptual framework comprised dependent variables which consisted of financial and non- financial incentives and support supervision as a moderating variable and the dependent variable which consisted of time management, health worker client relationship and accuracy in diagnosis of illness.

Conceptual framework

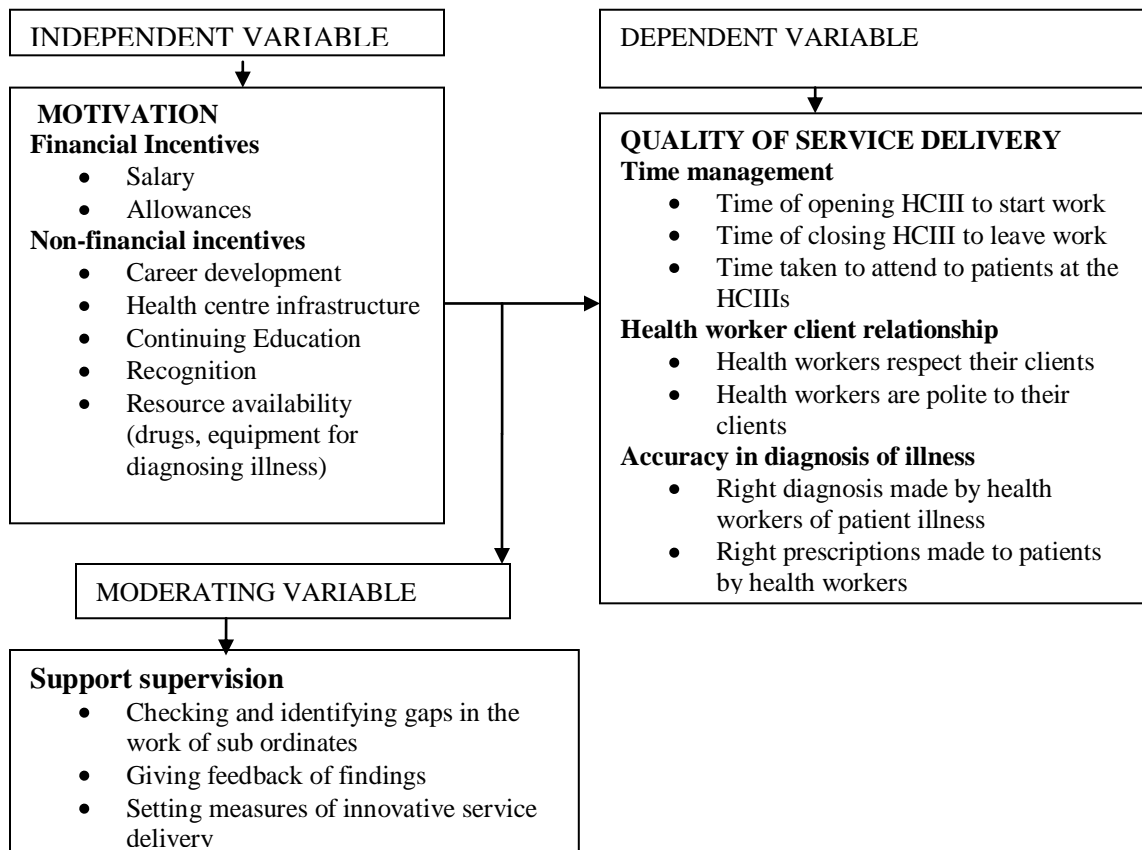


Figure 1. 1: Conceptual frame Work: Source: HFO, UNPD, Strategic frame work

As reflected in figure 1, the motivation of health workers is the independent variable and they consist of financial and non financial incentives. The financial incentives are salary and allowances. When the financial incentives of health workers are timely and regularly availed, the health workers will be motivated to keep time and concentrate their attention on providing health services at the HCIIIs instead of dividing their attention in taking up other income generating activities to complement their salary.

The non financial incentives are career development, health centre three infrastructure, continuing education, recognition, resource availability (drugs, equipments for diagnosing illness) as reflected in figure 1 are a motivation to health workers because they act as a base line in determining the quality of health service delivery and the absence of them leads to health worker discouragement in health service provision.

The dependent variable is quality of service delivery which comprises of time management in terms of time of opening the HCIII to start work, time of closing HCIIIs to leave work and time taken to attend to patients. It also comprises of health worker client relationship in which the respect of clients and health workers being polite to clients will be examined. In addition to the dependent variable, accuracy in diagnosis of illness in which the right diagnosis made by health workers of patient illness and the right prescriptions made to patients by health workers will be studied. The quality of health service delivery is determined by the level of motivation of health workers. If health workers are not motivated low quality of health service delivery will be realised by health consumers.

Support supervision as a moderate variable has an effect on quality of service delivery because it involves the senior staff providing support supervision for their lower cadre by giving them guidance in their work by checking and identifying gaps, giving feedback and setting measures of improving on the health service delivery in the HCIII. This significantly helps to improve the quality of health service delivery in areas where standards of service were being compromised.

1.7 Significance of the study

The study helped the researcher generate information which may be used by the district to sensitize the stakeholders and actors about the relationship between motivation of health workers and the QHSD such that the right mix of incentives for health workers are availed at the HCIIIs to improve the QHSD.

The study enabled HWs in HCIIIs to air out their views concerning the gaps in delivery of health services in regards to their motivation status and support supervision as moderating factor which may help in making the right decisions in designing better policies and developing strategies by the Ministry of Health to efficiently provide an answer to their pressing challenges at work.

The study helped to generate data which may be useful in promoting advocacy for motivation of HWs and better health service delivery to health consumers around the HCIIIs in Nwoya district because it highlights the health consumers' dissatisfaction and grievances concerning the current health system.

This study was significant because it may provide a sound documentary data on motivation of HWs and the quality of health service delivery in HCIII's in Nwoya district for scholar's citation in further studies for in-depth understanding of the topic under study.

The study helped to produce evidence that may help the Government of Uganda (GoU) and other relevant stakeholders understand the challenges facing the health sector, the obstacles that limit the efficient, effective and timely delivery of health service delivery to consumers and the reforms which may be necessary to improve the standard of health service delivery in HCIIIs in Nwoya district.

1.8 Justification of the Study

Agyepong, (1999) carried out a research on motivation of health worker and quality of service delivery in Ghana and Willis-Shuttack, et al (2008) in selected countries in Europe, Asia and Africa. This therefore prompted the researcher to carry out the study to provide sound documented facts and evidence on the relationship between motivation of health workers and the quality of health service delivery in health centre threes in Nwoya District since none had specifically been conducted. It was therefore very vital that the study was carried out to help bridge the gaps in the health service delivery in health centers IIIs in the district under study.

1.9 Scope of the Study

1.9.1-Content scope

The study focused on the three factors which included effects of financial incentives, non-financial incentives and support supervision as a moderating variable on the quality of service delivery in HCIII's in Nwoya district.

1.9.2 Time scope

The study was aimed at finding out the effects of financial incentives, non-financial incentives and support supervision on QHSD in Nwoya District from the period of 2011 to 2012 because of a need to document sound reasons as to why the health workers were not motivated to work when post in the HCIIIs and why the QHSD was report low, (PEM survey, 2007).

1.9.3 Geographical scope

The study was under taken in health centre III's in Nwoya district. The district is boarded by Gulu district in East, Masindi district in the South, Nebbi district in the West and Amuru in the North. Nwoya District had a total area of 4771.48sq km. The coordinates of Nwoya district were: 2°88'15.0"N, 32°01'53.0"E (Latitude: 2.6375; Longitude: 32.0147), (Falling rain geonomics, (1996). Nwoya district has four sub counties which are Alero, Anaka, Purongo and Koch Goma. The District have three HCIIIs which are; Alero HCIII in Alero Sub county, Koch Goma HCIII in Koch Goma Sub county and Purongo HCIII in Purongo Sub county under the

government of Uganda, (OCHA, 2010). This research was therefore carried out in the three HCIIIs in Nwoya District to find out the effects of motivation of health workers and QHSD.

1.10 Operational Definition of terms

Motivation

This refers to a psychological process which exerts and maintains an individual's degree of willingness and effort towards delivering quality health services to clients or patients at the health centre IIIs.

Quality

This was made in reference to services which are of good technical quality and are delivered in a respectful human way at the health facility

Health workers were defined as the stock of individuals engaged in the improvement of health conditions of the population. They include professionals (doctors, nurses, pharmacists, laboratory technicians among others).

Health service Delivery

Health service delivery is defined as the interactions that involve the patient in the promotion of an individual's health

Service was used to refer to the intangible economic activities that benefit the health of the community of Nwoya district.

Incentives referred to the external measures that are designed and established to the influence motivation and behaviour of individual, groups or organisation.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discussed the literature related to motivation of HWs and quality of service delivery. It particularly focused on effects of financial and non-financial incentives and support supervision on quality health service delivery.

2.2 Theoretical review

Herzberg's theory for motivation at the workplace was used as a basis for the study. This model assists in clarifying the complex issue of motivation of workers. The two-factor theory distinguishes between motivating factors or 'satisfiers' that are intrinsic to the job and the primary causes of job satisfaction and dissatisfiers which Herzberg also calls 'hygiene factors' that are extrinsic to the job and the primary causes of job *dissatisfaction*, or "unhappiness on the job".

In 1968 Herzberg stated that this two-factor theory study had already been replicated 16 times in a wide variety of populations including some in Communist countries, and corroborated with studies using different procedures that agreed with his original findings regarding intrinsic employee motivation, making it one of the most widely replicated studies on job attitudes, (Herzberg, 1968). More to that, the Gallup Organization, as detailed in the book, "First, Break All the Rules: What the World's Greatest Managers Do", by Marcus Buckingham and Curt Coffman, provides strong support for Herzberg's division of satisfaction and dissatisfaction on to

two separate scales. In this book, the authors discuss that the study identified twelve questions that provided a framework for determining high-performing individuals and organizations. These twelve questions aligned squarely with Herzberg's motivation factors, while hygiene factors were determined to have little effect on motivating high performance, (Herzberg, 1964)

The significant in the theory perspective adopted is that it's not only concerns with motivator factors but also addressed the hygiene factors of employees, a mix of which can be speculated to effectively improve staff performance at work which idea, is relevant to be applied to improve the morale of HWs in order to attain the right quality of service delivery in HCIIIs in Nwoya District.

The theory advanced an important argument to management that, removing some of the control over employees and increasing their accountability and responsibility over their work would in return increase employee autonomy, authority and freedom creating complete and natural work units where is it possible, for instance if employees are allowed to create a whole unit or section instead of only allowing them to create part of it, providing regular and continuous feedback on productivity and job performance directly to employees instead of through supervisors and also encouraging employees to take on new and challenging tasks would enable them to become experts at a task,(Basil, Manhoney, Jones & Nyle (1957). The theory at this point clearly illustrates and examines the need of support supervision as a moderating variable on job performance making it relevant to be applied to improve the quality of service delivery in HCIIIs in Nwoya District.

The Two-Factor Theory was preferred over Abraham Maslow's theory because the latter offered little data to support his ideas. Maslow's theory, poses a challenge for management practice as they work in a complex web relationship with individuals whose needs probably differ widely and these needs are more pronounced with the era of global employment across cultural borders. Secondly an individual's needs change over time and it is not a must that it progresses upwards following the hierarchy of needs as sometimes circumstances may dictate its progressing downwards, (Herzberg, 1964). However, in adopting this theory the researcher was not ignorant of its short coming given the fact that, Herzberg's work has work has been criticized on methodological grounds although he presented considerable empirical evidence to confirm his motivation-hygiene theory. While the Motivator-Hygiene concept is still well regarded, satisfaction and dissatisfaction are generally no longer considered to exist on separate scales. The separation of satisfaction and dissatisfaction has been shown to be an artifact of the Critical Incident Technique (CIT) used by Herzberg to record events. It was noted furthermore that, the theory does not allow for individual differences, such as particular personality traits, which would affect individuals' unique responses to motivating or hygiene factors, (Hackman, Oldham & Greg (1976) & King, (1970).

As applied to this study, the theory holds more water in providing an in-depth understanding of the fundamental effect of financial incentives, non-financial incentives and support supervision as a moderating factor on the quality of service delivery in HCIIIs in Nwoya District.

2.3 Actual Literature review

There is no simple formula for ensuring effective incentives and maintaining good motivation for a long term has been an issue in many programs. A need for regular review meetings and giving continued serious attention to motivation, using a mix of incentives, and avoiding de-motivating factors can help ensure that health worker remain active, effective and motivated,(USAID & BASICS, 2008)

2.3.1 Quality of Service delivery

Quality of health care in public health sector facilities is a longstanding and continuing concern of users of the health services and civil society as well as health sector policy makers, providers, administrators and managers. User complaints and media reports of rude and inpatient providers, inconvenient hours of operation, long waiting times and accuracy of diagnosis of illness are common leaving worried politicians, policy makers, civil society, managers and administrators are asking the question ‘How can we solve these problems?’, Agyepong, Anafi & Asiamah, Ansah, Ashon & Narh-Dometey , (2004). A third of the households (33%) surveyed by UBOS in 2004 rated overall quality of health service delivery as good, (UBOS report, 2004). This implies that continuous quality improvement with the emphasis on addressing the complexity of low financial and non financial incentives, contextually, starting with the most frequently mentioned and monitor progress of specific areas of de-motivation and poor quality service delivery that need managerial attention will help in improving the QHSD which is similar to the views generated in the qualitative data.

2.3.1.1 Time management

Time management in terms of time for opening HCIII to start work, time of closing HCIII to leave work and time taken to attend to patients at the HCIIIs are key issues which influence the utilisation of health services available at the health centres. The standard time for reporting for work at the HCIIIs was 08:00am, the standard time for closing out patient department to leave work was 05:00pm and the standard time for a patient to wait to be attended to was 30minutes, the PEM survey (2007)

In the research by Agyepong et al., (1998) in Ghana, a health worker was reported to have said that the salary being paid was not good which made them carry out other activities to supplement their salary causing them to arrive late at work only to be accused by clients of late coming, making her angry and talk to them anyhow. Additionally, the PEM survey (2007) carried out in Nwoya reported a variance of 45 to 50 minutes of standard opening time of 08:00am and a closing variance of 97 minutes from the standard time of 05:00pm. The variance in the time for attending to patient was report to be 30 minutes by heath workers and patients reported a variance of 1 hour 15 minutes and others reported 5 hours.

Similarly the qualitative data generated showed that the reporting time to start work, closing time to leave work and the time for attending to the health worker as detailed in the PEM, (2007) survey, however the other respondents disagreed to it mentioning that the deviation in the time mention was great which led to a strike in one of the HCIIIs in 2012.

2.3.1.2-Health worker Client relationship

The de-motivational effect of the staff is transmitted in the way they perform their duties and their response to clients. The daily unresolved frustrations of workers in the health service reduce

their willingness to exert and maintain efforts towards attaining the stated health centre III goal of providing high quality health care. Their pent up frustrations sometimes turned outwards to clients in the form of rudeness, anger, unfriendly behaviour and resentment, (Agyepong, et al, 2004). Agyepong et al, 2004 also reproduced verbatim expressions from the research of the health worker group discussions in Ghana saying that demanding huge rents by landlord and yet the salary being received is already so small tortures him and he directs his anger to the client and also reported another saying that the practice of the MOH asking them to improvise when they ask for equipment is bad because coming to work without having good equipment to work with makes work annoying. Then when the patients disturbing them with their problems boring them and make them angry', (Agyepong et al., 1998).

Mathauer & Imhoff, (2006), reported that health users and health administrators alike reported that it was difficult to report and consequently reprimand HWs in hard to reach districts due to the fear that they might opt to resign and work in other places. Weak sanctions resulted in to instances where HWs abuse their offices.

According to the UBOS report, (2004), about a third of the households rated responsiveness of staff as good implying that there was still a lot do on HWs relationships with clients. The PEM survey, (2007) explained the attitude of HWs and quality of health worker client relationship by Health service consumers (HSC) that ,9% of the health worker did not care , 6% were rude, 9% of the HWs as poor and 4% of HSC described the relationship as very poor. This exposed the fact that some HWs may not have been polite and respectful to their clients when they reported to the health facility to seek health services.

The qualitative data generated confirmed Agyepong, (1999) and PEM, (2007) by revealing that health workers were happy when carrying out their work if paid salary promptly because they

were then, not frustrated or angry about schools fees, rent among others are hence the QHSD is improved since frustration of the HWs is not transferred to clients at the HCIIIs.

2.3.1.3-Accuracy in Diagnosis of Illness

Quite often patients turn to health centres without receiving proper diagnosis and treatment Schachner & Steifer, (2010) due to the absence of drugs, equipments for diagnosis of illness and HWs often in many cases leaving patients waiting in front of locked doors or overstrained with their tasks to fulfil while Mocha, et al, (2008) added to it that, the breakdown and unavailability of equipments caused HWs to use experience in diagnosing illnesses and treating patients by chance which was discouraging and de-motivating because they were unable to fully utilize their knowledge. This therefore points out that drugs and equipment are key issues of concern in making the right diagnosis of patient illness and right prescriptions to patients by HWs in the delivery of health service which is related to the quantitative data generated. The respondents revealed that many times they left without drugs due to their absence at the HCIIIs and without proper treatment due to lack of test kits. The availability of drugs, equipments led to high QHSD and vice versa.

2.3.2-Financial Incentives of Health Workers and quality of service delivery

Health worker incentives could be in financial or non-financial terms as discussed below
2.3.2.1-
Financial incentives

2.3.2.2-Salary

The extent to which money was a motivational factor to improve the quality of service delivery remained a bit of unresolved debate, (Tim, 2007). Low salary was the most frequently mentioned work place obstacle with over 95% of staff in all districts selecting it as a problem in Ghana in a survey carried out in both 2002 and 2003 by Agyepong, et al, (2004), low salaries was a problem for staff with 94% of staff in the January 2002 survey and 95% of staff in the August 2003 survey selecting it as a work place obstacle. The study further revealed that only 2% of permanent staff and 7% of temporary staff were satisfied with their take home pay. Most workers mentioned an amount about three times what they currently earned as what would be a reasonable income given their needs and expenditure

Willis-Shuttack, et al, (2008), revealed that 90% of the studies identified that financial incentives were a motivational factor to HWs. Most HWs were taking up a second job to supplement their salaries because their pay was insufficient to cover their basic their family needs, hence depriving the health care system of qualified and efficient HWs in turn lowering the quality of health services offered, (Dieleman, Pham, Anh & Martineau , 2003). This probably implied that the complaints of salaries were high due to the current economic conditions of the country's economy characterized by high cost of living and inflation which created a high demand for money.

The qualitative data generated among the HCIIIs staffs, revealed that there was a lot of dissatisfaction about the salary level which led to HWs opening up drug shop or venturing in to farming to supplement their salary which lowered the QHSD because it negatively affected their concentration and time spent at work.

2.3.2.3-Allowances

Ministry of Finance and Economic Planning (MOFPED) released funds to districts on a quarterly basis without delay to match the districts' quarterly plans however, it was generally noted that release of funds delayed at the beginning of every financial year to districts in the first and second quarters, worse still the release did not match the expenditure projections drawn. Although the release of inadequate funds released in the 1st and 2nd Quarters were later compensated in the 3rd and 4th quarters, the poor budget performances were rate as poor, (The Office of the Auditor General report, 2006) and yet the HCIIIs according to USAID & BASICS, (2008) rely on these funds for incentives to facilitate HW meals or transport allowances for days spent in training as a motivation to them.

This was complemented by Agyepong, et al, (2004) who revealed that allowances for extra time worked at the health facility was a great motivation to HWs when it was introduced by the Ministry of health in Ghana because it complemented their little salary and enabled them to pay for their transportation to work, buy food, pay rent, water bill, electricity bill and children's hospital bills. This implied that the influence of allowances on quality of health service delivery cannot be ignored because it is from their work that HWs earn a living and survive on to acquire their basic needs. The qualitative data similarly revealed that allowances was a motivation to health workers and when there was a delay of payment of allowances of PHC HWs were left demotivated hence lowering the QHSD.

2.3.3. Financial Incentives and Quality of Health Service Delivery

2.3.3.1 Financial incentives and Time management

In regards to time management the PEM survey (2007) reported a variance of 45 to 50 minutes of standard opening time of 08:00am and a closing variance of 97minutes from the standard time of 05:00pm. The variance in the time for attending to patient was reported to be 30minutes by health workers and patients reported a variance of 1hour 15minutes and others reported 5hours. The poor time management among HWs was due to low morale attributed to low salaries and allowances. However, qualitative data generated from the study established that health workers would always do their jobs right even when salary delays because of their passion for their work implying salary does not affect QHSD.

2.3.3.2 Financial incentives and Health worker Client relationship

The PEM survey; 2007, pg. 17 revealed that Health service consumers (HSC) rating the attitude and response of HWs to patients. Health service consumers reported that 9% of the health worker did not care, 6% were rude. 9% of the HWs as poor and 4% of HSC described the relation as very poor, attributing it to low salary and allowances accorded to them. The qualitative data generated during the study using interview unearthed that there was good health worker client relationship in HCIIIs in Nwoya district which has helped in improving the QHSD.

2.3.4 Non-financial incentives and Quality of Health Service Delivery

2.3.4.1 Non financial incentives

Effective health care delivery requires a network of functional health facilities that are adequately equipped. Health facilities work as an interface between the health system and the community, in reference to this, the importance of non-financial incentives cannot be underestimated though most people traditionally over report the importance of financial incentive as a motivational factor.

2.3.4.2 Career development

Career development was identified in 85% of the HWs as a motivational factor as they took pride when they had the opportunity to progress. (Willis-Shattuck M., et al, (2008). HWs were reluctant to work in rural areas because opportunities for career development were typically less than in urban areas, (Agyepong, 1999). This probably explains why some HWs did not report to the remote health centres when posted because they harbour a stronger allegiance to their targets which are not integrated in the HCIII system. The finding in the qualitative data revealed that HWs were motivated to work where there was possibility of career development which is similar to the findings of the other scholars hence opportunities of career development motivates health workers to provide QHDS.

2.3.4.3 Education and training opportunities

Continuing education was by both managers and health personnel translated into updating knowledge through training and considered a motivational factor. A trained and skilled health sector work force was very important because it contributed to achieving the National health

policy since it introduced new concepts, approaches and equipped HWs to take on demanding duties to attain their personal goals of professional advancement allowing them to cope better with the requirements of their job, (Willis-Shattuck, et al., 2008).

However, most training programmes organized by MoH were done when there were disease outbreaks or national campaigns, (The Office of the auditor general report, 2006). In some districts staffs identified their own training needs and solicited for funding privately while in other districts like Rakai, the staffs have had training on an annual basis in different fields of specialization. In Kalangala and Gulu districts, there was no evidence of training in the last 5 years. Staff training had mainly been on job training, workshops and seminars and a few staff going for long courses in the field of medicine. HWs were commonly trained in PMCT, VCT and immunization courses because these interventions are adequately funded by donors.

It was noted that districts did not make regular reviews of man power requirements to identify training gaps in their annual budgets, (The Office of the auditor general report, 2006). This probably implied that since the return of peace no little effort was put in updating the knowledge of health workers to effectively handle their tasks although, this would enabled them to achieve mastery of needed skills and associated knowledge relating to their work in order to keep them updated and current, (USAID & BASIC, 2008). The qualitative data generated using the interview guides showed that health workers were motivated when they were given an opportunity to enrich their skills and knowledge through continuing education hence improving the QHSD in HCIIIs.

2.3.4.4 Health centre infrastructure

The construction of the health centre buildings were funded by the central government using Primary Health Care (PHC) development and Local Government Development Plan funds and constructions done following the standard specifications developed by the health infrastructure development and management department of Ministry of Health (MOH). Most of the constructions of health centres in some districts were done by Development Partners through projects. Previously, local governments used to help in the construction of some health facilities but have since stopped citing financial constraint following the abolition of graduated tax which was their major source of local funds.

According to the report from the Office of the auditor general (2006), most health centres lacked essential medical equipment and remain uncompleted or poorly done with the existing infrastructure insufficient to hold the core functions of the health centre. It was observed during the study that 16 health centres out of 81 visited had incomplete structures. These structures included maternity wards, staff houses and Out Patient Departments. This translated to 5,458 HCs in the country that may be having incomplete structures due to limited funding, shoddy work by contractors .The districts continued to requisition for funds to construct new facilities without first completing existing ones. Incomplete structures are not useful to government and health workers in their effort to improve on the provision of health services since the new born babies and their mother lack maternity wards. The districts on the other hand had have failed to attract qualified medical personnel due to lack of accommodation among other reasons. Some of the new constructions at the HCs though complete were poorly constructed had following defects

noted; sagging ceiling, big cracks in the walls, incomplete ceilings allowing free entry of vermin like bats.

The constructed health centre buildings were not maintained regularly as most of the walls require painting; floors are cracked, sewerage systems broken and rooms infested with vermin including bats and rats. Some of the stores and laboratory rooms were not burglar proofed compromising the security of equipment and drugs. Buildings had not been maintained due to insufficient budget allocations to carry out renovations, fencing and recruitment of guards at the HCs. This probably points out that the unsatisfactory health centre infrastructure could be attributed to inadequate supervision by both the districts and the MOH supervisory units, poor selection of contractors by the districts and laxity of managers at the HCs to report poor works to higher authorities. This is related to the qualitative findings which revealed that the presence of well constructed Health centre infrastructure enabled health workers to report early for duty, follow up patients after given an admission in the wards hence improving the QHSD in HCIIIs.

2.3.4.5- Equipment

The Ministry of Health (MOH) in the national medical equipment policy provided guidelines on standard equipment expected for each HC II to IV. Most of the equipments used in the HCs were procured directly from the suppliers by MOH and delivered to the districts for further distribution to earmarked HCs while others were donated by projects and NGOs depending on their work plans. MoH set up regional workshops to service and repair HC equipments to which districts and referral hospitals contribute funds to meet operational costs. Specialized and sophisticated equipment are maintained through supplier maintenance contracts, (The Office of the Auditor General report, 2006)

Agyepong, et al, (2004), carried out a study in Ghana which revealed that HWs revealed that lack of essential equipment, tools and supplies to work ranked as the second most selected problem in the January 2002 survey (75% of staff interviewed) and the fourth most frequently selected problem (64% of staff interviewed) in the August 2003 survey. The list of unavailable essential equipment, tools and supplies were very common basic relatively inexpensive common everyday items such as dustbins, brooms, disinfectant, gloves, soap, mops, bed sheets, pens, pencils, rulers alongside more expensive items such as sterilizers, air conditioners among. In instances where equipments were supplied to health centers to promote service delivery, the question of quality equipment maintenance remained poorly answered.

In Uganda although, The Office of the Auditor General report, 2006 clearly spelled out that, MoH set up regional maintenance workshops to ensure that health facilities were equipped with well-maintained equipments, the equipments at HCs were not maintenance regularly. Equipment like refrigerators, solar systems, microscopes, vehicles were found broken down and sometimes taking over a year without servicing and maintenance example, some HCs had broken down solar systems and were unable to preserve immunization vaccines hence affecting outreach. The reasons for the poor condition of equipments were observed as a failure by management at HCs to identify and report mechanical problems in time and limited technical skills of personnel at the mechanical workshops.

Some HCs were had missing equipments due to the absence and poor management of asset/inventory registers which made it difficult planning for the procurement of equipments

required in the delivery of quality health services, (The Office of the Auditor General report, 2006). It was noted that most of the health units lacked laboratories and laboratory equipment which led to treatment to be done asymptotically for example, between the years 2002 and 2005, out of a yearly average of 9 million malaria cases treated, 7.5million (83%) were not tested in laboratories, (The Office of the Auditor General report, 2006 & Agyepong, et al,(2004)

The report also explains that, some HCs have equipments but don't use them and the non-use of laboratory equipments, non-functional laboratories led to treatment of diseases using experience or guessing since no examining samples from patients were first done.

This therefore implied that some health centres threes in Uganda had inadequate or lacked equipments thus signs and symptoms of disease were treat instead of the actual patient illness because treatment was administered without first examining patient sample This is related to the qualitative data generated which revealed that the absence of equipments affected work negatively hence lowering the QHSD as signs and symptoms have to used to treat a patient.

2.3.4.6-Drugs

Drugs were an important component of the health system and its availability is a major indicator of quality health service delivery. In Uganda, MOH in collaboration with the National Drug Authority, National Medical Stores and Professional Councils provide an overall co-ordination and guidance on procurement of pharmaceuticals, other medical supplies, logistics and instructions on their rational use. Under the decentralization system, actual procurement of drugs in the districts is done using either the credit line method or direct purchases by the districts and HSDs.

Under the credit line, a Memorandum of Understanding was signed between GoU and NMS. Funds were allocated to each HC's account with the NMS by the MOH and drugs delivered to the district by NMS on the basis of drug requisition orders from HCs. In this case, there is a standard delivery schedule issued by NMS every year showing the order and delivery date deadlines. The drug are then distributed by NMS to the districts and then collected by the HSDs for later distribution to HCs. Under the new 'Pull system' of drug procurement, NMS has a logical accounting system that links all credit lines of health facilities. Orders are supposed to be made within specified ordering schedules and deliveries expected within a period of 2 months from the ordering date.

Under the direct purchase method, at least 50% of PHC funds released by central government were used to purchase drugs from NMS as a first priority, purchased allowed from another supplier only after NMS issuance of a certificate of non-availability. The method of distribution of the drugs purchased was determined by the method of book keeping used by the districts. In a centralized system of book keeping, drugs were distributed by the districts to HSDs which later distributed them to Health Centers under their jurisdiction. In a decentralized system of book keeping, drugs are distributed by the HSDs.

Economic policy research centre, (2010), reveals that, poor health services intermittent in the supply of drugs keep away the sick that would have otherwise sought treatment from those HCs. Consequently, when people fall sick, they preferred to go directly to larger facilities within their localities because they expect to receive relatively better treatment and diagnosis due to their functionality.

Despite all the mention ways health centre could receive drugs, it still remained a problem as only 18% of the households surveyed by UBOS rated availability of drugs as good and the majority(42%) felt it was poor in health facilities , (UBOS report, 2004). The Ministry of Health report, (2009), asserts that, 72% of government health units had monthly stock outs of any indicator medicine. The Office of the Auditor General report, (2006) on the other hand explains the that not only do HCs face drug stock outs but also face the problem of expired drugs delivery which led to poor delivery of health services as patients were asked to purchase their own drugs from private clinics at exorbitant prices hence those who cannot afford to buy drugs were home untreated. It was discovered that 17 health units had expired drugs and most of them were in HCIIIs (7 health units), followed by HCII (4 Health units) and then the rest were 2 in HC IV, District Hospital and regional Hospital,

Nabyonga, Desmet, Karamagi, Kadama, Omaswa, & Walker, (2008), reported there were more stock-out days for drugs in lower level facilities compared with fewer in referral facilities within the same time period. Availability of drugs influenced utilization of services; patients tend to visit health facilities in large numbers when they have information that drugs have been delivered. Although the government instituted measures to ensure constant availability of drugs, the demand was not satisfactorily met as drug stock-outs persisted. It was expected that the phenomenon of drug stock-outs will improve given that the government allocation to the health sector has been increasing since abolition of cost-sharing as planning at the district level.

This in relation to health centre IIIs probably implied that if the government and district officials don't keen follow up the question of availability of drugs at the HCIIIs then the community members may abandon using them.

This is similar to the qualitative data generated which revealed that health consumer were motivated to go to the HCIIIs when they hear that drugs have been delivered hence the presence of drugs improves the utilisation and the QHSD as all patients are able to get the prescribed treatment for their illnesses.

2.3.4.7-Recognition

Recognition and appreciation was viewed as creating a feeling of being valued and trusted from managers, colleagues and community. It was rated at 70% thus declared much a crucial component for motivation of HWs. One of the HWs was reported to say he/she felt she did a good job if her boss appreciated her. HWs also reported that they were encouraged by getting comments as results from their work in being useful to the society in taking care of people. In Tanzania although physical infrastructure and equipment were reported as being de-incentives, the need to feel valued and supported was much greater. It was also reported that to be trusted by the community was crucial, Willis-Shattuck .M. et al.; (2008).

USAID & BASIC, (2008) & Mbindyo, Gilson, Blaauw , & English , (2009) asserted that, recognition through events like a national health day, official badges or ID cards and presenting HWs who successfully completed key trainings to the community were key incentives to HWs. This therefore meant that HWs were motivated and felt confident while delivering health services when they were appreciated and recognized for a good job done in providing health services to the community. However they also pointed out that respondents in some settings argued that although the management was in a position of influence and could improve their

motivation to work, they did not take up this role. This implied that, recognition by the senior cadres, district officials and government were very important in motivating health workers to offer better quality of service delivery.

This view was similar to that generated from the qualitative data which unearthed that recognition of HWs for a good job done make them happy and motivated to work harder hence improving the QHSD and vice-versa.

2.3.5 Effects of Non-financial incentives on Quality of Health Service Delivery

2.3.5.1 Health center Infrastructure and Accuracy in Diagnosis of illness

The incomplete and poorly constructed health centre buildings including the laboratories, maternity wards and other medical and non-medical buildings posed a challenge for HCs to carry out their core functions. It made it impossible to install and upgrade the diagnostic competence of health facilities with necessary equipment for diagnosis causing HWs to use experience and guess work in diagnosing illnesses and treating patients which was a discouraging and demotivating to them since they were unable to fully utilize their knowledge, (Willis-Shattuck, et al., 2008) & (Agyepong, 1999). This therefore points out that health centre infrastructure affect accuracy of diagnosis of illness since it affects installation of diagnostic equipments.

The qualitative data generated unearthed that privacy of patients was observe, right diagnosis of illness promoted and follow up of patients was easy when there were completed health infrastructures at the HCIIIIs hence improving the QHSD and vice-versa.

2.3.5.2 Continuous Education and health worker client relationship

Continuous education was an important strategy which improved on the technical competence of the HWs to keep them update, skilled and current with the requirements of their job (Willis-Shattuck M., et al, 2008). Continuous education therefore promoted health worker client relationship because it helped to solve the challenge of inadequate skills and to enable health consumer feel rightly attended, diagnosis treatment of illness. Therefore continuous education is a strong motivation which could probably improve the health worker client relationship at the Health centre IIIs which is related to the qualitative data generated.

2.3.6 Support Supervision of Health Workers

The goal of supportive supervision was to promote efficient, effective, and equitable health service delivery. Support supervisors needed checklists to help organize their work to make it regular and reliable. Supervisees found this objective process motivating, because it helped them identify and address the highest-priority problems. Supervisors helped the supervisees to find solutions to the problems they encountered in their work and together set objectives to solve them, (Management Sciences for Health, (2006). This implies building a relationship of mutual trust between the supervisor and the supervisee is very important when offering support supervision to HWs.

Many health-care programmes relied on support supervision to increase the quality of health Service delivery. Although highly recommended, supervision is rarely carried out as a planned activity owing to lack of transportation means, fuel, financial resources, as well as inadequate

training (of supervisors) in supervisory skills, (Criel & De Brouwere, 2004). More to that, a systematic routine observation of supervisees was to help the supervisor to become aware of misunderstandings on the part of the supervisees, to effectively offer support in the provision of high-quality health care to their patients but not to find faults with the work of the supervisees. At the end of each visit, supervisors devoted sufficient time to discuss their positive as well as negative observations with the supervisees, (Criel & De Brouwere, 2004). According to Willis-Shattuck M., et al, (2008) management played an important role of (80%) motivating HWs by offering them support supervision. This therefore asserts that HWs were easily motivated by the supervisory role and leadership skills offered by of the supervisors to offer quality health services because their commitment factors identified or addressed de-motivation issues in the health work force.

2.3.6.1 Effects of Support Supervision on Quality of Service Delivery

Support supervision involved a practical system of objective measures to foster improvements in the procedures, personal interactions and management of health facilities. While many approaches were proposed to improve the quality of health services for example, quality assurance, continuous quality improvement, client-centred services, district team problem-solving and fully functional service delivery points, the support supervision approach improves services by focusing on meeting staff needs for management support, logistics, training and continuing education. Regular support supervision of health services was essential because it enabled supervisors to provide clear guidance in solving practical problems, (Management Sciences for Health, 2006)

Support supervision of the lower staffs by the senior staff was a motivation for the lower staffs because it enabled them to know that their senior staff was genuinely committed to their work

and career development hence this improved quality of service, (Dieleman, et al., 2003). Regular support supervision encouraged HWs to observe the standard time in opening, closing the HCIII, in attending to the patients and improving health worker client relationship in terms of respect and politeness towards patients.

The supervisors had a list of contacts, with telephone numbers, and written authority to request intervention (within certain limits) on behalf of the facilities she supervises. This tool hastened action and reinforced the credibility of the supervisor as a facilitator and problem-solver to help address problems in several areas like buildings and maintenance, equipment , drugs and supplies, transport, communications, personnel, finance, and administration, resources such as laboratory services at the health facility, (Management Sciences for Health, 2006)

Supervisors also prioritized the availability of the first elements that were to be checked to make sure that other functions can take place such as drug stock-outs in key program areas: tuberculosis, family planning, HIV, refrigerator not functioning, staff not on duty, staff absent or ill (or caring for family members), or those at work cannot handle the workload, broken or missing equipment: weighing scales, blood pressure cuff, specula, lights needed for some programs, key safety procedures: for example, injection safety, HIV infection prevention, and post-exposure prophylaxis for HIV which were probably not adequately followed among others, (Management Sciences for Health, 2006). This therefore implied that support supervision of catalyses the effect of financial and non financial incentives to ensure high QHSD rendered in HCIIIs which was the view held by all respondents of the study hence support supervision improves the QHSD in HCIIIs.

2.4 SUMMARY OF LITERATURE REVIEW

Agyepong, (1999), Willis-Shattuck, et al (2008), The Office of the auditor general report, (2006), Dieleman, et al (2003)& PEM survey, (2007) confirm that financial incentives and non financial incentives were a core motivation to HWs. Appropriate infrastructures were a significant motivation and recognition was a highly influential factor in improving the morale of health worker. They also confirmed that shortage of financial and non financial incentives were a challenge to health service delivery.

The PEM survey, (2007), Tim, (2007), Management Sciences for Health, (2006) & Dieleman, et al, (2003) asserted that, support supervision of the lower staff by the senior staff greatly helped in improving quality of service delivery to conform to the required standard. The Economic policy Centre, (2010) & MoH, 2009) pointed out that the absence of financial incentives, non financial incentives and support supervision was de-motivating HWs therefore unless the critical issues of de-motivated staff were comprehensively and urgently addressed, the planned standard QHSD would not attained

In conclusion, the motivations of health workers were undoubtedly country specific, financial incentives alone are not enough to motivate HWs therefore an effort needed to be undertaken to understand what incentives work best for health worker motivation in the health centres to improve quality of service delivery.

CHAPTER THREE

METHODOLOGY

3.1-Introduction

This Chapter explains a detailed description of the research methodology used in this study. It comprised of the description of the research design, sampling techniques, instruments and data analysis techniques. It described what was done and how it was done in details, (Oso & Onen, 2009). It is comprised of several sub sections which are present as below,

3.2 Research Design

The researcher used the case study design because it gave an opportunity to carry out an in-depth investigation of the study population selected for analysis. The design was chosen because it allowed the description and analysis of complex issues on a big population using a small sample and generalisation of findings on to other subjects in providing numerical descriptions of the population and in describing the topic of study, (Oso & Onen, 2009)

3.3 Research Method

The research method was executed using the mixed approach of quantitative and qualitative approach because of the need to thoroughly address all aspects of the topic and achieve a high degree of validity, credibility, research utility and enriched the nature of research.

Quantitative approach enabled the researcher to find out the relationship between motivation of health workers, quality of health service delivery and support supervision. The researcher designed a questionnaire consisting of semi structured and structured questions to generate data

on financial incentives which included salary and allowances, non financial incentives which included career development, health centre infrastructure, continuing education, recognition, drugs and equipments. Data was also collected using the questionnaire on quality of health service delivery which include; time management, health worker client relationship, accuracy in diagnosis of illness and on support supervision which was a moderating variable. The quantitative data collected using questionnaires, were coded and entered into the computer and computed into frequency counts, percentages and then treated to descriptive statistics, correlations and regressions using inferential data analysis using SPSS version 16. Regression was used to test relationship between motivation factors and QHSD. The findings on the demographic information was depicted and analyzed by using graphical and descriptive statistics.

Qualitative approach was used to enable the researcher to find out the perceptions, experiences, feelings and attitudes on the adequacy of financial incentives, non financial incentives and support supervision to validate the data generated from the quantitative approach. The qualitative data obtained from interviews and key informants was arranged into themes and then coded and finally subjected to content analysis and rich narratives generated as per the study objectives. All through triangulation was used to legitimise personal views and interest that were mitigated by sticking on ethical standards of participation during data collection and analysis, (Sakarantos, 2005).

3.4-Study population

The study was conducted among HWs in HCIII's and support functions of HWs in Nwoya District. The study population included District officials, HCIII health workers and the Health Unit Management Committee who were 75 respondents in total. Out of 75 respondents, the study was carried out on a sample of 63 respondents which consisted of 32 HWs (Sr. Clinical Officer, Clinical Officer, Mid wife Nursing, Officer Nursing, Enrolled Nurse, Laboratory technician, Laboratory Assistant, Nursing Assistants, Health Assistants), 22 Health Unit Management Committee of the three health centres, and 9 district officials (District Health Officer, Medical Superintendent of Anaka Hospital, Matron at Anaka Hospital, District Health Inspector at Anaka Hospital, District Drug inspector, District Chairman and the LC1s of Koch Goma, Alero and Purongo neighbouring the health centre threes of Nwoya District). The study used the District officials, HCIII health workers and the Health Unit Management Committee varied because they qualified and had information that could representatively inform the study on all the variables. Acquiring information from the District officials, HWs and Health Unit management Committee varied sample size was helpful because it allowed for less variance and greater statistical precision that was representative.

3.5 Determining of the Sample size

The research retrieved the sample population of health workers, the district officials and Health Unit Management Committee from the Nwoya local government, District health office updated health worker list 2011/2012, Alero, purongo and Koch Goma HCIIIs and Gulu district council score card report 2011/2012. The total sample size of district officials, health workers and Health Unit management Committee was determined using the mathematical tables of Morgan &

Krejcie (1970) because they had a definite population hence making the extraction of the sample size from the table possible. Out of the sample population which was 75 respondents the Morgan & Krejcie table showed that the relevant total sample size to use was 63 respondents. The Morgan & Krejcie table was used to select the sample size because it helped to minimize the degree of error and increase the level of confidence about the representativeness of the sample.

The sample size of the health workers, Health unit management committee were selected using the simple random sampling method using the formula below;

$$\text{Sample} = \frac{\text{Sample of component of accessible population} * \text{Total number of sample size}}{\text{Total number of accessible population}}$$

This enabled the research to retrieve 32 health workers and 22 Health Unit Management Committees as respondents for the sample size out of the sample population of 39 health workers and 27 Health Unit Management Committees. This was relevant because it enable the researcher to accord an equal chance to respondents to represent the population.

In order to attain the sample size for the district officials, purposive sampling was used and all the 9 district officials were taken up as respondents because they possessed rich knowledge and experience on the topic of study.

A summary of the population, sample and sampling techniques is provided in the table below.

Table 3. 1: Showing the sample size of the respondents

Respondents	Accessible population	Sample size	Sampling techniques
HWs	39	32	Simple random sampling
HUMC	27	22	Simple random sampling
District officials	9	9	Purposive sampling
Total	75	63	

Source: Morgan & Krejcie table (1970, Pg. 30 & 607-610), Nwoya local government, District health office updated health worker list 2011/12, Alero, Purongo & Koch Goma HCIIIs.

3.6 Sampling techniques/procedures

3.6.1 Sampling techniques

The study employed purposive sampling and simple random sampling to select the number of District officials, health workers and Health Unit Management Committees member of the study. Simple random sampling technique was considered appropriate for selecting HWs and Health Unit management Committee members in the study because it allowed all the elements in the sample to have an equal chance for selection thus reducing bias among respondents. On the other hand purposive sampling technique which is a non-probability sampling was considered for selecting the district officials because it allowed the researcher to select the sample basing on

personal knowledge and experience of the group to be sampled. This was based on the assumption that the respondents have the information required in advance, (Oso & Onen, 2009).

3.7 Data collection methods

The researcher employed three research methods to collect the data for this study which included interview guides and questionnaire survey method were used for collecting primary data and the documentation checklist was for collecting secondary data during the study.

3.7.1 Questionnaire survey method

The researcher used a survey questionnaire as a method of choice for collecting quantitative data. The questionnaire survey method was employed to collect specific information from HWs and the Health Unit Management Committee on financial incentives, non financial incentives, support supervision and the quality of service delivery. The health workers and the Health Unit management Committees were given questionnaires to fill and were after returned for coding and analysis. The questionnaire survey method was used because it was time saving, allowed for collection of information from a large population reducing the room for distortion of responses, (Sarantakos, 2005).

3.7.2 Interview method

The interview method is a data collection method where the researcher asked for information from the respondents through holding face to face interviews. The interview method was used for the district officials because it allowed the researcher to obtain relevant detailed information

regarding financial incentives, non financial incentives, support supervision and quality of health service delivery in HCIIIs.

3.7.3 Documentary review guide method

Documentary review guide method is a data collection method where the researcher reviews a list of public recorded information related to the topic of study. This was used to obtain unobtrusive information concerning the evidences of delivery notes and invoices for supply of equipments, drugs, completion and hand over reports for completed infrastructure, support supervision reports, health unit management report at the pleasure of the researcher without interrupting the researched. Document analysis was chosen because it enabled the researcher to access data at time of convenience and saved time and expenses in transcribing.

3.8 Data collection instruments

Questionnaires, interview guides, documentary check list were used as instruments in collecting data relevant for the research study from identified group of health workers, Health Unit Management Committee and district officials. The selections of these tools were occasioned by the nature of the sampling population, proximity, time, resource availability and the category of the population. The tools used in the study are described as below;

Questionnaires were used for collecting information that was required within a short period of time because the respondents could respond by providing the relevant information by writing on the questionnaires. This method was chosen because the respondents of the study were literate.

An interview guide was used to list questions to be discussed to elicit intended information or opinions from the district officials, district vice chairman and LC1s. This instrument was chosen because it allowed the researcher to obtain historical information or information that could not be observed.

Documentary review guide was a list of private or public recorded information related to the topic of study. This was used to obtain unobtrusive information at the pleasure of the researcher. Document analysis was chosen because it enabled the researcher to access data at his or her convenient time and to save time and expense in transcribing.

3.9 Reliability and validity of instrument

3.9.1 Validity

To establish validity, the instrument was given to three experts; District Population officer of Amuru, District Population officer of Nwoya and an expert from UMI to vet the content in the questionnaire and interview guide. In order to evaluate the relevance of each item in the instrument to the objectives, each item was rated on the scale of; - relevant (4), quite relevant (3), somewhat relevant (2) and not relevant (1). Bardege HCIII in Gulu district was used to pre-test the validity of the questionnaire.

After which a content validity index C.V.I was computed using the formula:

$$\text{CVI} = \frac{\text{No of Item declared valid by the judges}}{\text{Total No of items on the questionnaire}}$$

Judge 1:

$$\text{CVI} = \frac{16}{20} = 0.8$$

Judge 2:

$$\text{CVI} = \frac{17}{20} = 0.85$$

Judge 3:

$$\text{CVI} = \frac{17}{20} = 0.85$$

Therefore, Average of content validity index was:

$$\text{CVI} = \frac{2.5}{3} = 0.833$$

The overall content validity index (CVI) was 0.833 for the questionnaires thus the researcher declared the instruments valid meaning that the items on the tools were asking relevant questions since (Amin, 2005) stated that an instrument which had an average index of 0.70 and above were accepted as being valid. The researcher however made some adjustments in the questionnaire and as advised by the three judges who vetted the tools.

3.9.2 Reliability

The researcher conducted a pilot study to test the reliability of the questionnaire at Bardege Health centre III in Gulu district. It involved 15 HWs (this included Sr. Clinical Officer Clinical Officer, mid wife Nursing, Officer Nursing, Enrolled Nurse, Laboratory technician, Laboratory Assistant, Nursing Assistants, and Health Assistants) and interview was carried out with 1 LC1 and one district Official. The researcher used the test pre-test method to check whether the instruments would give consistent results. The instruments were carried out twice after an interval of two weeks to the selected participants in the pilot study. The results from the two studies did not indicate any significant difference.

Data was coded and entered into the computer. Cronbach's Alpha Reliability Coefficients were generated using the statistical package for social scientists (SPSS) computer program to estimate the reliability of the questionnaire. The results are summarized in the table below.

Table 3. 2: Reliability statistics

Test	Cronbach's Alpha	N of Items
Financial incentive	0.620	2
Non-financial incentive	0.840	7
Supervision	0.780	4
Quality of service delivery	0.745	7
All reliability statistics	0.746	

The researcher declared the interview guide reliable basing on computed cronbach's alpha which was 0.746 that is above 0.70 however the remarks and criticism of the participants were

considered and helped the researcher to refine the interview guide before conducting the main study.

3.10 Research procedures

The researcher sought permission and an introductory letter from the school of management studies at Uganda Management Institute. The researcher then sought permission from the District Health Office and the Chief Administrative Officer to carry out the research and used an introductory letter from UMI to collect data from the HWs, health unit management committee and district officials.

3.11 Data analysis

3.11.1 Quantitative analysis

Statistical package for Social scientists (SPSS) computer program was used to analyse the data. Data was collected from the field, coded and data fed in the computer to produce tables and graphs. For quantitative data analysis, descriptive statistics of frequencies, means and standard deviation were used. To test hypotheses, the researcher used inferential statistics (correlation) spearman's rho.

In this study, percentages were used to describe background information of respondents used in the study, means and standard deviation were used to determine the extent to which the respondents agreed and disagreed regarding the influence of financial and non-financial incentives on the quality of service delivery and spearman correlation index to establish the influence of financial and non-financial incentives on quality of service delivery in health centre

IIIs in Nwoya District. The raw score formula of spearman correlation index according to AcaStat Software (2012) is;-

$$\rho = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$$

Where;

n = number of paired ranks

d = difference between the paired ranks

3.11.2 Qualitative analysis

Data collected from the field was read, transcribed, recorded, organised and identified patterns coded the data according to the patterns and compatible themes under the variables of the study which is incentives of HWs and quality of service delivery. Verbatim expressions were quoted from respondents and an interpretation and comments were made of them by the researcher to complement the quantitative data from the questionnaires.

3.12-Measurement of variables

A Likert scale was used for measuring variables. All the participants were rated on scale of one to five using responses of strongly agree, agree, strongly disagree, disagree and undecided, respectively.

3.13-Ethical consideration

Ethical consideration was strictly followed during the study by attaining informed consent from the District health office and the Chief administrative office to carry out the study in HCIIs Nwoya district. After permission was granted for the study to go on, informed consent was attained from the HWs and Health Unit Management Committee to fill in the questionnaires and the district officials to be interviewed.

Each questionnaire for the HWs and Health Unit Management Committee and interview with the district officials begun with a statement of purpose for the interview, a promise of confidentiality and an assurance that there was no right and wrong answer hence should freely answer the question as they saw fit. The researcher assured the HWs, Health Unit Management Committee and the district official involved in the study that the research work was entirely for academic purposes. The researcher ensured this, by not including actual names of the respondents who participated in the study in the consequent chapters.

The HWs, Health Unit Management Committee and district officials who participated in this study were all briefed before the survey and asked to willingly consent to be part of the study and were informed that participation was optional. All audio recordings were done on the request and participation of the respondents. The research findings in the subsequent chapters were therefore unearthed in adherence to strong ethical procedures throughout the research study

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.1-Introduction

This chapter contains presentation, analysis and discussions of findings. The chapter has excerpts from the interviews, descriptive statistics, and correlation and regression analysis of the different variables of the study. This study was in light of investigating financial and nonfinancial incentives of HWs and the QHSD in Health centre IIIs in Nwoya district.

4.2-Presentation of the results

The results were interpreted and discussed in relation to the objectives of study and in comparison with the literature review cited in chapter two, the key focus was to establish the effects of financial and non financial incentives and support supervision as a moderating factor in influencing the quality of health service delivery.

Table 4. 1: The response rate

Data collection tools	Sample size	Data collection tools returned	Data collection tool not returned	Percentage
Questionnaires	54	44	10	81.5
Interview	9	8	1	88.9
Documentation check list	3	3	0	100
Total	63	52	11	90.1

Source: Primary data

As shown in the table 3 above, out of the 54 questionnaires issued 44 were filled and returned giving a response rate of 81.5% and concerning the interviews out of the 9 proposed interviews 8 interviews were carried out giving a response rate of 88.9%. The 3 documentation checklists were proposed to be done and were all done attaining a response rate of 100%. The response rate of the questionnaires, interviews and documentation were all considered representative because they all fall above 50% which is the minimum acceptable response rate.

The overall average response rate was computed and revealed a value of 90.1 that showed that the responses were representative.

This chapter will therefore, analyze the response data obtained from the research Sample (n = 44) at 82.5% as the responses rate.

4.3-Background Characteristics of Respondents

4.3.1-Gender of the HWs

From the table below it is evident that the population is representative of more female who were 23 (52.3%) as compared to the male who were 21 (47.7%). This shows that more female responded compared to males implying that women constitute the majority of the community including provision of labour for health service delivery. This could probably point out that more females were motivated and satisfied to be part of the health service delivery team than their male counterparts since the male hold the main financial responsibilities of the family which is very tasking.

Table 4. 2: Gender of respondents

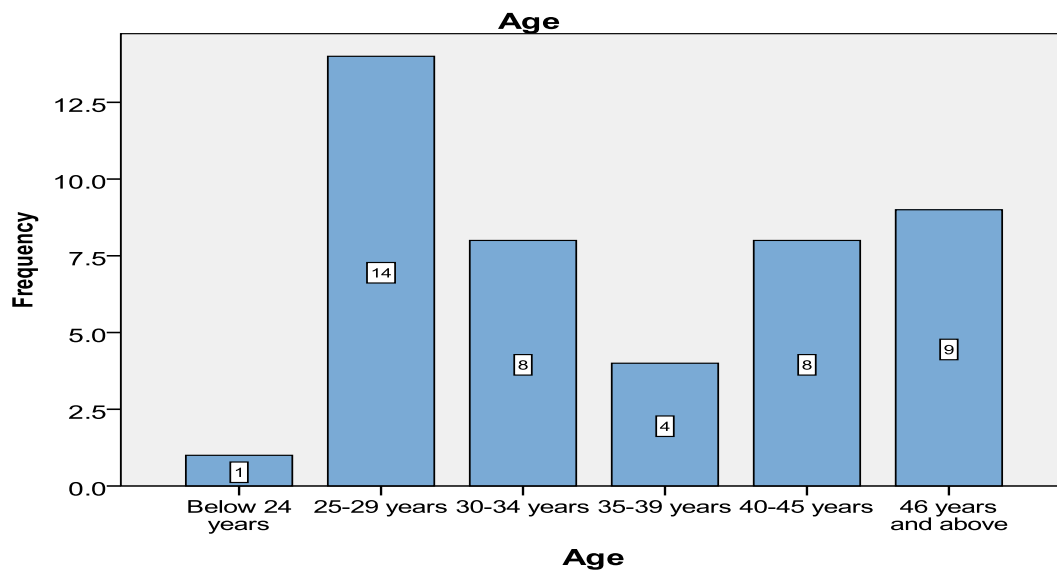
Gender	Frequency	Percent
Female	23	52.3
Male	21	47.7
Total	44	100

Source: Primary Data

4.3.2-Age of respondents

The figure below presents graphical representation of the age distribution of the HWs.

Figure 4. 1: Age of respondents



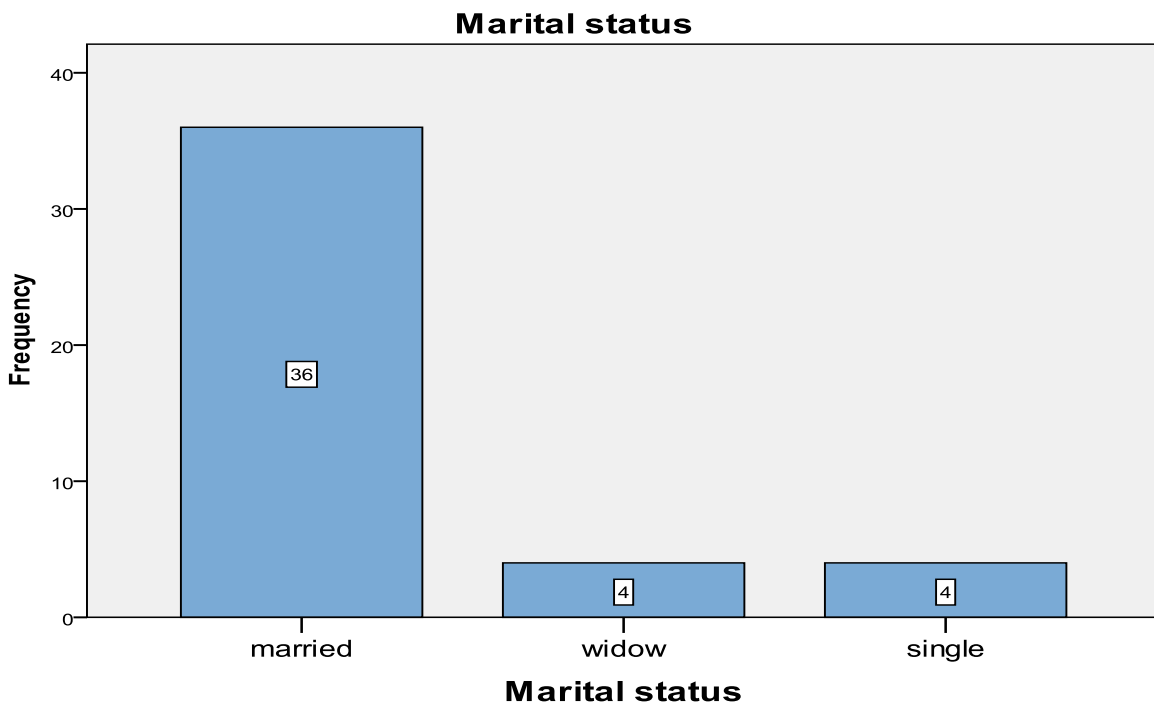
In reference to figure 4.3.2.1, It was observed that majority of the respondents were in the age category of 25-29 years 14 (31.8%) followed by those above 45 years 8 (20.8%) and the least age group fall below 24 years hence most of the respondents fall in the age group of 25-29 years. This implies that most of the HWs are in the reproductive age and in the stage of career

development therefore may need more financial and non financial incentives to keep them motivated and retained on their work hence this sounds a loud cry to the government to provide the right dose incentives for HWs in HCIIIs in order to improve the QHSD in HCIIIs.

4.3.3-Marital status of respondents

The figure below represents the graphical distribution of the marital status of respondents at HCIII's in Nwoya district.

Figure 4. 2: Marital status of respondents



The figure 4.3.3.1 above, shows that more than eighty percent of the HWs are married 36 (81.8%), only 4 (9.1%) percent are single and widowed 4 (9.1%) of the HWs are widowed. This implies that most of the HWs have many family responsibilities which need more financial

incentives to be motivate to work hence increasing the financial package will keep the HWs motivated to work and vice-versa.

4.3.4-Rank of the respondents

The table below represents the graphical distribution of the rank level of the respondents at HCIII's in Nwoya district.

Table 4. 3: Rank Level of the HWs

Title of respondent	Frequency	Percent
Sr. Clinical Officer	2	4.5
Mid wife nursing	5	11.4
Enrolled nurse	4	9.1
Laboratory assistant	2	4.5
Health assistant	4	9.1
Health unit management Committee	15	34.1
Clinical officer	4	9.1
Officer nursing	2	4.5
Laboratory technician	1	2.3
Nursing assistants	3	6.8
Others	2	4.5
Total	44	100

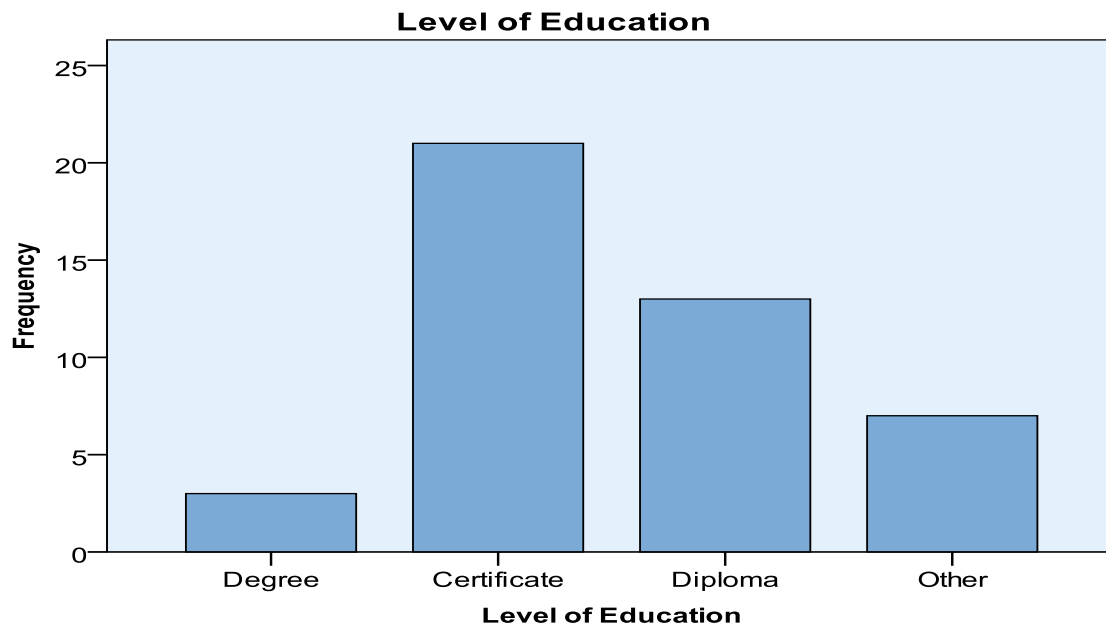
Source: Primary Data

As reflected in Table 4.3.4.1 above, The HWs are comprised of mid wife nurses who constituted 5 (11.4%) followed by clinical officers 4 (9.1%), health assistants and enrolled nurses both comprised of 4 (9.1%) while only 6.8% are nursing assistants. Senior clinical officers, Laboratory assistants and nursing officers and others (inclusive of support staff, watchman) all comprised of 2 (4.5%) of the HWs. Laboratory technicians had the least numbers among HWs at the health centres 1 (2.3%). The rank of staffs in the HCIII's mattered in the survey because it is attached to salary a grade which is a financial incentive HWs in delivering quality health services. This could probably imply that more staffs were probably motivated to provide quality health services to health consumers when they speculated a possibility of being offered sponsorship privileges for further education since it is attached to salary, allowances and rank in the medical profession. The top District officials in charge of the sponsorship programme should clearly state the criteria of getting sponsorship for further education to keep health worker motivated to deliver quality health services, if it is not done, many health workers may become de-motivated and resign or carry out their duties with a relaxed attitude therefore lowering the quality of health service delivery.

4.3.5-Education level of respondents

The table below shows the education level of respondents.

Figure 4.3: Education level of respondents

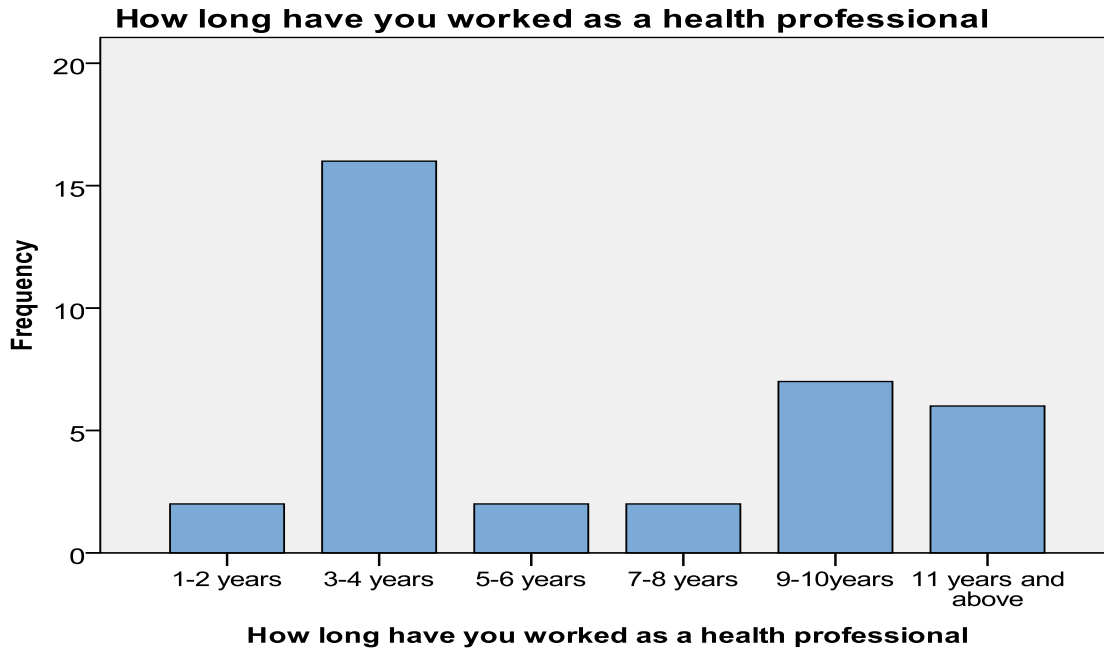


Source: Primary data

In figure 4.3.5.1 above, more than half of HWs are certificate holders 23 (52%) and almost a third are diploma holders 13 (30%), while others (inclusive of primary level certificate holders) comprising of 7 (16%). Degree holders comprised of the lowest number of HWs at 1 (2%) in Nwoya district. The education level of the respondents mattered in the study because it determined the quality of diagnosis of illness and prescription of a patient and salary. This may therefore point out that the more educated the HWs was, the better he was at diagnosis and prescription of drugs hence providing quality health services delivered in HCIIIs would not be questionable by the health users.

4.3.6-Period of work as a health professional

Figure 4. 4: Period served as a health professional



Source: Primary data

Figure 4.3.6.1 revealed that Nearly half 20 (45%) of the HWs have served as health professional for a period of between 3-4 years, followed by 8 (19%) who have served for 9-10years, 7 (17%) have served for more than 11 years while the least number of HWs have served for 1-2 years, 5-6 years and 7-8 years each comprising of 3 (5.7%) of the HWs in Nwoya district. The period of work of health worker was of interest because it grooms the character and determined the knowledge and experience of a health worker in the delivering quality health services since the ones who have worked longer have a better understanding of the core value, principles and dynamics of the work. This could therefore imply that the more the health worker served as a health professional the better positioned he was at delivering QHSD. Therefore if government allocated a special package besides the pension package for the HWs who have served for more

than fifteen years in the health system then others would be motivated to serve in government HCIIIs in Nwoya district.

4.3.7-Period of work at health facility

Table 4. 4: Period served as a health worker at health facility

Period served as a health worker at health facility	Frequency	Percentage
1-2 years	21	47.7
3-4 years	11	25
5-6 years	6	13.6
7-8 years	4	9.1
11 years and above	2	4.5
Total	44	100

Source: Primary Data

The table above shows that, almost half 21 (47.7%) of the HWs have served at the facility for a period of between 1-2 years, followed by 11 (25%) who have served for between 3-4years. The lowest number comprising of 4 (9.1%) and 2 (4.5%) who have served the facility for a period of 7-8 years and above 11 years respectively. The period of work as a health professional was of interest in the study because it determined the knowledge, expertise and better understanding of the how HCIII operates in health service delivery. This could therefore points out that the fewer HWs who were retained in the HCIIIs for more than seven years were more skilled to deliver better quality of health service because they are more experience in working in a particular HCIII

settings and have a built a good health worker client relationship with the health consumers hence improving the QHSD.

4.4-Quality of Service Delivery

4.4.1-Opening time of the health facilities

Table 4. 5: Time the health facility opens

Time the HCIIIs open to start work	Frequency	Percentage
Between 8:00am to 9:00am	38	84.4
Between 10:00am to 11:00am	1	2.2
Other	5	13.4
Total	44	100

Source: Primary Data

The table shows that 38 (84.4 %) of the respondents indicated 8:00am to 9:00am as the opening time of health facilities because it is the standard time as stipulated by the government, the 30minutes to one hour variation from 08:00am was attributed to cleaning up the health facility, aggregating of sharps, while 1 (2.2%) indicate 10:00am to 11:00am because of late arrival of patients to the health facility to seek medical attention because they come from far places, bad roads and poor means of transport to the health facility. Others 5 (13.4%) indicated that the facility is opened 24 hours and patients are attended to at any time they report to the health facility needing medical attention.

The entire district officials interviewed said that the standing orders are 08:00am to report on duty to start work and explained a 30 minutes delay to start work because they have to clean and

disaggregate sharps. They added that all HCIIIs have an arrival book which acts as a check to help them follow the standing orders for time to report on duty most of them are adhering to it.

On the contrary, all the village leaders interviewed revealed that all the HWs arrive to work at 10:00am because some patients arrive late to seek medical attention since that they travel between 4km to 7km Purongo Health centre III, in Alero and Kochgoma HC IIIs”.

This implies that the standing orders for time for reporting on duty of 08:00am has not yet been achieved in some health centres IIIs therefore the district officials may need to put in more effort to follow up the HWs develop a mechanism of recognising and appreciating the HWs who keep time to report on duty. The time for opening the HCIII to start work was of interest in the study because it helped in determining the quality of service delivery.

4.4.2 Closing time for the HWs at the Health Centre IIIs

The table below show shows the time for leaving work at the HCIIIs

Table 4. 6: Time for leaving work at the HCIIIs

Time for leaving work at the HCIIIs	Frequency	Percentage
Between 12:00pm to 01:30pm	3	6.8
02:00pm to 3:30pm	9	20.5
04:00pm to 5:30pm	25	56.8
Other	7	15.9
Total	44	100

Source: Primary Data

The table 4.4.2.1 above shows more than half (56.8%) of the respondents indicated the time between 04:00pm to 5:30pm as the closing time of health facilities while 20.5% indicated 02:00pm to 03:30pm and 6.8% point to the time between 12:00 noon and 1:30pm as closing time for health facilities. Others indicated that the facility is opened 24 hours and patients are attended to at any time.

All the district officials interviewed said the HCIIIs are never closed they are open for 24hours, OPD opens from 08:00am to 05:00pm and at night a staffs is allocated to cover at night time and handle emergency cases which arrive at the HCIIIs after closure of OPD at 05:00pm but the maternity section is 24hours open. However, one of the village leaders said that by the time it clocks 11:00am to 12:00pm the HWs say they are tired and patients should come back another day. While two village leaders said that the HWs close the health centre at 05:00pm and 04:00pm respectively because patients have all been treated but keep on standby for any emergency cases that arrives for treatment. This implies that if the district officials continue to carry out support supervision time management will be observed hence improving the quality of service delivery.

4.4.3 Average time taken to attended to a patient

The table below shows the average time taken to attend to a patient at the health centre IIIs by the HWs

Table 4. 7: Average time taken to attend to a patient

Average time taken to attend to a patient	Frequency	Percentage
20 to 30 minutes	26	60
40min to 1 hour	2	4.4
1hour to 1 and half hours	2	4.4
1hour 40minutes to 2 hours	5	11.1
Others	9	20
Total	44	100

Source: Primary Data

The table 4.4.3.1 above shows that, more than half (60%) of HWs indicated 20 to 30 minutes as the average time taken to attend to a patient because some HWs attend to the patients very fast while others (20%) specify that the average time depends on the conditions of the patient for example especially during child delivery where you take time up to delivery of the expectant mother.

The qualitative data generated from interview guides revealed that patients were attended to within 30minutes of arrival at Alero HCIII and if the OPD was closed the HWs appeared very fast to attend to the patient and qualitative data also revealed that the some respondents had yet found fault with the work of the HWs at the health centre III while some said that it took between 10-15minutes and other between 30-45 minutes to attend to a patient. On the contrary, one of the respondents said it took 2 hours to attend to a patient in Koch Goma HCIII and another added to it by saying it took 30 minutes and beyond to attend to patients and in 2012

there was a strike in Kochgoma HCIIIs women matched to a Sub County with annoyance because for 2hours no health worker was attending to them.

This therefore implies that some health centre attend to patients faster while some take long hence the district officials in charge may have to invent and strategize on measures of reducing on the time for attending to patients to improve the QHSD in Nwoya District.

4.5 The effects of financial incentives on Quality of Health Service Delivery in health centre III in Nwoya district.

The objective was designed to find out the effects of financial incentives on quality of health service delivery in health centre III in Nwoya district. It covered salary, allowances under financial incentives and it covered time spent by the health worker to attend to a patient at the HCIII and the time spent by the health worker at the HCIII. The data generated from the administered questionnaires and interview guides is as discussed below;

Table 4. 8: Descriptive analysis of data on the effects of financial incentives of Health Workers

Financial incentives provided adequately to HWs at the HCIII	Strongly Agree	Agree	Strong Disagree	Disagree	Undecided	Mean	SD
Salary is provided adequately	8 (18.2%)	16(36.4%)	9(20.5%)	10(21.0%)	1(2.3%)	3.55	1.11
Allowances are provided adequately	11(25.0%)	9(20.5%)	11(25.0%)	11(25.6%)	2(4.5%)	3.36	1.24

Source: Primary data

The table above shows that 16 (36.4%) of the respondent agree to salary as a motivation while 20.5% of workers strongly disagree and yet only 1 (2.3%) are not decided on whether or not salary is a motivation. The mean score is 3.55 with a standard deviation of 1.11. This means that on average, the responses are falling in the bracket of agreeing to salary as a motivation.

The documentation check lists reveals the availability of financial reports documented for allowances used for health centre activities like administration, primary health activities.

Three district officials and all the village leaders said that salary is a great motivation to the HWs if paid promptly and regularly because it removes laziness and relaxity at work. One of the village leaders validate it by giving an example of one staffs who abandoned work in Purongo HCIII because her name mysteriously disappeared from the pay roll and for 3years she was not receiving salary. The village leader revealed that the health worker had to indulge in private business to raise money to take her children to school and feed her family.

This therefore points out that salary cannot be ignored as a motivation, if government increases the salary health of workers in HCIIIs and avails it on time then high quality of service delivery would be achieved.

The table 4.5.1 also indicates that a quarter 11 (25.6%) of the respondent comprising of the HWs and the Health Unit management Committee strongly disagree that allowance is a motivation while similarly a quarter 11 (25%) strongly agrees that the provision of allowances will motivate HWs. The mean score is 3.36 with a standard deviation of 1.24. This means that on average the responses are falling in the bracket of disagreeing to allowances as a motivational factor.

All the district officials unveiled the fact that hard to reach allowances, Primary Health Care allowances, workshop allowances are provided to HWs, the PHC allowances are usually inadequate and sent late while the others say the hard to reach allowances are too small often hard to notice when salary is paid. This probably points out that, if the local government and central government coordinated and increased both PHC allowances and hard to reach allowances and sent them early, it would increase the health worker motivation to improve the quality of service delivery.

4.6- Financial incentives on quality of service delivery

Table 4. 9: Financial incentive and time to attend to patient

Is there a relationship between financial incentive and time to attend to patient?	Frequenc y	Percentag e
Yes	27	60
No	17	40
Total	44	100

Source: Primary Data

The table 4.6.1.1 shows that 60% of HWs assent of a relationship between financial incentive and the time taken by HWs to attend to the patients because when workers are financially motivated they will be able to concentrate on delivery of services at the HCIIIs. The table also indicates that 40% of HWs disagree that there is no relationship between financial incentive and the time taken by HWs to attend to the patients because they are professionals and paid by the government to do their job.

One of the village leaders said that when salaries take long to be paid HWs take about 4 hours in taking history and 2 hours in giving drugs takes hence a patient takes 6 hours to fully access health services at Koch Goma health centre III while two village leaders added that the low salary and delay of salary caused some HWs to abandon work in the health facility for agriculture and other private businesses hence reaching late for work. However, one of the district officials revealed that the HWs love their profession therefore what motivates a health worker to work is not financial incentive. This therefore implies that financial incentives affect the time taken to attend to a patient at the health facility.

4.6.2- Financial incentive and time spent by HWs

Table 4. 10: Financial incentive and Time spent by HWs

Is there a relationship between financial incentive and time spent by HWs at the health facility?	Frequency	Percentage
Yes	29	64.4
No	15	35.6
Total	44	100

Source: Primary Data

The table 4.6.1.1 above shows 64.4% of HWs assent of a relationship between financial incentive and the time spent by HWs at the facility because when workers are financially motivated they will have no thought of looking for another job, however without financial incentives HWs have side business to supplement their salary while close to a third (26.7%) disagree because there is a need for HWs to work willingly.

Two of the three village leaders revealed that most HWs were spending more time in opening private clinics and growing rice, beans hence making them arrive late for work and leave duty early. This unearths the fact that some HWs are not contented with their salary and therefore have to take on other side businesses to supplement their salaries in order to provide basic needs for their children. This probably implies that financial incentives of health workers affects time the spent at work and concentration at work because if the financial incentives offered are low, HWs will indulge in other private business to supplement their income hence lowering the quality of health service delivery in the HCIIIs.

4.6.3 Correlation between financial incentives and quality of health service delivery

Table 4. 11: Relationship between financial incentive and HWs time management

Relationship between financial incentive and HWs time management			Financial incentive	Time management
Spearman's rho	Financial incentive	Correlation Coefficient	1.000	.473*
		Sig. (2-tailed)	.	.012
		N	44	44
		Time management	Correlation Coefficient	.473*
		Sig. (2-tailed)	.012	.
		N	44	44

*. Correlation is significant at the 0.01 level (2-tailed).

The table shows a low positive relationship between financial relationship and the health worker client relationship, ($r = 0.473$). When the correlation coefficient was squared a correlation

determination ($r^2=0.473=0.223$) was attained which shows that 22.3% of the variance in time management of HWs is accounted for by financial incentives which are salary and allowances.

The positive correlation coefficient indicates that there is a statistically significant relationship, since $p < 0.05$ implying that the two variables are statistically significant ($p=0.012$) at 0.01 level of significance, which means that an increase in the salary and allowances will promote good time management hence improving in the quality of health service delivery and vice-versa. Therefore salary and allowance affects time management of HWs especially the closing time, opening time and the average time taken to attend to a patient.

4.6.3.1 Correlation between Financial incentives and Health worker Client relationship

Table 4. 12: Relationship between financial incentives and Health worker Client relationship

Relationship between financial incentives and health worker client relationship			Financial incentive	Health worker client relationship
Spearman's rho	Financial incentive	Correlation Coefficient	1.000	.333*
		Sig. (2-tailed)	.	.027
		N	44	44
		Health worker client relationship	Correlation Coefficient	.333*
		Sig. (2-tailed)	.027	.
		N	44	44

*. Correlation is significant at the 0.0 level (2-tailed).

The table shows a low positive relationship between financial relationship and the health worker client relationship, ($r = 0.333$). When the correlation coefficient was squared a correlation determination ($r^2 = 0.333 = 0.111$) was attained which shows that 11.1% of the variance in the health worker client relationship of HWs is accounted for by salary and allowances.

The positive correlation coefficient indicates that there is a statistically significant relationship, since $p < 0.05$ implying that the two variables are statistically significant ($p = 0.027$) at 0.01 level of significance, which means that an increase in the salary and allowances will lead to an improvement in the Health worker client relationship hence improving the quality of health service delivery and vice-versa. Therefore salary and allowance affects the health worker client relationship of HWs. This is similar to the quantitative data generated which revealed that late payment of salary and allowance made HWs rude to patients which lowers the QHSD in the HCIIIs.

Table 4. 13: Hypothesis testing for the relationship between financial incentives and Quality of Health Service Delivery

Relationship between financial incentives and QHSD		QHSD	Financial incentives
Spearman's rho QHSD	Correlation Coefficient	1.000	.612**
	Sig. (2-tailed)	.	.000
	N	44	44
	Financial incentive	.675**	1.000
	Correlation Coefficient	.675**	1.000
	Sig. (2-tailed)	.000	.
	N	44	44

** . Correlation is significant at the 0.01 level (2-tailed).

The table above shows that spearman's rho = 0.612, $p = 0.000$ hence $p < 0.05$.

The spearman's rho shows of a strong and positive significant linear correlation coefficient of 0.612 which indicates that there is a statistically linear relationship between the two variables in that an increase in the value of financial incentives would lead to an increase in the quality of health service delivery. The finding therefore does not satisfy the condition of the null hypothesis H_0 which states that there is no relationship between financial incentives of HWs and QHSD in HCIIIs in Nwoya District. Therefore the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted, which is; there is relationship between financial incentives and the QHSD in HCIIIs in Nwoya District hence the two variables are related.

4.7 Regression between financial incentives and Quality of Health Service Delivery

4.7.1. Model Summary

Table 4. 14: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.656 ^a	.430	.402	.41238

a. Predictors: (Constant), Allowance, Salary

From the table above Adjusted R squared = 0.430, thus 43% of the variation in the QHSD is explained by financial incentives. This therefore implies that an increase in financial incentives will lead to an increase in the quality of service delivery.

4.7.2 Acceptability of the model

Table 4. 15: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.266	2	2.633	15.482	.000 ^a
	Residual	6.972	41	.170		
	Total	12.238	43			

a. Predictors: (Constant), Allowance, Salary

b. Dependent Variable: QHSD

The significance value of the F statistic less than 0.01, P =0.000 which is the Significance level

which means that the variation explained by the model is not due to chance hence the model is statistically significant.

4.7.3 Standardized coefficients

Table 4. 16: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.698	.225		11.986	.000
	Salary	.198	.064	.412	3.116	.003
	Allowance	.154	.057	.358	2.706	.010

a. Dependent Variable: QHSD

Standardized coefficients or beta coefficients are the estimates resulting from an analysis performed on financial incentives that affects the quality of service delivery.

In conclusion, the table above shows that salary has the greatest effect on the quality of service delivery followed by allowances to HWs at HCIIIs as stipulated from the standard beta coefficient.

4.7 Effects on Non- financial Incentives and Quality of service delivery

Table 4. 17: Non-financial incentives of HWs

Non-Financial incentives adequately provide at the HCIIIs	Strongly Agree	Agree	Strong Disagree	Disagree	Undecided	Mean	SD
Career development is adequately availed for all health workers	8(18.2%)	12(27.3%)	11(25.0%)	8(18.2%)	5(11.4%)	3.23	1.27
Continuing Education is adequately provided for all health workers	10(22.7%)	14(31.8%)	8(18.2%)	7(15.9%)	5(11.4%)	3.39	1.32
Training is adequately provided for all health workers	9(20.5%)	19(43.2%)	2(4.5%)	14(31.8%)	0.0%	3.52	1.15
Health centre Infrastructure is adequately provided for all HCIIIs	10(22.7%)	25(56.8%)	2(4.5%)	7(15.9%)	0.0%	3.86	0.96
Drugs are adequately provided for HCIIIs	15(34.1%)	22(50.0%)	6(13.6%)	1(2.3%)	0.0%	4.16	0.75
Equipments are adequately provided for	12(27.3%)	15(34.1%)	9(20.5%)	8(18.2%)	0.0%	3.70	1.07

all HCIIIs							
Recognition is adequately provided for all health workers	11(25.0%)	19(43.2%)	12(27.3%)	2(4.5%)	0.0%	3.89	0.84

Source: Primary data

The table above shows that 27.3% of the HWs agree to opportunities in career development as a motivation for work while 11.4% strongly disagree. The mean score is 3.23 with a standard deviation of 1.24. This means that on average the responses are falling in the bracket of agreeing to career development as a motivational factor. The documentation check list could not capture any records for staffs who have attended trainings probably because it's the district staffs who directly invite the HWs for trainings and the records are kept with the district officials and the partnering NGOs.

One of the district officials said that promoting career development by giving sponsorship opportunity for the staffs for upgrading their career development is a key motivational factor to HWs. This points out that, HWs are more motivated to work when their career objectives are likely to be realised as they work, government should therefore increasing opportunities for sponsorship in health centre HCIIIs is likely to be a key motivational factor to most HWs.

Nearly a third (31.8%) of the HWs agreed to continuing education as a motivation for their work while 16% disagree. The mean score is 3.39 with a standard deviation of 1.32. This implies that on average the responses are falling in the bracket of agreeing to continuing education as a motivational factor to work. Close to half (43.2%) of the HWs agree that trainings enhanced their ability to work while 4.5% of the respondents strongly disagree. The mean score is 3.52 with a

standard deviation of 1.15. This therefore implies that on average the responses are falling in the bracket of agreeing that conducting refresher trainings will motivate the HWs of Nwoya district.

All the district officials and Village leaders said that continuous education and trainings are a motivation to HWs because it, updates the knowledge and skills of health worker to improve diagnosis of illness and handle to new challenging cases that arise at the HC IIIs.

This implies that HWs are impressed when they learn new medical advancements and new changes because it enables them carry out their activities better. This therefore points out that equipping HWs with new knowledge and skill will most like enable the health sector attain the desired standard of health service delivery.

Furthermore, 56.8% of the respondents agree to health centre infrastructure as a motivational factor while 4.5% of HWs strongly disagree. The mean score is 3.86 with a standard deviation of 0.96. This implies that on average the responses are falling in the bracket of agreeing to existence of health centre infrastructure as a motivation. The documentation check list revealed major rehabilitation and construction of health centre infrastructures including staff houses and wards for example in Koch Goma health and Purongo Health centre III respectively.

Three of the four district official and village leaders said accommodation of staff and construction of wards for admitting patients is a great motivational factor for HWs in HCIIIs because it creates privacy for the patient to speak out about her/ his condition to accurate diagnosis of illness and prescription to patient illness. Another village leader validated this by stating his argument that when HWs don't have accommodation within the health facility emergencies arise at the HCIII and there is no one to handle them and by the time the health worker arrives the mother has delivered on her own or the patient is almost dying".

This points out that infrastructures are a motivational factor to HWs in HCIIIs because they are able to follow up their patients in the ward after being given admission and patients at the health centre are able to speak out of what they are exacting suffering from to get the right treatment. This implies that the government should construct spacious wards and accommodation for staff because it can positively impact health service delivery.

The table above shows that 43.2% of the respondents agree that adequate supplies of drugs were a motivational factor while only 2.3% of the respondents disagree. The mean score is 4.16 with a standard deviation of 0.75. This means that on average the responses are falling in the bracket of agreeing to availability of drugs will motivate the HWs to work. The documentation check list revealed the availability of invoices, delivery notes which proved the supply of drugs at the health centre IIIs.

One of the village leaders revealed that sometimes there are no drugs in the health centre and patients have to go and buy medicine so that they are given injections and added that drugs for ulcers are never in HCIII and yet many people are suffering from ulcers. Another village leader said that sometimes HWs don't appear at the health centre the whole day when there are no drugs". This unearths the fact that shortage or lack of drugs in the health centre poses a big gap in health service delivery because patient illnesses are left untreated since some patients are unable to buy drugs, even when the others buy drugs from other private clinics and are treated the idea of free medical services is interfered with. This implies that increase of drug supplies at the health centres is most likely to increase the QHSD in health centre threes.

The table above shows that 27.3% of the respondents strongly agree and 34.1% agreed that adequate supplies of equipments were a motivational factor while 20% strongly disagreed and

18.2% disagree. The mean score is 3.70 with a standard deviation of 1.07. This means that on average the responses are falling in the bracket of agreeing to availability of equipments will motivate the HWs to work. The documentation check list revealed the availability of invoices, delivery notes proved the supply of major equipments like weighing scales, forceps, surgical knives among others done more than five years ago at the health centre IIIs and maintenance of these equipments were not being done lowering the quality of service delivery.

Half of the respondents agree that recognition of HWs will motivate the workers while only 4.5% of the respondents disagree. The mean score is 3.89 with a standard deviation of 0.89. This means that on average, the responses are falling in the bracket of recognition of health works will motivate them to work. The All district leaders and village leaders said that recognising and appreciating the work of HWs is a great motivation to them.

This therefore implies that recognition of HWs has an influence in motivating HWs at the HCIIIs.

4.7.1 - Effects of Non- financial Incentives and Quality of service delivery

Table 4. 18: Relationship between HCIII infrastructure and accuracy of diagnosis of illness

Relationship between health centre infrastructure and accuracy of diagnosis of illness	Accuracy in diagnosis of illness	in HCIII infrastructure
Spearman's rho	1.000	.731**
Accuracy in diagnosis of illness		
Correlation Coefficient		
Sig. (2-tailed)	.000	.000
N	44	44
Health centre infrastructure	.731**	1.000
Correlation Coefficient		
Sig. (2-tailed)	.000	.000
N	44	44

** . Correlation is significant at the 0.01 level (2-tailed).

The table shows a high positive relationship between HCIII infrastructure and accuracy in diagnosis of illness, ($r = 0.731$) and since $p < 0.05$ the two variables are statistically significant ($p = 0.000$) at 0.01 level of significance, which means that an increase in the number of well constructed HCIII infrastructure will lead to an improvement in the accuracy in diagnosis of illness hence improving the quality of health service delivery and vice-versa. Therefore HCIII infrastructure affects the accuracy diagnosis of illness. This is similar to the quantitative data generated which revealed that well completed HCIII infrastructure would provide spacious wards to enable the patient have enough privacy to speak out on patient illness for proper diagnosis, admission, treatment and follow up of patient condition by the health worker .

4.7.2- Correlations between continuing education and health worker client relationship

Table 4. 19: Relationship between continuing education and health worker client relationship

Relationship between continuing education and Health worker client relationship	Continuing education	Health worker client relationship
Spearman's rho	1.000	.561*
Continuing education Correlation Coefficient		
Sig. (2-tailed)	.	.013
N	44	44
Health worker client relationship Correlation Coefficient	.561*	1.000
Sig. (2-tailed)	.013	.
N	44	44

*. Correlation is significant at the 0.05 level (2-tailed).

The table shows a moderate positive relationship between continuing education and the health worker client relationship, ($r = 0.561$) and since $p < 0.05$ the two variables are statistically significant ($p = 0.013$) at 0.05 level of significance, which means that an increase the education level will lead to an improvement in the Health worker client relationship hence improving the quality of health service delivery, therefore continuing education affects the health worker client relationship of HWs. This is similar to the qualitative data generated which revealed that continuing education enables health workers to get equipped with more knowledge and skills to handle clients and treat illnesses which solves any conflicting issues among health workers and the health centre clients therefore improving the quality of health service delivery and vice versa.

4.8-Effect of Supervision of HWs in HCIIIS and Quality of Service Delivery

4.8.1-Support supervision of HWs and feedback from supervisor

The documentation check list underpinned the fact that supervision has been going on and will still go on in the health centre IIIs because it is part of the district plan. During support supervision, feedback in terms of recommendations, gaps, finding (both positive and negative) and action plans were written in the supervision book at the HCIIIs. It was also during support supervision that the in-charges sometimes discussed and submitted needs for the health facility and forwarded to the district officers in charge. The table below is evident that all HWs at the HCIII's in Nwoya district are supervised and all HWs obtain feedback from the supervisors. The documentation check list also agreed that support supervision was going and all of the health facilities had support Supervision books. It also further confirmed that supervisors and supervisee always held dialogues to discuss measures of improving service delivery at the HCIIIs as was found documented in the support supervision book.

Table 4. 20: Supervision of HWs

Are HWs supervised in HCIIIs	Frequency	Percent
Yes	44	100%
No	0	0
Total	44	100.0

Source: Primary data

4.8.2 -Descriptive Statistics for Supervision

Table 4. 21: Supervision of Health workers and Quality of Health Service Delivery

Supervision	Strongly Agree	Agree	Strong Disagree	Disagree	Undecided	Mean	SD
Supervision promotes salary increment	0%	9(20.5%)	10(22.7%)	17(38.6%)	8(18.2%)	2.45	1.02
Supervision promotes health worker time management	16(36.4%)	24(54.5%)	0%	4(9.1%)	0%	4.27	0.62
Supervision promotes resource availability of essential equipment & medical supplies	17(38.6%)	22(50.0%)	0%	3(6.8%)	2(4.5%)	4.18	0.92
Supervision improves health worker client relationship	16(36.4%)	24(54.5%)	2(4.5%)	1(2.3%)	1(2.3%)	4.2	0.82

Source: Primary data

More than a third (38.6%) of the respondents disagree that supervision promotes salary increment while 20.5% agree. The mean score is 2.45 with a standard deviation of 1.02. This means that on average the responses are falling in the bracket of disagreeing that supervision promotes salary increment. Hence supervision has a low effect on salary

The above the descriptive statistics was validated by all the district officials when they comment that there is no relationship between supervision and salary increment because it is done annually

for all HWs throughout the country by the government. This implies that supervision is carried out to improve the capacity of staffs and not as criteria for salary increment therefore if individuals who supervise the HCIIIs continued to offer support to the other colleagues the high quality of service delivery will be realised at the health facility.

The table indicates half (54.5%) of the respondents agree that Supervision promotes health worker time management while 9.1% disagree. Therefore the mean score is 4.27 with a standard deviation of 0.62. This implies that on average the responses are falling in the bracket of agreeing that supervision promotes health worker time management.

One of the district leaders said that support supervision helps to promote time management, sort out issues that cause poor time management and followed up health worker attendance. A village leader added it that during support supervision a health worker with poor time management habits is cautioned and would change unfortunately the supervisors reach the HCIIIs in the afternoon and find all the health worker on duty hence the gap in time management goes unnoticed.

This asserts that the role of supervision in quality health service delivery is unquestionable because it enables the interaction between the independent and dependent variable to achieve the planned standard of health service delivery. This implies that if the government increased funds for supervision to be on going, then time management would be kept by health worker health centre threes in Nwoya District.

Half (50%) of the respondents agreed that Supervision promotes resource availability of essential equipment and medical supplies while 6.8% disagree. Therefore the mean score is 4.18 and with

a standard deviation of 0.92. This implies that on average the responses are falling in the bracket of agreeing that supervision promotes resource availability of essential equipment and medical supplies.

All the village leaders and district leaders commented that support supervision can promote resource available because HWs are able to speak out on what resources and equipments are lacking and are helped to make requisition for supplies and resources to be delivered to the health facility. This therefore asserts that regular supervision promotes availability of resources at HCIIIs since the supervisors would be able to inform the District Health Office's on the resource missing at the HCIIIs and supply made hence improvement in the quality of service delivery.

More than half 54.5 % of the HWs agree that supervision improves health worker client relationship while 4.5% disagree. Therefore the mean score is 4.20 and with a standard deviation of 0.82. This implies that on average the responses are falling in the bracket of agreeing that Supervision improves health worker client relationship.

The district leader and village leaders all verbalised that supervision can improve health worker client relationship because can enhances solving conflicts amicably between community member and HWs instead of going to a radio station to air out community or individual grievances.

One of the village leaders added that after supervision at Koch goma HCIII, the rude health worker who used to shout at patients was talked to and she became polite to clients.

This points out that supervision helps in promoting good health worker client relationship since the HWs counselled, guided and followed up to improve. Therefore, if government recruited

more supervisors to offer support at the HCIIIs, the right quality of service delivery may be attained.

4.8.3 Correlation between Supervision and Opening time of health facility

Table 4. 22: Relationship between Supervision and Opening time of health facility

Relationship between Supervision and Opening time of health facility			Supervision	Opening time of health facility
Spearman's rho Supervision	Correlation Coefficient		1.000	.522**
	Sig. (2-tailed)		.	.017
	N		44	44
	Opening time of health facility			.522**
Opening time of health facility	Correlation Coefficient		.522**	1.000
	Sig. (2-tailed)		.017	.
	N		44	44

** . Correlation is significant at the 0.01 level (2-tailed).

The table shows a moderate positive relationship between supervision and the opening time of health facilities ($r = 0.522$) and since $p < 0.05$ the two variables are statistically significant ($p = 0.017$) at 0.05 level of significance, which means that regular support supervision improves on the opening time of health facilities to start work, therefore support supervision affects the opening time of health facilities. This implies that if regular support supervision is done then regularly then the opening time for the health facility to start work will be observed hence improving the quality of health service delivery and vice-versa. The finding of this study is

related to the qualitative data generated which revealed that support supervision help supervisors to resolve the challenges of lateness in opening of health facilities health facility to start work.

4.8. 4 Correlation between Support supervision and Closing time of health facility

Table 4. 23: Relationship between Support supervision and Closing time of health facility

Relationship between Supervision and Closing time of health facility		Supervision	Closing time of health facility
Spearman's rho Supervision	Correlation Coefficient	1.000	.402**
	Sig. (2-tailed)	.	.019
	N	44	44
	<hr/>		
Closing time of health facility	Correlation Coefficient	.402**	1.000
	Sig. (2-tailed)	.019	.
	N	44	44

** . Correlation is significant at the 0.01 level (2-tailed).

The table shows a moderate positive relationship between supervision and the closing time of health facilities ($r = 0.402$) and since $p < 0.05$ the two variables are statistically significant ($p = 0.019$) at 0.05 level of significance, which means that an regular support supervision improves on the closing time of health facilities to start work, therefore support supervision affects the closing time of health facilities. This implies that if regular support supervision is done then the closing time for the health facility will be observed and vice-versa as confirmed by the generated qualitative data which revealed that regular support supervision promoted the right

time for closing the health facility (Out Patient Department) among HWs thus improving the quality of health service delivery and vice-versa.

4.8.5 Correlation between Supervision and Opening time of health facility

Table 4. 24: Relationship between Supervision and average time to attend to a patient

Relationship between Supervision and average time to attend to a patient		Supervision	Average time to attend to a patient
Spearman's rho Supervision	Correlation Coefficient	1.000	.511**
	Sig. (2-tailed)	.	.014
	N	44	44
	<hr/>		
Average time to attend to a patient	Correlation Coefficient	.511**	1.000
	Sig. (2-tailed)	.014	.
	N	44	44

** . Correlation is significant at the 0.01 level (2 tailed).

The table shows a moderate positive relationship between supervision and the average time taken to attend to a patient ($r = 0.511$) and since $p < 0.05$ the two variables are statistically significant ($p = 0.014$) at 0.05 level of significance, which means that an regular support supervision improves on the average time taken to attend to a patient, therefore support supervision affects the closing time of health facilities. This implies that constant support supervision helps in observing the average time for attending to a patient at the health facility and vice-versa as confirmed by the generated qualitative data which revealed that regular support supervision promoted the right average time for attending to a patient at the health facilities among HWs

hence improving the quality of health service delivery and vice-versa which then implies that supervision of health workers will improve the average time taken to attend to a patient.

4.8.6 Correlations Relationship between supervision and health worker client relationship

Table 4. 25: Relationship between supervision and health worker client relationship

Relationship between supervision and health worker client relationship			Supervision	Health worker client relationship
Spearman's rho	Supervision	Correlation Coefficient	1.000	.201*
		Sig. (2-tailed)	.	.041
		N	44	44
		Health worker client relationship	.201*	1.000
	Health worker client relationship	Correlation Coefficient	.201*	1.000
		Sig. (2-tailed)	.041	.
		N	44	44

*. Correlation is significant at the 0.05 level (2-tailed).

The table shows a low positive relationship between supervision and the health worker client relationship, ($r = 0.201$) and since $p < 0.05$ the two variables are statistically significant ($p = 0.041$) at 0.05 level of significance, which means that an regular support supervision improves on the average time taken to attend to a patient, therefore support supervision affects the health worker client relationship. This implies that if support supervision is constantly done then the health worker client relationship will be improved hence improving the quality of health service delivery and vice-versa as confirmed by the generated qualitative data which revealed that regular support supervision get the supervisors an avenue ironing out any issuing of content

between the health workers and the health centre client hence improving the quality of health service delivery and vice versa.

4.9-Testing of the Hypothesis

Table 4. 26: Hypothesis testing for the relationship between nonfinancial incentives and Quality of Health Service Delivery

Relationship between non-financial incentives and QHSD		QHSD	Non-financial incentives
Spearman's rho QHSD	Correlation Coefficient	1.000	.0462**
	Sig. (2-tailed)	.	.000
	N	44	44
	<hr/>		
Non-Financial incentive	Correlation Coefficient	.675**	1.000
	Sig. (2-tailed)	.000	.
	N	44	44

** . Correlation is significant at the 0.01 level (2-tailed).

The table above reveals that spearman’s rho = 0.462, p= 0.001 hence $p < 0.05$.

This tells us that non-financial incentives of HWs and QHSD are statistically significant, therefore is a relationship between financial incentives and QHSD.

The null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted, which is; there is relationship between non-financial motivational factor and the QHSD in HCIIIs in Nwoya District thus the two variables are related.

Table 4. 27: Hypothesis testing for the relationship between supervision and Quality of Health Service Delivery

Relationship between supervision and QHSD.			QHSD	Supervision
Spearman's rho QHSD	Correlation Coefficient		1.000	.872**
	Sig. (2-tailed)		.	.000
	N		44	44
Supervision	Correlation Coefficient		.872**	1.000
	Sig. (2-tailed)		.000	.
	N		44	44

** . Correlation is significant at the 0.01 level (2-tailed).

The table above shows that spearman's rho = 0.872, p= 0.000 hence $p < 0.05$.

This tells us that supervision of HWs and QHSD are statistically significant, therefore there is a relationship between supervision as a motivation of health workers and QHSD.

The null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted, which indicate that there is; there is relationship between supervision and QHSD in HCIIIs in Nwoya District hence the two variables are related.

4.10 Regression

4.10.2 Regression between non-financial incentives and Quality of Health Service Delivery

4.10.2.1-Model Summary

Table 4. 28: Model Summary

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.618 ^a	.382	.262	.45820

a. Predictors: (Constant), Recognition, Trainings, Continued education,

Drugs, Equipment, Career development, Health centre infrastructure

From the table Adjusted R squared = 0.262, thus 26.2% of the variation in the QHSD is explained by nonfinancial incentives.

4.10.2.2 Acceptability of the model

Table 4. 29: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.680	7	.669	3.184	.010 ^a
	Residual	7.558	36	.210		
	Total	12.238	43			

a. Predictors: (Constant), Recognition, Trainings, Continued education, Drugs, Equipment, Career development, Health centre infrastructure

b. Dependent Variable: QHSD

The significance value of the F statistic less than 0.05, $P = 0.010$ which is the Significance level which means that the variation explained by the model is not due to chance hence the model is statistically significant.

4.10.2.3 Standardized coefficients

Table 4. 30: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.170	.467		4.648	.000
	Career development	.057	.088	.135	.641	.526
	Continued education	.096	.104	.236	.925	.361
	Trainings	.034	.073	.073	.459	.649
	Health centre infrastructure	.080	.127	.144	.635	.529
	Drugs	.210	.120	.293	1.748	.089
	Equipment	-.038	.104	-.077	-.368	.715
	Recognition	.016	.121	.025	.132	.896

a. Dependent Variable: QHSD

Conclusion

In conclusion availability of drugs has the greatest effect on the QHSD followed by continued education of HWs, health centre infrastructure, career development while availability of equipments, trainings and recognition respectively have the least effect on the QHSD in HCIII's in Nwoya district.

4.10.3 Regression between Support Supervision and Quality of Health Service Delivery

4.10.3.1-Model Summary

Table 4. 31: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.914 ^a	.835	.831	.21940

a. Predictors: (Constant), supervision

From the table Adjusted R squared = 0.831, thus 83.1% of the variation in the QHSD is explained by supervision.

4.10.3.2 Acceptability of the model

Table 4. 32: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.216	1	10.216	212.240	.000 ^a
	Residual	2.022	42	.048		
	Total	12.238	43			

a. Predictors: (Constant), supervision

b. Dependent Variable: QHSD

The significance value of the F statistic less than 0.05, P =0.000 which is the Significance level which means that the variation explained by the model is not due to chance hence the model is statistically significant.

4.10.3.3-Standardized Coefficients

Table 4. 33: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.025	.200		5.121	.000
Supervision	.765	.053	.914	14.568	.000

a. Dependent Variable: QHSD

In conclusion, the table above shows that supervision has a great impact on the QHSD at HCIII's in Nwoya district.

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0-Introduction

In this chapter, the summary, discussions, conclusions and recommendation of the study were presented according to the findings and where appropriate, existing literature were included in the discussions. The limitations, contributions and implications for future researches were also integrated in this section.

5.1-Summary

The researcher in chapter five presented an objective by objective summary of the findings of the study following a descriptive and correlation analyses of the collected data. Below is the summary of the findings according to the three main objectives.

5.1.1 Objective 1: To establish the effects of financial incentives on the quality of health service delivery

Under the first objective, the analysis of the quantitative data revealed a correlation coefficient of 0.612 suggesting that there is a moderate positive and statistically significant relationship between financial incentives and QHSD in HCIs in Nwoya District. The qualitative data highlighted the availability of allowances used for health centre activities like administration, primary health activities which is a motivation for HWs. It further revealed that untimely and irregularly payment of salary was a great de motivation to the HWs. Financial incentives

motivates HWs to provide quality health service delivery when provided on time and demotivates them if not provided or delayed.

5.1.2 Objective 2: To establish the effects of non financial incentives on the QHSD in Health centre IIIs in Nwoya District.

In the second objective, the analysis of the quantitative data revealed a correlation coefficient of 0.675 suggesting that there is a moderate positive and statistically significant relationship between non financial incentives and QHSD in HCIIIs in Nwoya District. The qualitative data highlighted that promoting career development is significant in updating health worker knowledge and skills to handle to new challenges that arise and improves diagnosis of illness, health centre infrastructure for accommodation of staff, admitting patients is significant in creating privacy for the patient to speak out on his condition accurately for proper diagnosis and treatment of illness.

The qualitative data also that revealed that, sometimes there are no drugs in the health centre causing patients go home without treatment, most of the equipments supplied were old or broken down without replacement making work difficult for health workers. It was also revealed that health workers were recognised and appreciated by the district health sub district team and the health centre in charges. This therefore means that the availed proportions of non-financial incentives in the different health centres positively or negatively influences the QHSD in HCIIIs.

5.1.3 Objective 3: To establish the effects of supervision on the QHSD in Health centre IIIs in Nwoya District.

Lastly, in the third objective, the analysis of the quantitative data revealed a correlation coefficient of 0.872 suggesting that there is a strong and positive and statistically significant relationship between support supervision and QHSD in HCIIIs in Nwoya District. The qualitative data highlighted that, support supervision helps to promote time management, resource availability, sort out issues that cause poor time management and followed up health worker attendance and client relationship at the HCIIIs however, it also revealed that there is no relationship between supervision and salary increment since it was done annually for all HWs throughout the country by the government. Therefore despite the fact that, support supervision does not promote salary increment it, tremendously promotes the improvement in the quality of service delivery at the health facility.

5.2-Discussion of the study findings

5.2.1-Introduction

This section presents a discussion of the key findings of the study under the three main objectives as below:

5.2.2 Objective 1: To establish the effects of financial incentives on the QHSD in Health centre threes in Nwoya District.

The level of financial incentives available for the HWs and HCIIIs is likely to affect the level QHSD. All the HWs were receiving salary except on one health worker who claimed that her

name had disappeared from the pay roll for the last 3 years and had abandoned work at the HCIII. A greater percentage of the respondents comprising of the HWs and the Health Unit Management committee agree that salary (36.4 %) was a better motivation for the HWs while a lesser percentage strongly agree (25%) that allowances was a better motivation incentive. This was supported by a high percentage of the respondents who held the view that salary has an effect on QHSD. The descriptive statistics reveals that on average, the responses of HWs and Health Unit Management Committee are falling in the bracket of agreeing to salary as a motivation if paid on time and regularly. The descriptive statistics also reveals that on average response on allowance are falling in the bracket of disagreeing to it as a motivation for HWs.

The findings of the research results discovered a positive relationship between salary and the quality of service delivery. The positive relationship between financial incentives and quality of service delivery was tested using the Adjusted R squared ($r^2 = 0.40.2$) which explained that the variation of 40.2% in the QHSD is explained by financial incentives. The variation revealed tested using the F statistics shows a significance value of the F less than 0.01, $P = 0.000$ which is the significance level meaning that the variation explained by the model is not due to chance hence the model is statistically significant. The t-test performed revealed that salary has the greatest effect on the quality of service delivery followed by allowances to HWs at HCIIIs.

This finding is similar to that of Bukuluki, Ssengendo, Mafigiri, Byansi & Banoba, (2011) who reported that low salaries is the major causes of discouragement at the HCIIIs because in adverse effect it escalates from poor time management to absenteeism at the health centre. In addition, the persistent delays in salary payment of as long as two months makes it difficult for in-charges

of health units to discipline HWs who skip work when are not yet paid. Laying down precaution to reduce late coming and absenteeism became difficult due to delayed payment of salaries and allowances. This study and earlier studies demonstrate the need for strict scrutiny for the financial incentives, for all employees if job motivation is to be achieved across board. The study has important implications for management in health service organizations who want to improve, retention and remuneration of their workers and is in line with Herzberg's theory developed in 1959.

The data generated from interviews corresponded with the comment of the three district officials and all the village leaders who said that salary is a great motivation to the HWs if paid promptly and regularly because it removes laziness and relaxity at work. Considering the consistent findings of the study and scholars, conclusions can be made that financial incentive affect QHSD.

5.2.3 Objective 2: To establish the effects of non financial incentives on the QHSD in Health centre threes in Nwoya District.

The availability non financial incentives are likely to dictate the level of QHSD in HCIII's in Nwoya district. A greater percentage of the respondents comprising of the HWs and the Health Unit Management committee agree that opportunities in career development and training held a percentage of 75% as a motivation for work. This was supported by a high percentage of the respondents who held the view that career development and training have an effect on QHSD. The descriptive statistics reveals that on average of both career development and training

responses for are falling in the bracket of agreeing to them as a great motivation to work if made available.

The data generated from the interviews, agree that promoting career development by giving sponsorship opportunity for the staffs for upgrading their career development and training opportunity was significant in updating health worker knowledge and skills to handle to new challenges that arise at the HC III and improves diagnosis of illness. This therefore implies that impact of continuing education and training are unquestionable in improving the QHSD in HCIIIs.

The research results also show that 56.8% of the respondents agree to health centre infrastructure as an incentive for motivation. The descriptive statistics reveals that on average the responses for health centre infrastructure as an incentive are falling in the bracket of agreeing to it as a great motivation to work. The documentation check list and interview revealed that the major rehabilitation and construction of health centre infrastructures including staff houses and wards for example in Kochgoma health and Purongo Health centre III respectively were a incentive to HWs because it creates privacy for the patient to speak out his of his condition accurately for proper diagnosis of illness to confirm the illness of a patient to give the correct treatment for patient, makes it easy to follow up their patients in the ward after being given admission and patients at the HCIII. This therefore means that implies that construction of spacious wards and accommodation for staff can positively impact health service delivery.

The descriptive statistics revealed that the findings of the research results showed that 70.5% of the respondents agree that adequate supplies of drugs and equipments as a motivation to HWs at HCIIIs with average responses falling in the bracket of agreeing to availability of drugs and equipments as a incentive for the HWs in HCIIIs.

The documentation check list revealed the availability of invoices, delivery notes which proved the supply of drugs and equipments at the health centre IIIs. However, the interviews revealed that there are no drugs in the health centre sometimes and patients have to go and buy medicine so that they are given injection. The interviews also revealed that most of the equipments supplied to were old and some broken down without replacement making work difficult for example two of the three HCIIIs reported cases of non functional weighing scales while one report the condition of most of their equipments as old with need for replacement. This unearths the fact that shortage or lack of drugs and equipments in the health centre poses a big gap in health service delivery because patient illnesses are left untreated and illness are treated using symptoms and when drugs are prescribed, they are not available to the patients. This therefore implies that availability of drugs and equipments affect QHSD in HCIIIs in Nwoya district

The descriptive statistics reveal that 68.2% of the respondents agree that recognition of HWs will motivate the workers with the average responses falling in the bracket of agreeing to recognition of health works as an incentive to motivate them to work.

The interviews results agree that recognising and appreciating the work of HWs is a great motivation to them. This therefore implies that recognition of HWs affects that QHSD in the HCIIIs.

The findings in this study showed all the variables of non financial incentives had a positive relationship with quality of service delivery. The relationship of non financial incentives was test using Adjusted R squared was found to be 0.262 which implied 26.2% of the variation in the QHSD explained by nonfinancial incentives. The variation of 26.2% was then tested using F- statistics and showed a significance value of the F less than 0.01, $P = 0.010$ which is the significance level which means that the variation explained by the model is not due to chance hence the model is statistically significant. Lastly the t- test was used to test the strength of each motivation facto and revealed that availability of drugs has the greatest effect to the quality of health of service delivery followed by continued education of HWs, health centre infrastructure, career development while availability of equipments, trainings and recognition respectively have the least effect on the QHSD in HCIII's in Nwoya district.

This finding is similar to that of Mathauer & Imhoff, (2006), who explained that non-financial incentive plays an important role with respect to increasing motivation of health professionals because it upholds and strengthen the professional ethos of HWs entailing acknowledging of their professionalism and addressing professional goals such as recognition, career development and further qualification. This implies that the availability of the non-financial incentives will help to develop a good working environment to enabled HWs deliver quality health services.

Bukuluki, et al (2011) & Nwoya district development plan (2011), unveiled that fact that shortage of equipment, stock outs of medicines and other health supplies remains a bottleneck to effective health service delivery. In this regard, the Office of the Auditor General Report, (2006) too, further revealed (100%) health facilities visited, lacked equipment of one type or another

and concluded on the basis of his finding that all the 27,632 health facilities in the Uganda lacked equipment of one type or another. Most of the health centers lack laboratory equipment, delivery kits, testing kits, Oxygen cylinders BP machines, drip stands, scanners, examination screens, weighing scales, communication equipments, beds and mattresses. The researcher therefore notes that, one cannot talk about ways to motivate workers without mentioning nonfinancial factors because they clearly have a relationship in the QHSD.

Information generated from the interview revealed that training, career development, continuous education, drugs, equipments health centre infrastructures and recognition were strong incentive factors to all the HWs in the HCIIIs and a key motivation. The interviews conducted validated the above view and the majority of the people interviewed agreed that non-financial incentives in the different proportions used in the health centres influenced the QHSD.

Therefore non financial incentives provided in the right proportion will promote the QHSD.

5.2.4 Objective 3: To establish the effects of support supervision on the QHSD in Health centre IIIs in Nwoya District.

Availability of regular support supervision affects the QHSD in Health centre IIIs in Nwoya District. The descriptive statistics shows that 54.5% of the respondents agree that support supervision promotes health worker time management, 50% of the respondents agree that support supervision promotes resource availability of essential equipment and medical supplies, 54.5 % of the HWs agree that support supervision improves health worker client relationship with all the average responses falling in the bracket of agreeing that supervision promotes time management, resource availability of essential equipment and medical supplies and improves

health worker client relationship. The interviews revealed that support supervision helps to promote time management, resource availability, sort out issues that cause poor time management and followed up health worker attendance and client relationship. This implies that support supervision affects the QHSD at the HCIIIs in Nwoya District.

However, the research results also shows that 20.5% of the respondents disagree that supervision promotes salary increment the average responses falling in the bracket of disagreeing that supervision promotes salary increment hence support supervision has a low effect on salary.

The interview results shows that there is no relationship between supervision and salary increment since it was done annually for all HWs throughout the country by the government.

The findings of the study indicated a positive relationship between support supervision and the quality of service delivery. The relation between support supervision and quality of service delivery was tested using Adjusted R squared which revealed a value of $r^2 = 0.831$, thus 83.1% of the variation in the QHSD is explained by supervision. The variation of the model was tested using F statistics which revealed a significance value of the F statistic less than 0.05, $P = 0.000$ which is a Significance level which means that the variation explained by the model is not due to chance hence the model is statistically significant. Lastly the t-statistics was used to test the strengths of the moderating variable and revealed that supervision has a great impact on the QHSD at HCIII's in Nwoya district.

These findings are backed by Marjolein & Tim (2003), who underpinned the fact that support supervision is an incentive for HWs because for them to know that their senior staffs were genuinely committed to their work and career development through support supervision was a motivation. When support supervision is done regularly, HWs are encouraged to observe the standard time in opening, closing the HCIII, in attending to the patients, improving health worker client relationship in terms of respect and politeness towards patients and availability of resources and equipments which improved the QHSD which a similar case as in Nwoya District.

The interview results reveal that support supervision can improve health worker client relationship, resource availability and time management because it enhances solving conflicts and grievance amicably between community member and health. Therefore support supervision affects quality of health service delivery.

5.3-Conclusions on study findings

The conclusions on the study finding can be drawn from the findings in relation to other similar researcher done elsewhere as below;

5.3.1 Objective 1: To establish the effects of financial incentives on the QHSD in Health centre threes in Nwoya District.

The study used two parameters which were salary and allowances in the study to measure the influence of financial incentives on QHSD in HCIIIs in Nwoya District. The study concludes that financial incentives have a low positive statistically significant relationship on the QHSD

and that salary has a greater effect on QHSD than allowances. The study therefore concludes that financial incentives may have a fundamental non-compromising effect on QHSD in HCIIIs in Nwoya district, therefore, a good remuneration package must can ensure a sustainable and remarkable standard of health services maintained in the HCIIIs.

5.3.2 Objective 2: To establish the effects of non-financial incentives on the QHSD in Health centre IIIs in Nwoya District.

The study used seven parameters which were career development, continued education, trainings, health centre infrastructure, drugs, equipments and recognition in the study to measure the influence of financial incentives on QHSD in HCIIIs in Nwoya District. The study concludes that there is a high positive statistically significant relationship between health centre infrastructure and accuracy in diagnosis of illness and a moderately positive statistically significant relationship between continuing education and health worker client relationship.

It also concludes that the availability of drugs has the greatest effect on the QHSD followed by continued education of HWs, health centre infrastructure, career development while availability of equipments, trainings and recognition respectively have the least effect on the QHSD in HCIII's in Nwoya district. Furthermore, the study generally that non-financial incentives act as a baseline in determining QHSD therefore it's critical to examine each variable as different people and cadres have different non-financial incentives as a motivation.

5.3.3 Objective 3: To establish the effects of support supervision on the QHSD in HCIIIs in Nwoya District.

The study concludes that support supervision has a high positive statistically significant relationship between support supervision and QHSD. According to the findings, it can be concluded that support supervision has a great effect on QHSD as most employees are keen about their personal supervision to the extent that when supervision was done regularly, HWs were encouraged to observe the standard time in opening, in attending to the patients and improving health worker client relationship in terms of respect and politeness towards patients. The district supervision team in Nwoya district should therefore continuously offer support supervision to HWs in the HCIIIs because their support to them may be paramount in the efficiency and effectiveness in determining the performance of the HWs at the health facilities.

5.4-Recommendations

The following recommendations are proposed to key stakeholders for implementation to address the problems of low motivation of health workers and poor quality of health service delivery offered at the HCIIIs in Nwoya district.

5.4.1 Objective 1: To establish the effects of financial incentives on the QHSD in Health centre IIIs in Nwoya District.

Looking at the study outcome under the first objective, the government and partners to make a deliberate effort to revise the budget allocations for health worker salaries and allowances and availed them timely and regularly to prevent HWs from taking up other income generating

activities to supplement their salaries like opening of drugs shops, farming which limit the concentration and time spent in the HCIII hence affecting the quality of health service delivery negatively.

5.4.2 Objective 2: To establish the effects of non financial incentives on the QHSD in Health centre threes in Nwoya District.

With regard to the above objective, an urgent effort must be made by the government, Health sub district to ensure that all the non financial incentives that influence the quality of service are availed to ensure the standard of health service delivery provided is as expected to health consumers because all HWs were discouraged to work in the absence of equipments, drugs, descent HCIII infrastructures and training to cope with new challenges at work.

5.4.3 Objective 3: To establish the effects of support supervision on the QHSD in Health centre threes in Nwoya District.

Under the third objectives, the ministry of health, district officials, HCIII administration, and partners must make a deliberate effort to provide fuel vehicles and allowances to ensure continuous support supervision in the HCIII because this is will help the health workers master and apply their newly learnt skills during trainings and continuous education as their supervisors identify gaps, offer guidance and after hold dialogue meetings give feedback concerning their performance and together set measures of innovation to improve the quality of health service delivery in the HCIII.

5.5 Limitations of the Study

Although the researcher considered this study to be technical and comprehensive enough to unveil all the data concerning the motivation of health workers and quality of health service delivery, the scope, time and methodology (tool) pose some limitation as discussed below;

The geographical scope of the study of HCIIIs in Nwoya district found in Northern Uganda was a key limitation to because the political situation and socio economic status displayed may not exactly mirror the ideas of a fully functioning HCIII therefore making the conceptualisation of financial and non financial incentives and support supervision as a moderating variable difficult. However if this study was done at a national level, it would give it a national outlook and acceptance.

The two years period chosen as a basis for analysing the effects of financial and nonfinancial as incentives and support supervision as a moderating factor on the QHSD may not reflect enough of the actual situation in other HCIIIs in the country because the adverse effect of the war for more than 20 year in Northern Uganda left HCIIIs as abandoned with no one to maintain them. In addition to that reopening of the HCIIIs had not taken more than 5years since the return of the community who were settled in the camps.

This being a case study the generalisation of the findings to all the HCIIIs in the whole country would be a limitation because the results of the study were only applicable and mirrored HCIIIs in Nwoya district.

5.6-Contributions of the study

5.6.1 Objective 1: To establish the effects of financial incentives on the QHSD in Health centre threes in Nwoya District

Basing on the first objective of this study to establish the effects of financial incentives on the QHSD in Health centre IIIs in Nwoya District, the study brought out the fact that delay or absence of financial incentives affected time management and health worker client relationships in the HCIIIs. More HWs became rude and took longer hours in attending to patients when not paid salary. It therefore unveiled the unique understanding that there is a positive relationship between financial incentives and quality of service delivery.

The study highlighted that if the financial incentives of HWs are increased then many of them will be motivated to concentrate in providing quality health services to health service consumers other than dividing their attention to a complementary job to supplement their incomes to enable them ably support their families.

5.6.2 Objective 2: To establish the effects of non financial incentives on the QHSD in Health centre threes in Nwoya District

According to the study result of the second objective to establish the effects of non financial incentives on the QHSD in Health centre IIIs in Nwoya District, the study brought out the fact that career development and training is very important in determining the QHSD in HCIIIs because they enable health works to gain new knowledge and skills to deal with challenging issues and new cases of disease at work. It therefore contributed in explaining positive

relationship between financial incentives and quality of service delivery. The study further unearthed the importance of non financial incentives and the extent to which they can affect the QHSD using regression.

The study contributed in exposing the benefits of having good health centre infrastructures in place as it would prevent late reporting on duty by HWs because they will be having a provision for accommodation within the health centre. The presence of wards in the health canter would make it easy for the HWs to follow up of patients when given admission for more care and support. It would also help in accurate diagnosis of illness because patience would be able to freely accurately explain their sickness to the HWs.

5.6.3 Objective 3: To establish the effects of Support Supervision on the QHSD in Health centre IIIs in Nwoya District

Considering the third objective of the study to establish the effects of support supervision on the QHSD in Health centre threes in Nwoya District, the study contributed in highlighting the fact that support supervision can help in improving health worker client relationship and availability of resources because the supervisors are able to iron issues of rude staffs or any accusations against a staff and forward missing resources in the Health centre to the district for more supply during support supervision.

The study helped to clearly point out that there is a relationship between support supervision and quality of service delivery.

The study contributed in bringing out the fact that the time for opening, closing health centres and attending to patient will be reduced if support supervision is carried out in the HCIIs

because the support supervisors are able to look through the attendance books of HWs and also hold dialogues with the community members to health solve any problem of delay in attending to a patient seeking health services.

5.7 Areas Recommended for further Research

Considering the literature reviewed, methodology used, and the findings of the study, the researcher finds it imperative to recommend the following areas of further research;

Further research needs to be done on this same subject using other study designs like longitudinal study design to find out whether the same results will be generated.

More to that, further research on motivation of HWs and quality of health services should be done with a basis of 10 years for analysis after the war to expose the actual situation and progress in the HCIIIs to find out if it has caught up with the rest of the country after the 25years of war in northern Uganda.

Lastly further research needs to be done on this same subject but considering a wider scope of all HCIII's country wide other than one district looked at in this study to give a national out look of the effect of incentives of HWs on QHSD in HCIIIs.

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APPENDIX 1: QUESTIONNAIRE

Dear respondent, I am a student of Uganda Management Institute carrying out a research study on incentives of health workers and quality of service delivery in Nwoya District for partial fulfillment of the requirement for the award of Masters in management Studies. You have been chosen to participate in this study and your positive response will be highly appreciated. Any information obtained in this study will be treated with uttermost confidentiality.

Are you willing to participate in this study?

Yes 2. No

SECTION 1: RESPONDENT CHARACTERISTICS

1.1 Sex

1. Female

2. Male

1.2.Age

Below 24years

35-39 years

25-29 years

40-45 years

30-35 ears

45 and above

1.3.Marital status

Married

Single

Divorced

Separated

Widow/Widower

1.4.Title of respondent

Sr. Clinical Officer

Clinical Officer

Mid wife Nursing

Officer Nursing

Enrolled Nurse

Laboratory technician

Laboratory Assistant

Nursing Assistants

Health Assistant

Health Unit Management Team

Other.....

1.5.What is your highest level of academic qualification

Degree

Diploma

Certificate

Other.....

1.6.How long have you served as a health worker?

.....

1.7 How long have you worked at health facility/health facilities?

.....

SECTION 2: QUALITY OF HEALTH SERVICE DELIVERY

3.2. What time does this health facility open?

a) Between 08:00am to 09:00am

c) Between 12:00am to 01:00pm

b) Between 10:00am to 11:00am

d) Other.....

Please give a comment for your answer above.....

3.6 What is the time for leaving work at the health centre IIIs to leave work

1. Between 12pm to 1:30pm

2. 2pm to 3:30pm

3. 4:00pm to 5:30pm

4. Others.....

Please give a comment for your answer above

3.4.What is the average time you take to attending to a patient?

20minutes to 30minutes

1hour to 1hour 30 minutes

40minutes to 1hour

1hour 40 minutes to 2hours

Others.....

Please give a comment for your answer above

SECTION 2: MOTIVATION INCENTIVES ADEQUATELY PROVIDED TO HEALTH WORKERS

2.1.Using the rank of 1-5 to evaluate your level of motivation at the health center IIIs, 1 indicating Undecided, and 5strongly disagree please indicate your financial and non financial incentives

5. Strongly agree (SA) 4. Agree (A) 3. Strongly Disagree (SD) 2. Disagree (D) 1. Undecided (U)

Incentives						
	Financial Incentives	SA	A	SD	D	U
1.	Salary	5	4	3	2	1
2.	Allowance	5	4	3	2	1
	Non - Financial incentives					
3.	Career development	5	4	3	2	1
4.	Continued Education	5	4	3	2	1
5.	Trainings	5	4	3	2	1
6.	Health centre Infrastructure	5	4	3	2	1
7.	Drugs	5	4	3	2	1
8.	Equipment	5	4	3	2	1
9.	Recognition	5	4	3	2	1

Please give comment on your answer given in 2.1

.....

SECTION 3: FINANCIAL INCENTIVES AND QUALITY OF HEALTH SERVICE DELIVERY

3.1. Using a scale of 1-5 please rank your opinion about the argument that financial incentives have a great impact on your quality of health service delivery in your job.

- | | | | |
|----------------------|--------------------------|---------------|--------------------------|
| 5. Strongly agree | <input type="checkbox"/> | 2. Disagree | <input type="checkbox"/> |
| 4. Agree | <input type="checkbox"/> | 1. Don't know | <input type="checkbox"/> |
| 3. Strongly Disagree | <input type="checkbox"/> | | |

Please give a reason you're your answer in 3.1

3.5. Is there a relationship between financial incentive

a) Time taken to attend to a patient?

YES NO

Please explain your answer

b) Time spent by health workers at the health facility?

YES NO

Please explain your answer

3.6.Using the rating of 1 to 5, would you describe the relationship between health service consumers and health workers at the health facility as excellent or very poor

5. Strongly agree (SA) 4. Agree (A) 3. Strongly Disagree (SD) 2. Disagree (D)

1. Undecided (U)

Relationship	SA	A	SD	D	U
Health consumer -Health worker relationship	5	4	3	2	1
Excellent	5	4	3	2	1
Good	5	4	3	2	1
Poor	5	4	3	2	1
Very poor	5	4	3	2	1

3.9.1. Please give a reason for your answer in 3.8 above

.....

NON-FINANCIAL INCENTIVES AND QUALITY OF HEALTH SERVICE DELIVERY

Do the following non-financial incentives have an effect in determining the quality of health service delivery at your health facility?

Non-financial incentives	SA	A	SD	D	U
Health centre infrastructure and accuracy in diagnosis of illness	5	4	3	2	1
Continuing education health worker client relationship	5	4	3	2	1

Please give a reason for your answer in 4.0 above

.....

SECTION 4: EFFECT OF SUPPORT SUPERVISION ON QUALITY OF HEALTH SERVICE DELIVERY IN HEALTH CENTRE THREES IN NWOYA DISTRICT

4.1. Are health workers supervised in the HCIII?

YES NO

4.2 Who supervises the health workers at the HCIII?

4.3 When was the last time of supervision of the health workers at the HCIII?

4.4 Do you get feedback after supervision from the supervisor to the supervisee?

YES NO

If no. why?

4.4. Support supervision improves the quality health of service delivery at your health facility

Moderating variable		SA	A	SD	D	U
A	Support supervision and Financial Motivational factor	5	4	3	2	1
1	Support supervision promotes salary increment	5	4	3	2	1
B	Support Supervision and Non - Financial motivational factor					
2	Support Supervision promotes health worker time management	5	4	3	2	1
3.	Support Supervision promotes resource availability of essential equipments and medical supplies missing at the HCIII's	5	4	3	2	1
4.	Support Supervision improves health worker – client relationship at the health centre three	5	4	3	2	1

Please give a reason for your answer in 4.4.....

Any other comment by the respondent

INSTRUCTIONS FOR RESEARCH ASSISTANTS

Incentives are categorized as financial and non-financial incentives.

- Financial incentives comprise of salary and allowances
- Non-financial incentives comprise of career development (possibility to specialize in ones field of expertise or get a promotion),
- Continuing education (opportunity to attend classes and seminars),
- Health centre infrastructure (the physical condition of health facility),
- Resource availability (equipment and medical supplies),
- Personal recognition or appreciation from colleagues and managers,

Quality of service delivery will imply

- Time management in terms of time of opening HCIII to start work, Time of closing HCIII to leave work, and time taken to attend to patients at the HCIII
- Health worker client relationship in terms of Health workers respect their clients, Health workers are polite to their clients

Accuracy in diagnosis of illness in terms of Right diagnosis made by health workers of patient illness, Right prescriptions made to patients by health workers

Supervision will consist of ;- moderating effect on quality of service delivery in Nwoya District because senior staff support their lower cadre, guiding them in their work by checking , identifying gaps in the work of the junior workers by the superior and giving them feedback and setting measures to improve health service deliver

APPENDIX 11: INTERVIEW GUIDE

Dear respondent, I am a student of Uganda Management Institute carrying out a research study on incentives of health workers and quality of service delivery in Nwoya District: A case study of health centre IIIs, for partial fulfillment of the requirement for the award of Masters in management Studies. You have been chosen to participate in this study and your positive response will be highly appreciated. Any information obtained in this study will be treated with uttermost confidentiality.

Are you willing to participate in this study?

Yes 2. No

SECTION 1: INCENTIVES PROVIDED TO HEALTH WORKERS

1.1 What are the things that make health workers like their jobs (strong incentives) as health workers at the health center III?

1.2 What Financial incentives are available to health workers at the HCIII?

1.3 What non-financial incentives are available to health workers at the HCIII?

1.4 Do you think there are other incentives that should be provided to health workers to improve the quality of health services at the HCIII?

If yes what incentives.....

2.0 QUALITY OF HEALTH SERVICES AT THE HEALTH CENTRE III AND HEALTH WORKER CLIENT RELATIONSHIP

2.1. Do you agree that the health centre is equipped with excellent time management to provide quality of health service delivery?

Time management in terms of :-

- a) Time of opening the health centre to start work
- b) Time of closing the health centre to end work
- c) Time taken to attend to a patient at the health centre

2.2 How do you describe the relationship between health workers and health consumers?

Health worker –health consumer relationship in terms of:-

- a) Respect of clients by Health workers
- b) Politeness of health worker to their clients

2.3. How do you describe the accuracy in diagnosis of illnesses by the health workers to health consumers?

Accuracy in diagnosis of illness in terms of

- a) Right diagnosis made by health worker of patient illness
- b) Right prescription made to patients by health workers

SECTION 3: FINANCIAL INCENTIVES AND QUALITY OF HEALTH SERVICE DELIVERY

3.0. Is there a relationship between financial incentives of health workers and the quality of service delivery at the HCIII?

3.1 Do you agree that financial incentives have a strong effect on the quality of health service delivery HCIII?

3.2. Do you agree that the financial incentives have a big effect on the following quality of service delivery in HCIII?

- 1) Financial incentives on health worker client relationship
- 2) Financial incentives on time management

SECTION 4:NON-FINANCIAL INCENTIVES AND QUALITY OF HEALTH SERVICICE DELIVERY

4.0.Is there a relationship between non-financial incentives of health workers and the quality of service delivery at the HCIII?

4.1. Do you agree that non-financial incentives have a strong effect on the quality of health service delivery HCIII?

4.2. Do you agree that the following non-financial incentives have a big effect on the following quality of service delivery in HCIIIs?

- 1) Health centre infrastructure and accuracy of diagnosis of illness
- 2) Continuous education on health worker client relationship

SECTION 5: EFFECT OF SUPPORT SUPERVISION ON QUALITY OF HEALTH SERVICE DELIVERY IN HEALTH CENTRE THREES IN NWOYA DISTRICT

5.0.Are health workers supervised at the HCIII?

5.1. Who support supervises health workers at the HCIII?

5.2. Do you agree that support supervision improves the quality of health services in HCIII in your sub county?

5.3. Do you agree that support supervision has a strong effect on the following quality of health service delivery?

- 1) Support supervision promotes salary increment which in term promotes performance
- 2) Support supervision promotes health worker time management
- 3) Support supervision promotes resource availability of essential equipments and medical supplies missing at the HCIII
- 4) Support supervision improves health worker – client relationship at the HCIII

SECTION 6: CHALLENGES FACED BY MANAGEMENT IN PROVIDING MOTIVATION INCENTIVES TO HEALTH WORKERS

6.0 What are the challenges faced by management in providing incentives to health workers in HCIIIs

6.1 How can these challenges faced be addressed to improve the quality of health services at HCIIIs.

Any other comment by the respondent

INSTRUCTIONS FOR RESEARCH ASSISTANTS

Incentives are categorized as financial and non-financial incentives.

- Financial incentives comprise of salary and allowances
- Non-financial incentives comprise of career development (possibility to specialize in ones field of expertise or get a promotion),
- Continuing education (opportunity to attend classes and seminars),
- Health centre infrastructure (the physical condition of health facility),
- Resource availability(equipments and medical supplies),
- Personal recognition or appreciation from colleagues and managers,

Quality of service delivery will imply

- **Time management in terms of** time of opening HCIII to start work ,Time of closing HCIII to leave work, and time taken to attend to patients at the HCIIIs
- **Health worker client relationship in terms of** Health workers respect their clients , Health workers are polite to their clients
- **Accuracy in diagnosis of illness in terms of** Right diagnosis made by health workers of patient illness, Right prescriptions made to patients by health workers

Supervision will consist of ;-has a moderating effect on quality of service delivery in Nwoya District because senior staff support their lower cadre, guiding them in their work by checking , identifying gaps in the work of the junior workers by the superior and giving them feedback and setting measures to improve health service delivery.

APPENDIX 111: DOCUMENTATION CHECK LIST

1. Reports from NGOs concerning the incentives given to health workers
2. Health three financial reports
3. Drug stock in and stock out delivery notes or receipts
4. Essential equipment delivery notes or receipts
5. Records on trainings given to health workers from NGOs
6. Records on infrastructure completion at the health district sub office
7. Supervision of health workers record
8. The Nwoya 2010/2012, 2012/2013 development plan
9. Minutes of the Health management committee meeting

APPENDIX IV: RESEARCH TIME FRAME

	PHASE/ACTIVITY	TIME	DATES	DEPENDANCY
A	DEVELOPMENT OF PROPOSAL	4MONTHS	JANUARY- MARCH	A
B	DEVELOPING AND PILOTING INSTRUMENT	1	APRIL	B
C	DATA COLLECTION	1	JULY	C
D	DATA ANALYSIS AND INTERPRETATION	3	AUGUST- SEPTEMBER	D
E	TYPING EDITING /REPORTING /WRITING/ SUBMISSION	2	NOVEMBER- OCTOBER	E

APPENDIX V: RESEARCH BUDGET

No.	Items	Details of items	Amount in UGX
1.	Stationary for data collection and recording	1. 3 reams papers each 10,000 2. 1 flash disks 3. Writing Materials (Pens & Books)	60,000 80,000 40,000
2.	Hired of Personal	1. 2 Research Assistants each 50,000/= ,4 days 2. 1 Data Manager for 3 days each day 80,000/=	400,000 240,000
3.	Transport	Movement to and from the research field	600,000
4.	Services	Printing each page is 500	200,000
5.	Miscellaneous		100,000
Total			<u>UGX 1,750,000</u>