

**INFLUENCE OF PUBLIC-PRIVATE PARTNERSHIP ON HEALTHCARE
SERVICE DELIVERY IN NAIROBI COUNTY, KENYA**

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DECLARATION AND APPROVAL

Declaration by student

This project is my original work and has not been presented for a degree or any other award in any other University.

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DEDICATION

I dedicate this research project to the Almighty God for giving me the wisdom and strength and my entire family for the mutual support and encouragement.

ACKNOWLEDGEMENT

Most importantly, I want to thank the Almighty God for his goodness and generosity over my life all through the time of the study. I appreciate the guidance and mentorship I received from my supervisor Dr. Kezia Njoroge and Dr. Caroline Kawila Kyalo. I thank my supervisors who offered priceless counsel and scholarly guidance during the whole period of the study. Thanks to my colleagues Fr. John Ondieke, Willy Mhapa and the rest who I may not mention by names for encouraging me to push on and complete the course. My family for trusting me; may God Bless you all.

ABSTRACT

The Kenyan healthcare sector suffers from challenges in service delivery due to poorly remunerated staff, low retention rates, low motivation, shortage of medical supplies and corruption. This led to the sector to be devolved and interest in getting private and public partners to improve quality of service delivery. The study was set out to assess the influence of Public-Private Partnerships (PPP) on health care service delivery in Nairobi County, Kenya. In achieving this objective, it set out to determine the influence of PPP in financial support, PPP managerial support and PPP human resource support on health care service delivery in three major hospitals within Nairobi County – Kenyatta National Hospital, Mbagathi District Hospital and Kibera South Health Centre. The study is informed by principal-agent theory and stakeholder's theory. The study used descriptive research design. The study targeted healthcare providers and facility administrators in the three hospitals and the population was 1288 respondents. Stratified sampling was applied to the target population as per facility and simple random sampling was applied in getting the respondents who participated in the study. A sample of 304 respondents was reached by using the Yamane (1967) and the 7 administrators were selected to be interviewed through the application of purposive sampling. The primary data for the study was obtained using a structured questionnaire and an in-depth interview guide coupled with an observation checklist. Secondary data used to complement primary data. A pre-test was done using 15 healthcare providers and 2 administrators at the Carolina for Kibera Health Facility to test for validity and reliability of the instrument. The quantitative data was analyzed using descriptive, regression and correlation analysis and qualitative data was analyzed to fit the preset study variable theme. The findings were presented in tables, charts and discussions. The findings would benefit policy makers and scholars interested in this data. From the findings, public private partnership financial support ($\beta=1.428$, $p<0.005$), public private partnership managerial support ($\beta=.191$, $p<0.005$) public private partnership human resource support ($\beta=.196$, $p<0.005$) and public private partnership risk-sharing ($\beta=.090$, $p<0.005$) are all significant predictors of healthcare service delivery within Nairobi County. The study concludes that public private partnership is a critical driver of healthcare service delivery. The study recommends that finance managers of the Health care providers in Nairobi City County in Kenya should exercise prudence in spending of the money disbursed by public private partnership in executing projects that significantly contribute towards effective health care service delivery. Public private partners should provide necessary support to the leadership and the top management team working in the health care providers in Nairobi to ensure effective health service delivery is attained. Public private partners should collaborate and work closely with the human resource managers of the health care service providers in Nairobi City County to provide state of the art training to employees so that they are up-to-date with the changing dynamics. The risk managers working in the health care providers in Nairobi should collaborate and work together with the public private partners to ensure effective risk management practices are embraced in the projects that are implemented.

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ABBREVIATIONS AND ACRONYMS

COVID-19:	Corona Virus Disease 2019
EP:	Equipment Partnership
GE:	General Electric
HCPs:	Health Care Providers
KESSP:	Kenya Education Sector Support Program
KNH:	Kenyatta National Hospital
KSHC:	Kibera South Health Centre
MDGs:	Millennium Development Goals
MDH:	Mbagathi District Hospital
MeTA:	Medical Transparency Alliance
NACOSTI:	National Commission for Science Technology and Innovation
NGO:	Non -Governmental Organizations
PFI:	Private Financial Initiatives
PIU:	Project Implementation Unit
PPP:	Public Private Partnership

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Public Private Partnership (PPP) is an important innovative approach that defines long-term contractual relationships that exists between the public and private actors in providing infrastructure and services to the public (Berezin et al., 2018). PPP is seen as the long-term contract partnership agreement made between the public and private sector agencies in financing, designing, operation and implementation of infrastructure facilities and state projects. It stems from the funding and operations and the partnership agreements between the government and the private sector (Khan & Puthussery, 2019). PPP is undertaken to spur economic growth through sharing project risks, funding large infrastructure projects and supporting the management and governance of different industries and sectors. PPP is also about proper governance through control measures, monitoring and evaluation and proper governance through administration and management aspects. It works to attain set goals (Kravchenko, 2019).

When it comes to healthcare sector, Ganapathy and Reddy (2021) noted that the sector demands expensive infrastructure and consumption of modern technologies and advancement in medical field. To deliver quality services to the patients, the sector and stakeholders incur huge costs and thus call for participation by other partners. Furthermore, Nuhu et al. (2020) noted that health sector operations are linked to four pillars, namely information, management, human resources, and financing. The delivery of quality services in the health sector, huge expenses incurred and increased populations demanding services, calls on large capital input. Getting large amounts of

capital might be too much for the government or the private sector to undertake and hence need for both sides to partner. Hellowell (2019) avers that in the healthcare sector, Public-Private Partnership (PPP) presents greater opportunities for health facilities in accessing sources of capital, expertise and technology.

Looking back in history, Khan and Puthussery (2019) noted that since the 1980s, policy-makers and researchers worldwide have always argued that management, human resource and financial support of health care can be improved through reforms and partnerships to provide better health care. This can greatly improve clients / patients' satisfaction as far as health service delivery is concerned. Although healthcare privatization is not common in many countries, increasing attention has shifted to a use of contracting services within the healthcare sector. For instance, in Europe one of the initiatives that have become very common is Public-Private Partnership (PPP), Nuhu et al. (2020) shared was the mechanism for supporting the financing, managing, provision of expertise staffing and human resources in building health facilities and running their operations.

On the global scene, Public private partnerships started in France in the late 1970s in projects done to upgrade highways and in the 1990s in United Kingdom when it was privatized the transport system. The notion spread to other western nations like Australia and Canada and later spread to developing nations in Asia and Africa with the aim of improving infrastructure development in ICT, transport and energy (Debela, 2019). PPP covers deficits in costs, expertise knowledge, expert staffers and risk in some ventures. The PPP mechanism increases equitable growth and development levels in any economy through enhanced governance and leadership in infrastructural projects (Kravchenko, 2019). PPP practices include sourcing for financial resources, acquiring

experts in specific fields, managing the implementation process and undertaking risk management. This study will consider PPP under support for financials, human resources, managerial and risk sharing aspects in improving service delivery.

Fuya et al. (2021) examined the manner in which management of PPP projects affected project performance in China. The study focused on management activities that included monitoring, evaluation and results application. The results indicated that performance was excellent necessitated by evaluation processes related to preliminary preparation. This study noted that through PPP, the government was able to provide essential services to the citizenry which would otherwise be difficult to provide.

In Nigeria, Liman et al. (2021) that the government had embraced and endorsed adoption of PPP in the healthcare sector; in an effort to deliver specialized medical services like dialysis in renal centres. The the main reason why government use PPP in some sectors, for example, health care is to support infrastructure projects and to take advantage of private sector's capability in delivering innovative projects while strengthening efficiency and at the same aim to achieve cost saving. Adeoye and Islam (2019) revealed that acceptance of PPP is largely due to spreading the risks associated with large capital projects. Hellowell (2019) noted that advancement in technologies in the Lesotho healthcare system is linked to association with foreign private entities. The healthcare professionals in the country are able to work with experts in different medical fields and that has improved service delivery.

Assessing the situation in Ghana and Kenya, Suchman et al. (2018) noted that collaborations have been made by both sectors for the sake of improving health outputs. But the health finance policy has been slow in adapting to the consumer behaviors and this can be attributed to organizations structure and systems that had become

insufficiently adaptive and responsive to market choice. Furthermore, policymakers have debated the benefits and problems of PPP within the healthcare sector widely and an important argument put forward against implementation of PPP within the healthcare sector is that, it can result to low staff levels. In particular, PPP positively influence labor-intensive services including healthcare because reduction in the member of staff and the high workload can result in poor quality services being extended to patients within unsafe environment (Okwaro et al., 2017).

In advancing on diverse theoretical approaches in privatization of the public service, people can expect employment to be affected in many ways: maximizing profits incentives and the cost- reduction problems that are facing PPP in the healthcare sector can mean they can hire smaller number of staff may make them work for long hours. As observed by Suchman et al. (2018) implementation of PPP can erode the notion that state as an important employer can modify employment terms and conditions – job security. It can also work to improve the speed at which growth and developmental agendas are implemented and quality of services delivered to the general population (Mokua & Kimutai, 2019).

World Health Organization (WHO, 2000) suggests that countries whose healthcare systems are efficient, accessible and cost effective exhibit a variety of public and private sector participation. The World Health Organization (WHO) report argues that failure to utilize available private sector capability can prevent the ability of healthcare to adapt to the global dual challenges of reduced public financing and the growth in demand for services. Further report by African Infrastructure Country Diagnostic estimates that addressing country's low infrastructure requires sustained expenditure of United States

dollars 4 billion per year in the next decade. Thus, there is need to assess the link between PPP and service delivery in Kenyan healthcare system.

On financial support, PPP mechanism works by drawing investors both from the government and private sector who contribute to the large costs needed for mega-projects (Chu & Muneeza, 2019). The government works to pass regulations and policies on funding of projects and transference of funds in the cases of international/foreign partners. PPP also works to foster strong collaborative ties that come in handy when sourcing for additional funding when there are cost overruns in projects. The concept of PPP also takes the form of managerial support, that involve seeking partners with expertise knowledge and skills and experiences in handling similar ventures (Berezin et al., 2018). The partnerships guide the management of the PPP projects and monitor, evaluate and control the implementation process leading to its success. Keers and van Fenema (2018) shared that PPP projects are likely to fail to deliver on its mandates where there is lack of managers who are experienced, knowledgeable and get sound information whereupon they make their decisions. Managerial support also works to avert crises and risks that may deter the progress of the PPP programs and projects.

PPP is also about human resource support, and works in sharing of knowledge and skills between different partners. Joachim (2020) noted that both the private and the public sector can work in a collaborative manner to attract and keep highly trained and experience staffs, who will deliver the project goals. The partnership increases the pool from which human resources can be sourced to improve service delivery of the program and success of projects. PPP concept also works in risk sharing that covers taking risk management measures, avoiding risky ventures through assessing investment versus

outcome and making informed decisions. Tallaki and Bracci (2021) revealed that when costs are huge and it is shared between several parties, in instances of losses, no single party suffers a lot. It is also easier to manage and control costs and project expenses through acquisition of costly tools, equipment and machinery that deliver quality outputs. Risk sharing equally involves having staffers that handle monitoring and control of project resources for its efficient utilization and installing control systems and authorization processes (Li & Wang, 2018).

In helping understand service delivery, different scholars have advanced various definitions. However, Berezin et al., (2018) defines it as an offering which meets the diverse needs of a user of a given service. Such service needs to be readily available and presented on time in a place where users need it. The service needs to be consistent such that the receivers can depend on it without being disappointed. It needs to be delivered on time as per user specifications (Lince-Deroche et al., 2020). The service also needs to be usable meaning that the format needs to be appropriate to promote client understanding. It needs to respond to the needs of clients more appropriately such as to inform credible decision making. It needs to be authentic and responsive. It also needs to be flexible such as to accommodate changes in user needs and be able to be sustained over time. In short, it needs to be affordable to the customers (Yang et al., 2020).

Healthcare service delivery is a measure of quality services offered to the patients at the health facilities. It is equally having functional and modern facilities that are well-equipped to handle preventive and curative care for all persons seeking health services (Njoroge, 2019). Some of the commonly applied measures include cost for each patient, level of patient satisfaction, solutions to health challenges faced by patients and overall

revenue growth for the healthcare facility. Service delivery will also be measured by the variety of services offered in the participation health facilities and timeliness in delivery of the services. Patients should not have to wait for long before receiving health services as this has negative impacts on the health status and quality of life. This study will measure healthcare service delivery using elements such as timely completion of projects, variety of offered services, and satisfaction with the offered services and reduced service delivery timelines.

The poor performance experienced in healthcare service delivery has prompted the Government of Kenya (GOK) to look for alternatives to raise extra money, adopt low-cost technologies while at the same time prioritize infrastructural investment and therefore it becomes very important to maintain good contractual agreement in PPP. In Kenya the government in 2015 choose General Electric (GE) healthcare to be one of its key partners to provide a seven-year Managed Equipment Partnership (MEP), which according to World Bank (2017), costed 4.6 million. According to a report by World Bank this allows Kenyans in 98 public hospitals in the 47 counties access Teleradiology services. The MES in a form of PPP allow patients to adopt a pay for service expenditure plan and the benefits of this approach are equipment finding, maintenance and others including trainings. Further reports show that Kenya was awarded a credit of US Dollars 40 million from World Bank to create bankable pipeline of the public-private partnership projects. According to World Bank (2018) reports there are active PPP projects with a total investment of US Dollar of 2476 million.

Nairobi City County is one of the counties that have enjoyed public-private partnerships in developing the county. The county according to (Kiboi et al., 2018) has been able to improve healthcare services by getting implementing partners from locals and

international societies and funding and financing from foreign investors and the local private investors. PPP has improved healthcare systems and advanced medical equipment to ease health service delivery. Use of experts has also helped in streamlining health services, but still there are complaints on quality of the services (Chepkonga & Nyaga, 2019).

The PPP has been proposed as a way of delivering the big4 presidential agenda. On healthcare, the study will purposively cover Kenyatta National Hospital (KNH) which is the largest referral facility in the country and has proposed expansion of its facility by developing a highly specialized three hundred bed facility to bridge the infrastructure gap in provision of world-class quality health care. Kenyatta National Hospital Board (KNHB) envisions to achieve that through Public Private Partnership (PPP) arrangement and to attract private funding. The private partners include banks like Eco-bank, KCB, churches like Nairobi Pentecostal Church, New life SDA, Holy Trinity Catholic Church, Anglican Church; learning institutions like University of Nairobi, Kenyatta University, Riara springs and university and Nairobi Muslim Academy, groups and individuals. These partners are tasked with financing the designing, constructing, and equipping the KNH Private Hospital.

In seeking to achieve the universal health coverage (UHC), Mbagathi District Hospital (MDH) has partnered with Kenya Deposit Insurance Corporation (KDIC) that has funded projects in the facility. The funding was for assorted medical equipment, six ICU beds, 66 ordinary beds and construction of two large waiting bays. MDH has also partnered with USAID in offering youth group support for behavior changes, offering gene expert testing and the A+ mtaani project. The Kibera South Health Centre (KSHC) is located in Nairobi's Kibera slums, the largest in Africa. The KSHC was initiated

through the efforts of MSF-BELGIUM and later handed over to the Nairobi City County. The health centre has also collaborated with Save the Children NGO to offer Kangaroo mother care to the facility administration. This was done by training and educating the nurses and clinicians on handling of pre-term babies. It has also worked with KELIN in the stop TB campaign through training community health champions.

The three facilities were purposively selected due to the many different partners they have engaged in over the years and what their role has been in attaining quality health service delivery. This study will concentrate on public-private partnerships in these three beneficiary facilities –Kenyatta National Hospital (KNH), Mbagathi District Hospital (MDH) and Kibera South Health Centre (KSHC) and how PPP can improve healthcare service delivery.

1.2 Statement of the Problem

Effective healthcare sectors demands access to sufficient resources and modern equipment. But the Kenyan health sector suffers from insufficient resources leading to poorly remunerated workforce, drug shortage, poorly maintained equipment and low staff numbers (Chepkonga & Nyaga, 2019). In addition we have corruption and embezzlement of funds and underfunding of the health facilities. Njoroge (2019), noted that to resolve these challenges, the health sector was devolved to the counties. There has been a focus on public-private partnerships as a source of funding and infrastructure development in healthcare sector. PPP enables knowledge transfer, sharing of risks accompanying large projects and gaining managerial support. Several studies have considered healthcare service delivery in the different counties but little has been done in linking service delivery to aspects of PPP.

There have been several studies done on public-private partnership and healthcare service delivery such as Ferreira and Marques (2021) revealing that PPP helped to ease the financial strain in capital intensive infrastructure projects. But the study was done in Portugal creating contextual gaps. Torchia and Calabrò (2018) revealed that PPP can create tensions between the different parties unless proper standards, policies and regulations are in place. The study did not link PPP to service delivery highlighting conceptual gaps. Damoah and Asamoah (2021) found that PPP improved financing in the transport sector leading to better client satisfaction but it was a case study of intercity STC coaches in Ghana and this created methodological gaps.

Hellowell (2019) shared that Sub-Saharan African nations are using PPPs to finance healthcare operations and attain high clinical care services. The study was done in Lesotho leading to gaps in context. Top PPP partners in healthcare included USAID, WHO, Kenya Red Cross Society, The Global Fund and World Vision. These partners financed health programs, enhanced accountability, governance and environmental concerns. The study focus was not on healthcare service delivery. Problems in Kenyan healthcare sector based on insufficiency of resources, staffing, high cost of services and unsatisfied patients call for new solutions. The knowledge gaps were filled by assessing the influence of public- private partnership on the healthcare service delivery in Nairobi County's three health facilities which include; Kenyatta National hospital, Kibera South Health Centre and Mbagathi District Hospital.

1.3 Objectives of the Study

1.3.1 General Objective

The purpose of the study was to assess the influence of Public-Private Partnerships on health care service delivery in Nairobi County Kenya.

1.3.2 Specific Objectives

This study was guided by the following objectives:

- i. To determine the influence of PPP financial support on healthcare service delivery within Nairobi County.
- ii. To ascertain the influence of PPP managerial support on healthcare service delivery within Nairobi County
- iii. To establish the influence of PPP human resource support on healthcare service delivery within Nairobi County
- iv. To assess the influence of PPP risk-sharing on healthcare service delivery within Nairobi County

1.4 Research Questions

The study sought to answer the following research questions:

- i. What is the influence of PPP financial support on healthcare service delivery within Nairobi County?
- ii. What is the influence of PPP managerial support on healthcare service delivery within Nairobi County?
- iii. What is the influence of PPP human resource support on healthcare service delivery within Nairobi County?
- iv. What is the influence of PPP risk-sharing on healthcare service delivery within Nairobi County?

15. Justification of the Study

The findings would extend the volume of prevailing knowledge on the contribution of the PPP in healthcare provision coupled with client satisfaction based on high quality

health services. The study would enrich the understanding of both public and private sector reforms in healthcare delivery in urban setting by linking the relationship between the service providers in both sectors and establishing the relationship between clients receiving services from a private or public facility or both through making a comparison. The findings would also inform the policy makers to implement the recommendations that will be put forward.

1.6 Limitation of the Study

The study intended to answer questions on healthcare service delivery through the influence of PPP and in the course of data collection the researcher may face some challenges. The respondents were unwilling to participate in the study and share information on the subject. To curb this issue, the researcher explained that the information was to be used for academic purposes only and confidentiality was maintained. The respondents also demanded to be given more time to fill the questionnaire such that their work day was not interfered with. The delays posed challenges in research timelines and affected the conclusion of the research exercise, analysis and report writing. In response, the researcher allocated sufficient time for data collection. In other cases, there was a problem with collecting data from some targeted respondents who were unreachable due to COVID-19 movement restrictions. The researcher used soft copies in collecting data using Google forms and email respondents who were unreachable due to covid-19 or prefer filling questionnaires on soft copy.

1.7 Delimitation of the Study

The study focused on assessing the influence of Public-Private Partnerships on health care service delivery in Nairobi County Kenya. The study concentrated on PPP elements including financial support, managerial support, human resource support and

risk sharing and its influence on healthcare service delivery. The targeted healthcare facilities included Kenyatta National Hospital, Mbagathi District Hospital and Kibera South Health Centre. The study's respondents included health care providers and healthcare facility administrators and the research focused on PPP projects in the last five years (2016 -2020) undertaken in these facilities.

1.8 Significance of the Study

The study would boost the available additional information on the way PPP influences service delivery among healthcare facilities in Kenya. It would expand how PPPs can be used to transform healthcare sector for better service delivery. Unlike private or public investments separately, PPP present an opportunity where experts in a given field bring in their expertise to ensure smooth project implementation at a cost-effective budget. This would also bring to the fore the existing disparities in performance as well as providing some guide in the reallocation of resources in the bid to close the inequity gap in service provision. The study would also provide information that would inform future decision-making processes in allocation of resources among government sponsored health facilities.

1.9 Assumption of the Study

The information sought in the study is technical and requires first-hand experience in the project financed by both the government and a private entity. It was assumed that the targeted respondents took part in the projects and remembers very well the effects that the said projects had on service delivery. It was assumed that the respondents were knowledgeable on matters being sought by the study because of their involvement in in them. The respondents were also presumed to be ready and willing to provide requested data freely without being coerced.

1.10 Operational definition of terms as used in the study

Private Public Partnership: A project funded and operated in collaboration between the government and a private establishment.

Service delivery: Refers to the acts of providing healthcare services to patients within the facilities financed in partnership between the government and a private entity

PPP Financial Support: Refers assistance offered in a PPP project to ensure that activities run as scheduled. It relates to provision of finances and how they are utilized in the project execution.

PPP Human Resource Support: It refers to the support accorded to the government in the form of human capital to boost implementation of a project where the private sector entity has partnered with the Government.

PPP Managerial Support: Refers to assistance extended to a given project financed through PPP in terms of managerial experts who help in management functions to ensure efficient utilization of resources and timely execution of tasks

PPP Risk Sharing: refers to assumption and allocation associated with costs and uncertainties along the PPP issues and aimed at high delivery of outcomes

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

It presents literature that has been documented by other scholars in the same and related fields of study. The literature is reviewed in an order as predetermined by the study objective and the specific objectives in particular. The empirical review is divided into sections covering the dependent variable of health service delivery and the independent aspects of public-private partnership aspects. It also has a section theoretical review, the conceptual and operational framework of the study variables.

2.2 Health Service Delivery

Service delivery is a portion under the healthcare system and involves patients receiving treatment and care as per their health issue. The delivery of the health services is determined by availability of supplies and resources. The services include primary care, in-patient and out-patient service, home-based care and rehabilitation. It can also include preventive care and curative care provided by physicians of different technical skills and health facility (Debela, 2019). The service delivery is also about the immediate output of the health system as influenced by the inputs in terms of healthcare staff, supplies and sources adopted in financing.

The health system's main function is making available health services to the people and the services meet the minimum quality standards. It is also measured in terms of time taken to deliver health services, the various services offered, cost implication for the services and quality of technical skills of the physicians and the facility. According to Chukwuma et al. (2019) health service delivery is based on three models; the medical model that looks to the illnesses, symptoms and treatment; the second is the public

health model which focus on how the ailments affect the population and hence need for education, public awareness on care and prevention and nutritional aspects and lastly the human service model that covers the patient and environmental aspects.

In Uganda, Kamulegeya et al. (2020) study was on the efforts made by hospitals in Uganda to overcome the challenges posted by covid-19 pandemic era. The concentration was on adoption of technology where prescriptions were sent and administered digitally. The outbreak of the pandemic led to movement restrictions which impacted access to medical services. The situation led to prominence and rise of digital health technologies to deliver healthcare services such as tele-consultations, tele-psychiatry, healthcare information dissemination, mobile testing and laboratory services. The people of Uganda could still access healthcare services both preventive and curative despite movement restrictions. In some cases, using digital systems patients were able to schedule for consultation and treatment and visited the hospitals at the designated time.

Ogwel et al. (2022) research article was on improving services offered to patients by hospitals within Kisumu County. The study concentrated on the contributions of cloud computing as technology advanced and got adopted in healthcare. The researchers noted that healthcare delivery systems are far behind in provision of services that are cost effective and meet the established standards of quality. Thus, the need to check if cloud computing can help improve service delivery. The findings showed that health facilities that adopted cloud computing gained health benefits with aspects like access to 24-hour platform, security of facility systems, ease of information access and collaboration with other health service providers, lowered maintenance and labour costs and patients can access wider health services. The study concluded that use of cloud

computing led to improved health service delivery and benefits were enjoyed by the facilities, patients and the public.

Hussain et al. (2019) study was on measuring patient satisfaction among public health facilities in Pakistan. The patient satisfaction is directly connected to usage of health services and satisfaction was influenced by doctor and nurse's services, the waiting time before the patient was attended to and availability of high-tech facilities and equipment. The findings showed that the services by the doctors and nurses, the wait time, high-tech equipment and well-equipped facilities improved patient satisfaction in public hospitals in Pakistani.

Feng, Martinez-Alvarez et al. (2017) shared that China has extended access to essential services in the rural areas through using the three-tier health service delivery system. Linking the health facility networks in the county, township and village levels such that all population can easily access services. The system was aimed at responding to acute health challenges like insufficient basic care, funding, healthcare workers and connectivity. The results show that political commitment and the three-tier model led to improve access to healthcare services, human resource development, innovative financing mechanisms and public-private partnership models that have led to the country having a successful health service system.

2.3 Financial Support and Healthcare Service Delivery

Miller *et al.* (2021) examined the aspects of public finance and service delivery. The study focus was on what is new, what is missing and what is next in public financing. The study stems from growing interest in understanding the reforms within public finance and public financial management in support of delivery of basic services.

Through reviewing ODI papers, the study noted that public entities especially the health sector must look beyond budget allocation at government level and expand their funding sources. There is also need to consider the budget cycles, the political factors and donor policies and regulations as the health docket seeks financing for its usage. It was also found the need to look at political and legal systems that determine allocation and spending on basic services. The next phase is to broadly look at public finance from institutions with good practices and compare with experiences by other sectors. The goal of attaining universal access to basic healthcare services can only be achieved through capacity of governments to raise, mobilize, allocate and utilize public funds effectively.

Goryakin et al. (2020) study was on public financial management and effects on health service delivery. The focus was health financing policy in low and middle income-earning countries and data was sourced from reviewing existing academic literature. The researchers accessed information from 53 articles on quality of health systems, impact of public financial management quality, good governance through strengthening the health system. The results shared show a need for budget transparency, participatory budgeting, decentralization and donor-funding policies that work to improve effectiveness of health service delivery. Adoption of high quality public financial management systems has positively impacted the service delivery and performance aspects. Other than mobilizing funds, there is need for prudent use and good governance for quality healthcare delivery in public hospitals.

Banigbe et al. (2019) study was on effect of PEPFAR funding for HIV service delivery in Nigeria. US President's Emergency Plan for AIDS Relief (PEPFAR) has adopted different policies with a focus on country ownership and use of locally available raw

materials to cover for the substantial funding cuts. The study surveyed 30 comprehensive HIV treatment clinics for a two-year period 2013-2015 and considered the PEPFAR funding policy change, its impact on service delivery and response of the clinics to the stated changes. The study compared staffing, laboratory services and clinical operations before and after adoption of the policy changes. It was discovered that in the face of funding cuts and policy changes in donor funding; there was a significant reduction in staff employment, viral load testing, tracking for defaulters and prevention services. There was interruption of laboratory services as lab staffers received reduced wages that de-motivated them and compromised quality of care and service delivered. There was also an increase in user fees to address funding shortages and conclusions were such that funding cutbacks is linked to poor healthcare.

Atim et al. (2021) research study was on how economies financed their universal healthcare. The focus was on five middle income countries that have shown incomplete progress towards attainment of UHC and reforms needed for health financing. Close attention was paid on UHC flagship programs and health financing where several stakeholders came together to help the government in improving healthcare delivery. The results indicated that in Indonesia reforms made under the Jaminan Kesehatan Nasional (JKN) has improved health services coverage and health financing indicators. In Ghana, there has been reduction in funding levels for health and less than 50% attainment in UHC service coverage index. In India, results indicate public health financing level low despite the Ayushman Bharat (PM-JAY) reforms that pushed for innovative purchasing and mix of public-private partnerships. There is also a lot of out-of-pocket spending when locals are accessing health services. Results showed that Kenya and South Africa still face challenges in public healthcare financing, strategic purchasing and coverage of health services especially to rural and informal

communities. The governments and private entities can look to debt and equity financing options as a source of capital for the health programs.

2.4 Managerial Support and Healthcare Service Delivery

King'oo (2017) investigation was on top management support and quality service delivering within the Nairobi City County Government -NCCG. Modern organizations see the value of providing quality services to its customers and in public sector they have the responsibility of providing quality services. Attainment of quality service delivery in the public sector has had challenges linked to poor leadership, corrupt managers, organizational structure and lack of a clear strategic plan. The focus was on top management support with elements of managerial support, organizational structure, strategic change management practices, and provision of facilities and resources. The results showed that management support at the county government in Nairobi is through managerial support, structure, change management practices, availing resources and facilities had improved service delivery. They also offer specialized advice, monitor implementation stages to deliver quality and timely services. In conclusion, hierarchical structure made it easier to make quality decisions, manage the organization in an efficient manner hence ensuring smooth flow of operations for better organization performance.

Kaziba et al. (2017) study was on supervisory leadership and healthcare service delivery within Ugandan public hospitals. The focus was on personnel management elements and supervisory leadership in health service delivery under child and maternal, STI/HIV/AIDS and tuberculosis services and outpatient curative services. The study revealed that the relationship between supervisory leadership was significant to child healthcare services, maternal healthcare services, STI/HIV/AIDS services, tuberculosis

services and outpatient curative services. Findings also showed that supervisory leadership aspects include participatory decision making, period evaluation of staff performances, enhance professionalism through staff trainings, increase skill transfer and create conducive work environments. Effective healthcare service delivery cannot be achieved if there is neglect of supervisory leadership role and government should motivate staffs and enhance management in the health facilities.

Marutha (2019) assessed the management skills and competency development in the area of medical and health records to support healthcare service delivery. Successful performance of any organizational activity and business function demands skills and competency amongst its staffs. When it comes to medical and health records, there is need for prudent management for service delivery, since mismanagement in the area can result in inaccessible records, altering of records, falsification of records, damaged or stolen and affects delivery of services. The mishandling can make healthcare workers unable to render their services and hence the study looked at mapping out standard requirements, use of digital systems and training of managers and medical and health record staffs. Training programs organized for staff in charge of records management helped improve their ability to perform their tasks efficiently with less wastages. It resulted in greater customer satisfaction. It was therefore proposed that a framework be developed for management skills training to improve the competency of staff for better healthcare service delivery.

Nyasetia (2020) study was on the influence of elements of PPP on healthcare service delivery. The study noted that health services in Kiambu County had challenges in human resources, management, financial and technical aspects due to the increased goods, staffing, and budget. This led to government support in terms of financial and

human resources through PPP and the study was done to assess community benefits and service delivery levels. The study specifically assessed technical, PPP's financial, managerial support and service delivery and collected data from beneficiaries and community members of Githurai 45. The data was collected from primary sources and secondary sources through review of past literature. The results showed that PPP managerial support, PPP human support, PPP procurement support and PPP financial support led to improved healthcare service delivery. Further results showed that PPP aspects were positively correlated to service delivery. The study concluded that the variables examined influenced healthcare delivery. Recommendations were for availing sufficient funds and financing options, provision of technical and skilled staff, develop modalities for public-private partnerships working together and managers that ensure smooth operations.

2.5 Human Resource Support and Healthcare Service Delivery

Joachim (2020) study was on relationship of human resource management and culture of quality in Brazilian hospitals. The focus was on Public-Private Partnerships (PPPs) for dealing with public administration by private sector management and delivery of emergency health services. This is based on reported inadequacies in quality and safety in health services and management difficulties and to inform human resource management in hospitals. The researcher collected in a span of two years from 2018-2020 and did interviews to 107 participants from Salvador, Bahia, Brazil. The study sought to understand coalitions and support for human resources in health sector by involving secretary of health, community members and municipalities. The human resource support works to implement and monitor the PPP activities and create opportunities for partnerships for service delivery. The construction of human resource

management considers hiring and evaluation, professional development, empowerment and sense of meaning. High quality service delivery will need identification and adoption of HRM processes. The HR support is also linked to formulating a culture of quality and quality improvement for high service delivery.

Kisumbe and Mashala (2020) assessed the influence of human resources practices and job satisfaction for delivery of health services in decentralized units in Tanzania. The human resource practices together with performance appraisal and how they affect satisfaction with job and service delivery in decentralized units. The researchers looked at Shinyanga region that had experienced poor performance in healthcare service delivery. The region did not attain 50% of its millennium development goals and was ranked last in aspects such as results-based financing. The study results indicated that HR practices had some chances of enhancing job satisfaction. Human resource planning and supervision had significant chances on job satisfaction and led to improved healthcare service delivery. Further results showed that the HRM practices were constrained due to limited and ineffective participation by the employees and lack of supportive supervision from managers in the health facilities. Enhancing employee participation in HRM practices improved job satisfaction and healthcare service delivery in the facilities.

Wairiuko et al. (2018) study was on human resource capacity in implementation of e-government within Kajiado County. Technology growth and demand by populations has made governments to shift to use of e-government initiatives for effective operations and service delivery. E-government leads to improvement in accountability, transparency and deliver services in a timely and costly manner. Influence of human resource capacity covered the technical skills, project management skills, and

communication and presentation skills, availability of supportive and technical staff. The study findings showed that the human resource capacity and its skills led to adoption of e-government and its adoption at the county government improved its service delivery quality and effectiveness. The county should also use financial and non-financial to reward and motivate employees and offer competitive salaries.

Al-Hanawi et al. (2019) study was on healthcare human resource development in Saudi Arabia and its focus was on the challenges and opportunities. Saudi Arabia has a huge demand for better health facilities due to growing population and the elderly and thus need for trained healthcare professionals. The county has heavily relied on foreign employees hence the need to look at healthcare human resource development initiatives for provision of healthcare professionals with appropriate learning and competence. Secondary data was collected from reviewing past literature on steps taken to attain Vision 2030, strategic plan and national transformation program for healthcare HR development in Saudi Arabia. Findings indicate that healthcare human resource development capacity is for meeting needs for healthcare HRD and absorption of young trained Saudis in the healthcare facilities. Attaining of Vision 2030 in securing job opportunities for youths can be attained by training them and absorbing them in the healthcare sector.

2.6 Risk Sharing and Healthcare Service Delivery

Alonazi (2017) study was on exploring the shared risks in public health programs through public-private partnerships. The study looks at attainment of Vision 2030 by the Saudi government through health partners and sustaining the relationship for realizing health benefits. The partnership works to reduce health risk factors, sustain public health programs and maintain social well-being. The focus was on Saudi

National Transformation Program (NTP) and assessed the healthcare system, policies, regulations and reports in improving outcomes from public health programs. The study noted that PPP sustenance was linked to patient-centeredness, technology capacity, trust worthiness, competence and flexibility among the partners.

Nguyen and Garvin (2019) assessed the aspect of contractual risk sharing mechanisms in the US highway PPP projects. The study was due to the basis that large infrastructure projects often face the challenge of cost overruns and divisions of the stakeholders. Therefore, the governments rather than develop, finance, and manage infrastructure projects, they procure long-term infrastructure projects to the private sector. In PPP the multilateral transactions, interests, economic and political contexts create uncertainty and it is at the root cause of the contractual issues. The different in views on incentive allocation, high transaction costs and opportunism affect the relationship among the PPP partners. Therefore, the need to manage the uncertainty and contractual issues leads to development and adoption of risk sharing methods. Some of the risk sharing mechanisms include transfer of risks, taking insurance policies, cutting operational costs, working with many partners to distribute losses, aligning interests and expectations and risk allocation. The risk sharing mechanisms in the 21 US highway PPP contracts were done ex post resolution to allow implicit flexibility and address uncertainty.

Danielle (2020) examined the allocation of risks in ICT projects under public-private partnerships. The PPP model is based on three principles; allocation and transfer of risks, affordability and value for money. In the past PPP was mostly applied in hard service development like infrastructure projects, but the fourth industrial revolution has created room for advancement in technology. Advancement in technology through

service delivery innovation and ICT has created opportunities as well as risks under the PPP mechanisms. Thus, it is important to discuss risk allocation in soft service delivery such as ICT PPPs and data was collected by desktop analysis. The study identified various risks including high levels of uncertainty in funding, stakeholder commitment and complexity of the relationships. The risks also included vendor financing, market risk, intellectual property (IP) risk, data governance, and regulatory risk, but managing the risks offers a chance for expansion of PPP interactions.

Shrestha et al. (2018) study was on inefficiencies of risk allocation for PPP water projects in China. Risk management is a concern in PPP projects and there are still issues with effective risk allocation. Previous studies document inefficiency in risk allocation and PPP risk misallocation. The researchers considered 32 PPP water projects in China and assessed how to maximize risk mitigation efficiently and manage risks. The findings indicate that risk allocation practices are not ideal and they are main cause of project failures. The study recommends that project managers and stakeholders should modify and use current risk allocation practices for better risk management and success of PPP projects.

Wang et al. (2020) study was on risk factors and sustainable delivery in infrastructure PPP projects. Risky situations are created in PPP projects linked to large capital flow and lengthy period for the projects that affect sustainable project delivery. PPP projects have placed a lot of focus in risk management for success of the projects. Some of the risk factors include risk relationship network, individual attributes and cohesion in the sub-groups. The risk factors were in two categories, first the powerful and independently influential risk factors like government approvals, government credit, legal and regulatory systems. The second aspect is the highly vulnerable and easily

influenced risk factors like completion risks, insufficient resources and revenues and changes in fee cost. Others included legal changes, public objection and financing risks that affect project delivery. The results provide an understanding of the role of risk sharing, allocation and management for sustainable project PPP management by both the government agencies and private enterprises. Risk management will also be based on risk identification, risk relationship, risk allocation and sharing and network visualization and analysis.

2.7 Theoretical Review

Two theories will be developed and used to conceptualize and to assess the influence of PPP in Healthcare delivery in Nairobi County, Kenya. This study will use two theories; The Principal-Agent theory and Stake Holder's Theory

2.7.1 Principal- Agent Theory

Developed by Jensen and Meckling (1976), this theory expounds on the probable relationship between those who own an organization and those entrusted with the responsibilities of managing the day to day operations in that organization. Though the business owners are liable for the actions of their manager agents, they have limited control in the way managers make decisions on how to use resources at their disposal. There are bound to arise differences as each of these parties in the relationship seek to protect their interests. This gives rise to conflicts that need to be managed at all times to ensure that interests of all stakeholders in the organization are protected (Joachim, 2020).

Under the decentralized system as noted by (Joachim, 2020), the central government contract-out public services to a lower level or to a private provider and the central

government becomes the principal, the private provider, lower level/department becomes an agent. Local government can also be a principal depending on arrangement. For example, the district may contract a private provider to offer services on its behalf thus making it a principal and the private provider or in a partnership becoming an agent.

To harmonies the relationship, the following should be emphasized; the agent and the principal should be free to monitor each other, any kind of behaviour that may delay any of the partners should be left out, no conflict of interest must be declared so that one does not fear correcting another in case something is deemed going wrong. For example, (Shrestha et al., 2018) noted a scenario where local politicians, councillors can award a contract to himself through a tendering process to construct health facilities, to steal government drugs in collaboration with healthcare workers. In situations where no stringent conditions are put in place, accountability challenges may be taken as an advantage on the side of the agent. For example, agents have taken advantage of the principal's weakness in regulating and monitoring to cheat/overcharge patients since these patients lack adequate information to hold the agents accountable and, in most cases, don't know where to report and demand accountability. Such situations lead to exploitation and reduce patient satisfaction with healthcare services provided by the agent on behalf of the principal.

This theory has been applied by various stakeholders in explaining the nexus between PPP and organizational performance. For instance, Nyasetia (2020) study applied it examining the influence of elements of PPP on healthcare service delivery. Alonazi (2017) applied it in exploring the shared risks in public health programs through public-private partnerships. This study noted that PPP sustenance was linked to patient-

centeredness, technology capacity, trust worthiness, competence and flexibility among the partners. In another study, Nguyen and Garvin (2019) applied agent principal theory in assessing the aspect of contractual risk sharing mechanisms in the US highway PPP projects. The findings indicated that risk sharing mechanisms in the 21 US highway PPP contracts were done ex post resolution to allow implicit flexibility and address uncertainty.

This theory explains the relations based on clients' perception, continues support from the principle (government and other donor agencies) and cooperation from the agent (partner). Understanding the working relations between the principle, agent and users is important in this study. However, the theory does not address the stakeholders concerns adequately. These include the interests of the clients/ patients as main stakeholders in PPP HealthCare service delivery. Therefore, the need for the second theory to fill this gap hence exploring stakeholder's theory. This is why the study focuses mainly on the clients on the other side understanding agents' mode of operation.

2.7.2 Stakeholder's Theory

Formulated by Freeman (1984), this school of thinking identifies different stakeholder groups in an organization as including: staff, customers, business owners and the general public. These are key pillars in an organization because without their support, future existence of an organization becomes compromised. Stakeholders basically include all individuals who are affected by the undertakings in the organization. It is therefore important that their interests are managed and well taken care off (Jones & Wicks, 1999).

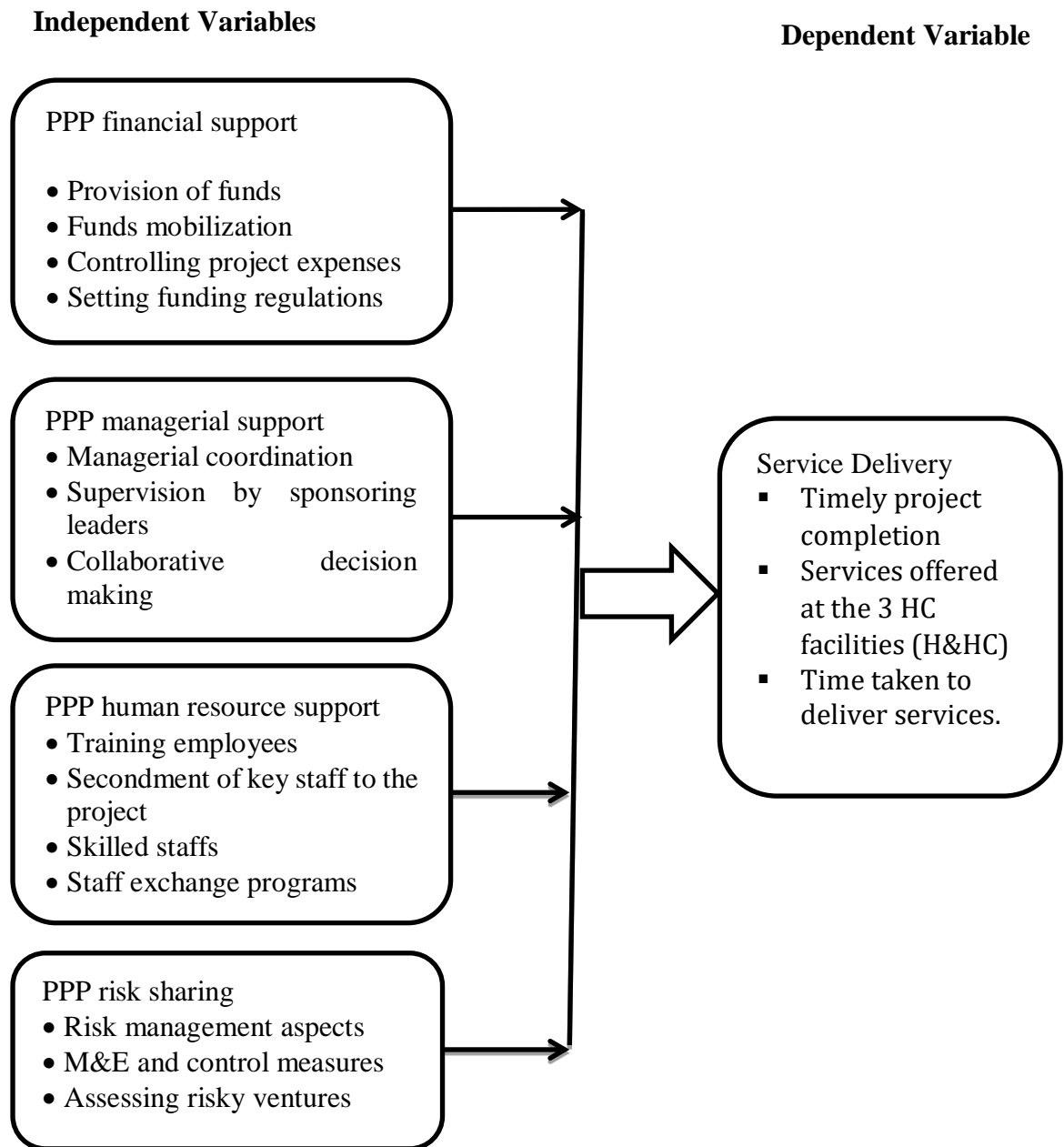
This theory has been applied by several scholars in examining the relationship between PPP and firm performance. For instance, Joachim (2020) applied it in studying the relationship of human resource management and culture of quality in Brazilian hospitals. It was noted that all stakeholders in a project played a key role in project performance. Wairiuko et al. (2018) applied it in studying human resource capacity in implementation of e-government within Kajiado County. The study findings showed that the human resource capacity and its skills led to adoption of e-government and its adoption at the county government improved its service delivery quality and effectiveness.

The PPP arrangement makes good use of the stakeholders' theory because it involves coming together of different stakeholders to pursue a common goal (Li & Wang, 2018). It appreciates the role played by each of the stakeholder in ensuring project success. The government coming to work together with private sector to deliver common good services like health is important to an economy in improving the living standards. The theory however fails to identify which stakeholder interests should take precedent especially in public good projects.

2.8 Conceptualization

Figure 2.1:

Conceptual Framework



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design, target population, the sample, sampling procedures, data collection instruments, validity and reliability of the instruments, data collection procedures and data analysis procedures.

3.2 Research Design

Research design is an overall blueprint that guides the researcher's actions when conducting the research exercise and seeking answers to the research questions (Rahi, 2017). The study used mixed design that incorporated both descriptive survey research and quantitative designs. Descriptive research design gives a thorough and accurate description survey by determining the what, why, where and how of the situation and to ensure that there is minimum bias in collection of data (Atmowardoyo, 2017). The descriptive approach was mainly used to collect data from respondents (health management and health providers) to answer research questions on PPP in health care service delivery. The approach enabled the researcher to present results using simple statistic, mean scores, percentages and frequencies distribution. Quantitative design on the other hand helps provide quantitative analysis that help draw inferences.

3.3 Target Population

Study population is a group of people with common observable characteristics. The target population for this study included health care providers such physicians, nurses, technologists and pharmacist in the three health facilities within Nairobi County that have PPP project implemented and the administrators in health facilities as key informants. This target population consisted of all those who directly deal with

health activities within the Nairobi County and they constituted both the public and private sectors, who had benefited from PPP initiatives as illustrated in table 3.1.

Table 3.1:

Target Population

Category of Health care	Kenyatta National Hospital (KNH)	Mbagathi District Hospital (MDH)	Kibera South Health Centre (KSHC)	Total
Health care providers	757	354	170	1281
Key informants				
Administrators (key informants)	4	2	1	7
Total target population				1288

3.4 Sample Size and Sampling Procedure

Sampling process enables a researcher select a small population of elements to include in the study in such a way as representing the entire population (Kothari, 2003). It needs to be done in a scientific way to eliminate any chances of the sample bearing less or more of the characteristics in the population. Stratified sampling procedure was used to get the group as per the health facility and simple random sampling procedure was used to get the respondents per strata. The simple random sampling allowed each individual in the group an equal chance to participate in the study. This was out of the total number of 304 respondents arrived at earlier by using Yamane formula below. Purposive sampling technique was used to select seven administrators in the three selected healthcare facilities (Kenyatta National Hospital -KNH, Mbagathi District Hospital -MDH and Kibera South Health Centre -KSHC).

3.4.1 Study Sample Size

The researcher employed the under listed formula by Yamane (1967) for calculation of sample size for health care providers.

$$n = \frac{N}{1 + Ne^2}$$

Where,

n= the sample size

N = the size of population

e= the error of 5%

From the use of the formula, the precision error was 5% with a confidence level of 95%.

The total population of HCP and beneficiaries 1281 hence the sample size was:

$$n = \frac{1281}{1+1281(0.05)^2} = 304$$

While the total population of Key informants (Hospital/ Health Centre Administrators) of 7 was purposively chosen since they were involved in the day today running of the healthcare facilities. The total sample size was therefore 7 + 304 =311 respondents as shown in Table 3.2

Table 3.2:

Sample Size

Category of Health care	Kenyatta National Hospital (KNH)	Mbagathi District Hospital (MDH)	Kibera South Health Centre (KSHC)	Total
Health care providers	179	84	41	304
Key informants Administrators (key informants)	4	2	1	7
Total target population				311

3.5. Data Collection Instruments

Data was in two categories: primary and secondary data. Primary data was gathered from respondents during the field visits to PPP health facilities. This was by use of

structured questioners for beneficiaries and health care providers, Key Informant Interview (KII) guides for key informants and observation checklists.

Secondary data was gotten from review of existing literature on health care delivery under PPP. The researcher also used hospital and health centre administrative records, books, journals, government publications, surveys, newspapers among other written documents.

3.6 Validity and Reliability of Research Instruments

3.6.1 Validity of Research Instrument

According to Dikko (2016) validity refers to the extent to which a researcher's instrument measures what it is designed to measure. Dikko points out, by designing the questionnaire, the researcher can construct the document to accurately reflect the concepts that the researcher wants to measure. To ascertain the validity of questionnaires and interview schedules, a pre-test study will be conducted among healthcare providers and administrators in different health facilities with similar characteristics. The pre-test study enabled the researcher to do necessary adjustments of the instruments with the supervisor's guidance. The pre-test study was conducted at Carolina for Kibera Health Facility which had embraced the PPP model. The 2 administrators were interviewed and 15 healthcare providers filled the questionnaire and help in authenticating the reliability and validity of data collection tools. Test re-test was use such that the same instrument was administered twice to the same group and the responses compared for the first and second test. The averages were then compared with the content of the project and necessary adjustments were done.

The validity was checked through content validity method by comparing the elements in the research tools (questionnaire and interview guide) with contents in the study aspects like general literature, conceptual framework and empirical literature. The filled instruments were shared with the research specialists, fellow students and university supervisor and their input was used to amend the instrument. The researcher then edited the tools in terms of spacing, content, timelines, format and flow of questions.

3.6.2 Reliability of Research Instruments

Reliability refers to the stability or consistency of measurement; that is whether or not the same results would be achieved if the test or measure is applied repeatedly (Heale & Twycross, 2015). The test re-test technique was used to estimate the reliability of the instruments. This involved administering the same test twice to the same group of respondents who were identified for this purpose but not part of the target group. Taber (2018) posits that if a researcher administers a test to a subject twice and gets the same score on the second administration as the first test, then there is reliability of the instrument. Nunnally (1967) suggested that the minimally acceptable reliability of 0.7 is recommended. Therefore, a reliability test of the instruments was done using Cronbach alpha coefficient.

3.7 Data Collection Procedure

Qualitative and quantitative data was collected from respondents. The methods of data collection included administering structured questionnaire for healthcare providers (HCPs) and structured interview schedule for administrators and observation methods that allowed for gathering information without direct questioning on the part of the researcher through a checklist. The questionnaire was used to collect specific data as

the questions asked were in line with specific objectives of this study. This reduced time spend to collect data as it was a direct method of extracting information from respondents.

In-depth interviews helped the researcher in collecting data from hospital administrators' respondents, and this method allowed probing for more and clarification allowing the researcher to gather detailed information in regard to healthcare delivery at PPP health facilities, while the observation check-list was used by the research team to observe how service delivery was offered in the three health facilities to compliment the findings from the two categories.

3.8 Data Analysis

After collecting data necessary, filled questionnaires and interview data was checked for completeness and consistence then sorted for analysis. Qualitative data was analysed using content analysis. All data from in-depth interviews was validated by visiting other sources. Observed data was noted using an observation checklist and the data was analysed using narratives, to describe how significant the observed data contributed to patients' satisfaction or dissatisfaction.

Quantitative data was edited, coded, checked and entered in analysis software Statistical Package for Social Scientists (SPSS) latest version 25 and then analysis was carried out. Descriptive analysis was done to obtain means, frequencies and standard deviation and inferential statistics were done through correlation and regression. The findings were presented using statistics in terms of tables, graphs, and pie-charts accompanied by explanation to exhaustively assess the occurrences.

To reach inferences, multiple regression analysis was adopted assuming the following format:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where:

Y = Service Delivery

X₁ = Financial Support

X₂ = Managerial support

X₃ = Human Resource Support

X₄ = Risk sharing

β₀ = Constant,

β₁, β₂, β₃ and β₄ = Regression Coefficients

ε = Error Term

3.9 Operationalization of Variables

The operationalization framework which shows the parameters applied in measuring each of the variables is presented below in Table 3.3

Table 3.3:*Operationalization of Variables*

Variable		Dependent Independent	/ Measurement Indicators
PPP support	financial	Independent	<ul style="list-style-type: none"> • Provision of funds • Funds mobilization • Controlling project expenses • Setting funding regulations
PPP support	managerial	Independent	<ul style="list-style-type: none"> • Managerial coordination • Supervision by sponsoring leaders • Collaborative decision making
PPP support	human resource	Independent	<ul style="list-style-type: none"> • Training employees • Secondment of key staff to the project • Skilled staffs • Staff exchange programs
PPP risk sharing		Independent	<ul style="list-style-type: none"> • Risk management aspects • M&E and control measures • Assessing risky ventures
Service Delivery		Dependent	<ul style="list-style-type: none"> • Timely project completion • Services offered at the 3 HC facilities (H&HC) • Time taken to deliver services

The Table 3.3 shows the study variables and their indicators, like health care service delivery in Nairobi County Kenya will be measured by the level of timeliness in project completion, services offered at the 3 HC facilities (H&HC) and the time taken to deliver services at the health facilities. This helps ascertain whether the projects were completed within the stipulated timeline or were delayed. It is expected that because of the expertise of different stakeholders, project period estimation is bound to be with precision hence eliminating chances of project delays. However, some scholars note that delays by some of the stakeholders in playing their role in the project could bring about delays hence delay the completion time.

The first independent variable in this study is PPP financial support which evaluates the financial resources availed by stakeholders in the arrangement. It is important to note that stakeholders in PPP arrangements provide financial resources that will support

implementation of the project. Therefore, this variable will evaluate the timeliness in provision of funds, adequacy of the amounts mobilized, controls put in place to eliminate misappropriation of funds, and development of regulations to ensure optimal utilization of the financial resources. It is important to note that PPP projects are normally capital intensive hence the need for collaboration with private entities to ensure the success of these projects.

The second independent variable relates to PPP managerial support which will be measured by the number of managerial experts seconded to the project from different stakeholders, the level managerial coordination and involvement of key staff from different stakeholders in the project. It shall also take into considerations the level of collaborations among stakeholders in decision making on matters relating to the project.

The third independent variable is Human resource support which shall evaluate the level of involvement of employees from different stakeholders in the project. Different stakeholders normally bring different expertise to the project so as to deliver high quality services. The study evaluate the level of training offered to hospital staff from different stakeholders to ensure project success, the number of employees from different stakeholders to the PPP seconded to the project, the proportion of skilled staff allowed to supervise the project and the level of exchange programs among staff from different stakeholders.

3.10 Ethical Consideration

Mustajoki and Mustajoki (2017) define legal and ethical consideration as the standards for conduct that give recognition and distinguish acceptable and unacceptable behaviour to the process of research investigation. Permission to conduct the research

will be sought from National Commission for Science Technology and Innovation (NACOSTI). The study ensured and assured respondents' confidentiality is upheld by explain to them that the study data is for academic and policy information only and won't harm any respondent. They also explained that they were free to with draw from the study at any point.

The study ensured that it did not harm respondents and other sources of data. The study did not jeopardize the process of service delivery since data was collected after getting services of out- patient respondents who are the target. The respondent's views were respected and presented in a way that elicited their feeling, perception and general situation of healthcare delivery under PPPs.

Quotations and archive data cited had and was acknowledged including all secondary data sources used in the study. The researcher allowed any respondent who wished to withdraw from the study or abstain from answering questions amidst the interview. Finally, it was explained to the respondents that the study was for academic and policy implementation purposes only.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

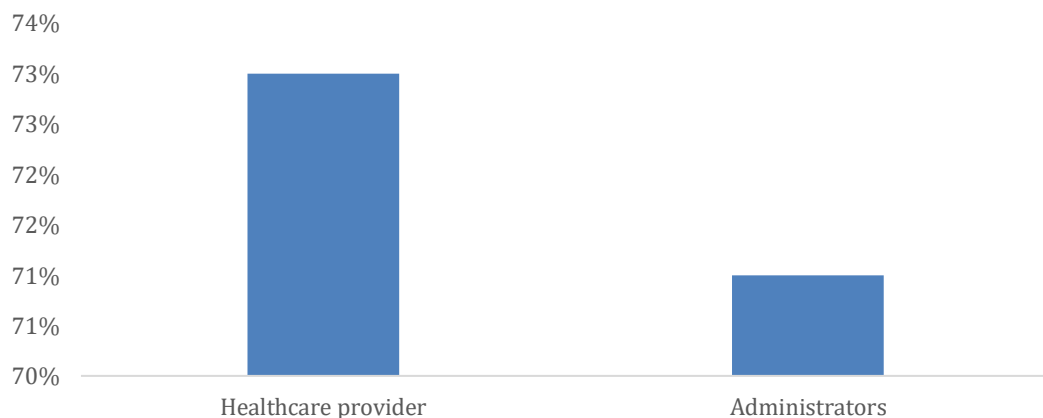
The chapter details an analysis of the response rate, the reliability results and general information as well as the presentation of results on the specific objective variables of the study starting with descriptive statistics and then regression results.

4.2 Response Rate

A total of 304 questionnaires were administered to health care providers from which 221 were completely filled in and returned. This represented a response rate of 73%. For the key informant interviews, 7 of them were targeted and 5 were available for interview giving a response rate of 71.4%. Figure 4.1 is a summary of the response rate recorded in the study.

Figure 4.1:

Response Rate



The response rates in Figure 4.1 concur with Adams and McGuire (2022) who opined that an above 70% response rate is always good for analysis of the findings in a study.

4.3 Reliability Results

The study conducted a pilot study on the identified respondents who were excluded from the main study. The data collected from the pilot was captured in data analysis software from which Cronbach Alpha coefficient indices were extracted. The reliability of the scale used in design of the questionnaire was determined by computing the Cronbach Alpha Coefficients and a breakdown of the findings is as summarized in Table 4.1.

Table 4.1:

Reliability Results

Variable	No. of Items	Cronbach Alpha Coefficients
Financial Support	7	0.765
Managerial Support	10	0.897
Human Resource Support	7	0.883
Risk Sharing	7	0.767
Service Delivery	12	0.781
Average		0.819

The results in Table 4.1 indicate the overall Cronbach Alpha Coefficient value of 0.819. This concurs with the assertion of Nunnally (1967) who suggested that the minimally acceptable reliability of 0.7 is recommended. It thus implies that the study questionnaire had items that were formulated using a reliable scale.

4.4 Demographic Information

The general information of the respondents was determined and the results summarized as shown in the subsequent sections.

4.4.1 Age of the Respondents

The age of the respondents was determined and the results summarized as indicated in Figure 4.2.

Figure 4.2:

Age of the Respondents

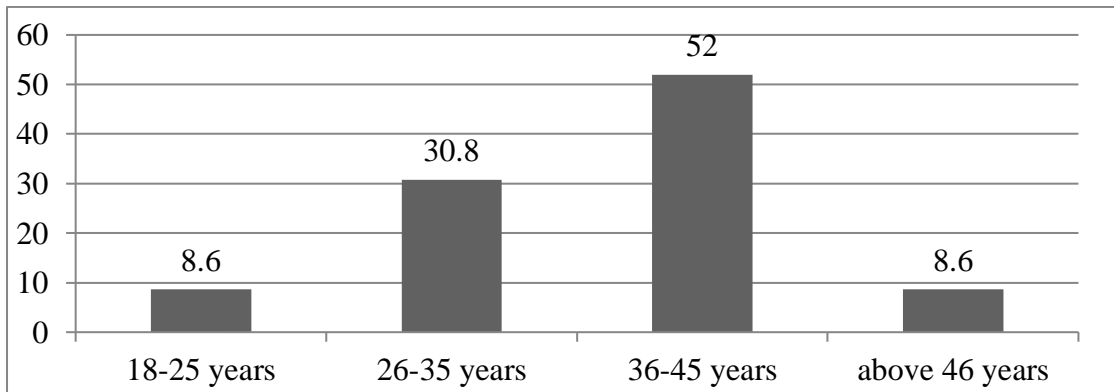


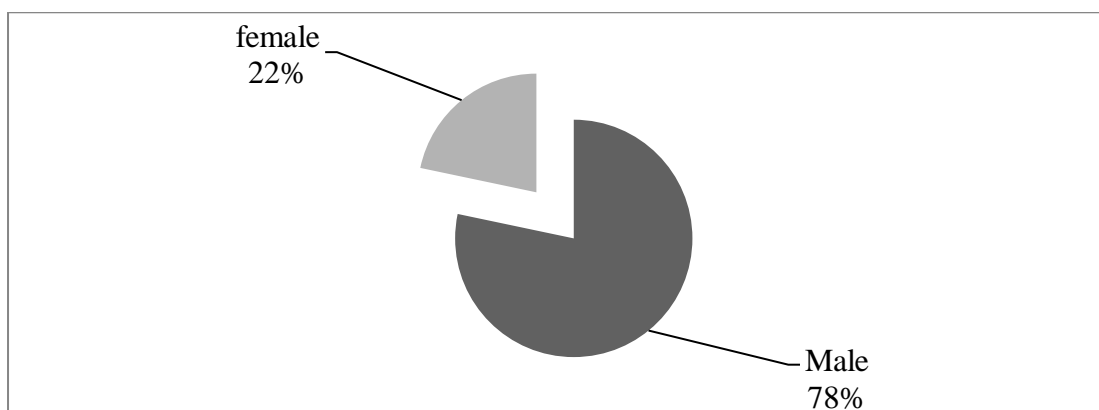
Figure 4.2 show that while 52% of the respondents were 36-45 years, 8.6% tied at 18-25 years and above 46 years. This means that both youths and adults were involved in the study implying that versatile views were sought from them on PPP ad health service delivery.

4.4.2 Gender Distribution

The distribution of respondents by gender was determined and the findings summed up as shown in Figure 4.3.

Figure 4.3:

Gender Distribution



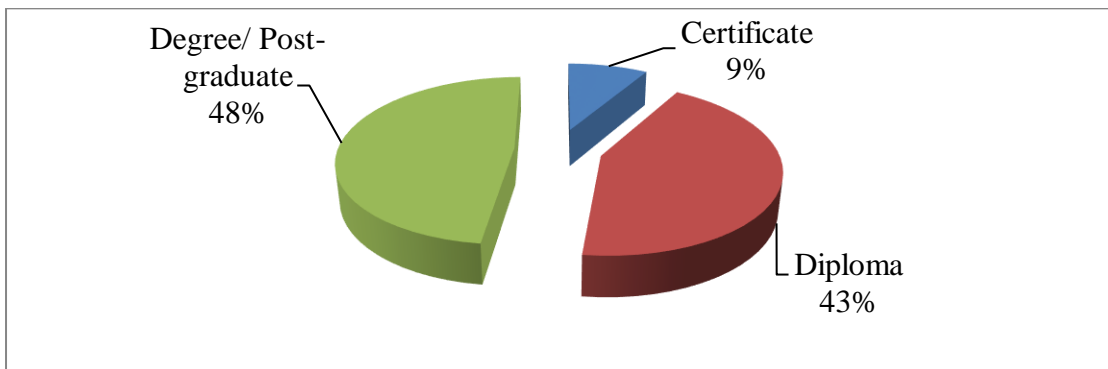
The findings in Figure 4.3 show that while 22% of the respondents were female, 78% were male. This means that the information gathered from the respondents who participated in the study were gender representative. This means that most of the healthcare facilities in Nairobi County that had implemented PPP projects highly rely on male employees.

4.4.3 Level of Education of Respondents

Figure 4.4 is an overview of the results on level of education of the respondents of the study.

Figure 4.4:

Level of Education of Respondents



The findings in Figure 4.4 indicate that while 48% of the respondents were degree holders and postgraduates, 9% had certificates. This means that respondents who took part in this study were generally learnt and shared relevant information as sought by the study.

4.4.4 Relevant Health Facility

Figure 4.5 is a summary of the health facilities that respondents were employed to work in.

Figure 4.5:

Relevant Health Facility

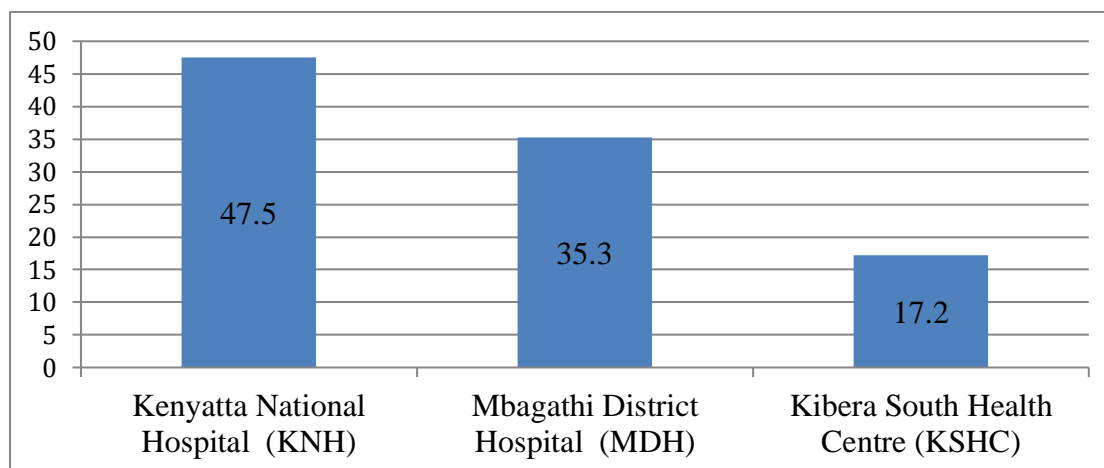


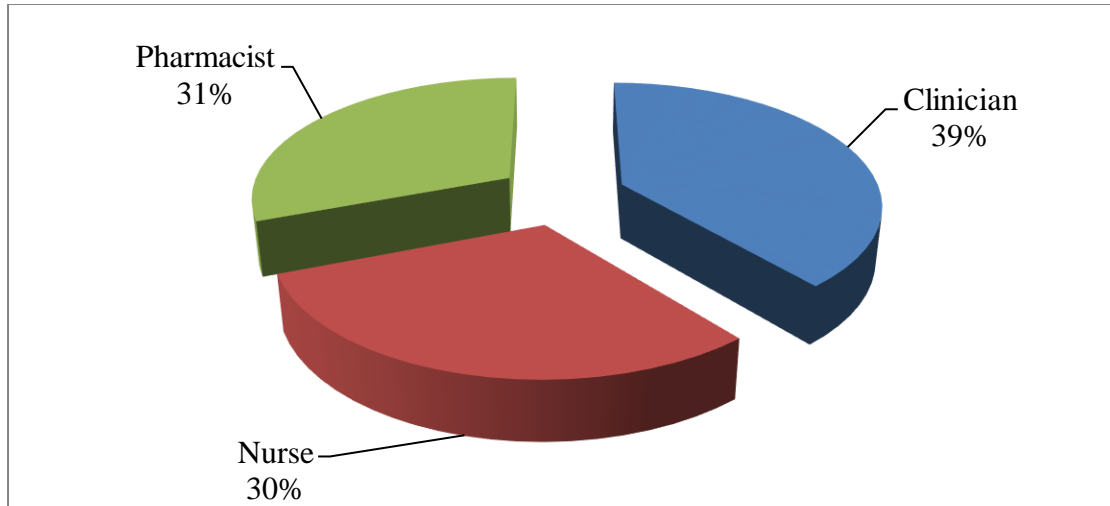
Figure 4.5 indicate that while 47.5% of the respondents worked at KNH, 17.2% were from KSHC. This means that there was representative distribution of the respondents across the health facilities that were covered in the study. Thus, detailed information portraying the state of affairs was sought from the respondents.

4.4.5 Position Occupied by Respondents

The relevant positions held by respondents were established and the findings summarized as indicated in Figure 4.6.

Figure 4.6:

Position Held



The findings in Figure 4.6 indicate that while 39% of the respondents were clinicians, 30% were nurses. This means that respondents who took part in the study held different categories of jobs although all of them were aligned with health. As such, it can be inferred that respondents were well versed with information on health service delivery as sought by this study.

4.4.6 Years of Experience

The years of experience of the respondents were determined and the findings summarized as shown in Figure 4.7.

Figure 4.7:

Years of Experience

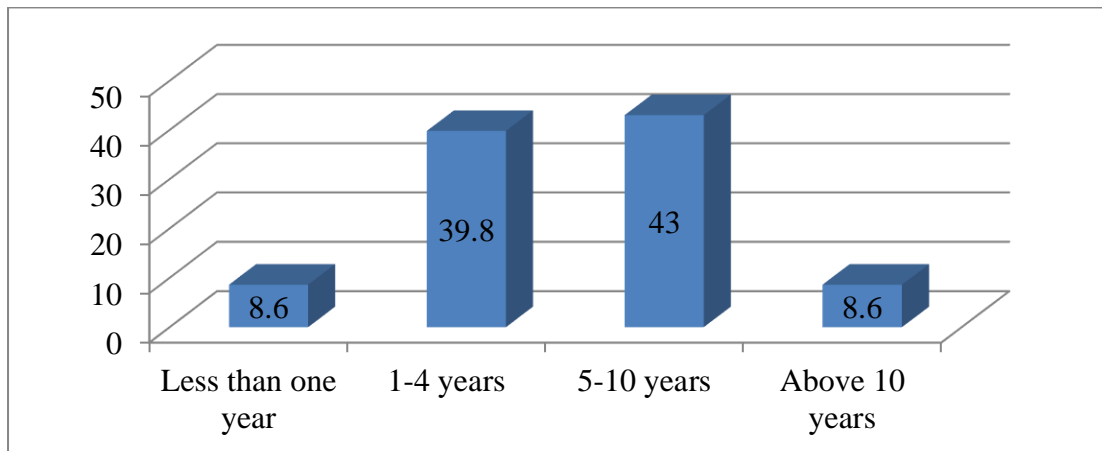


Figure 4.7 shows that while 43% of the respondents had worked for 5-10 years, 8.6% tied at less than a year and over 10 years respectively. This implies that respondents who took part in the study had gained relevant knowledge and information from the period of time they had worked with their institutions.

4.5. Financial Support

Table 4.2 is a summary of the results of descriptive statistics on financial support.

Table 4.2:

Financial Support

Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
Most of operations are funded by our partners	12	5	18	8	19	9	133	60	39	18	3.76	0.76
The partners finance infrastructure projects at the hospital	21	10	16	7	21	10	118	53	45	20	3.68	0.706
The partnership ensures adequate funding for operations in the hospital	13	6	17	8	20	9	127	57	44	20	3.77	0.486
The partners dictate how fund utilization will be done	10	5	13	6	25	11	131	59	43	19	3.85	0.6
Partner have measures to control project expenses	9	4	29	13	25	11	121	55	37	17	3.67	0.523
The partners dispatch funds based on the budgetary line	9	4	11	5	16	7	144	65	41	19	3.89	0.536
The project budgets are approved by the PPP partners	7	3	19	9	24	11	129	58	42	19	3.81	0.585
Average											3.78	0.599

The findings in Table 4.2 indicate that on overall, financial support was among the highly practiced aspect of Public-Private Partnerships in the studied health centres in Nairobi ($M=3.78$, $SD=0.599$). This is further supported by a large proportion of respondents who agreed at 60% and those strongly agreeing at 18%. A small proportion of respondents (8%) disagreed while another 5% strongly disagreed.

Respondents were in agreement that the partners dispatched funds based on the budgetary line ($M=3.89$, $SD=.536$). This is supported by a high proportion of respondents that agreed at 65% and those strongly agreeing at 19%. This implies that the budgets played an instrumental role allowing Public-Private Partners to distribute funds to the studied health centers based on the needs and priorities as planned. This finding is supported by Miller et al. (2021) who noted that public entities especially the health sector must look beyond budget allocation at government level and expands their funding sources. There is also need to consider the budget cycles, the political factors and donor policies and regulations as the health docket seeks financing for its usage.

Respondents were in agreement that the partners dictated how fund utilization was done ($M=3.85$, $SD=.600$). This is further supported by a high proportion of respondents that agreed (59%) and strongly agreed (19%) with the statement. This means that Public-Private Partnerships contributed to effective utilization of the funds in the studied health centres. This finding is echoed by Miller et al. (2021) who noted that the goal of attaining universal access to basic healthcare services can only be achieved through capacity of governments to raise, mobilize, allocate and utilize public funds effectively.

The study reported that the project budgets were approved by the PPP partners ($M=3.81$, $SD=.585$). This is supported by a large proportion of respondents who either agreed (58%) or strongly agreed (19%). Project partners are key stakeholders in any

project because of the contributions they make in terms of finance and specialized skills. This implies that the Public-Private Partners played an instrumental in approving major expenditures to be incurred by the health canthers that were studied.

The study observed that the partnership ensured adequate funding for operations in the hospital ($M=3.77$, $SD=.486$). A large proportion of respondents (57%) agreed while 20% agreed strongly. This means that the partnership played an instrumental funding role to the health canthers that were covered. Atim et al. (2021) showed that Kenya and South Africa still face challenges in public healthcare financing,

The findings further indicated that most of the operations were funded by partners ($M=3.76$, $SD=.760$). This is supported by 60% of the respondents that agreed and 18% that strongly agreed. This means that the partners were the major funders of the studied health centres. In other words, much of the finances running the operations of the health centres that were covered in this study were derived from the partners.

Respondents observed that their partners financed infrastructure projects at the hospital ($M=3.68$, $SD=.706$). More than half (53%) of the respondents agreed while 20% strongly agreed. This implies that the partners raised funds that were used to finance infrastructure projects in the studied hospitals. Respondents indicated that partners had measures to control project expenses ($M=3.67$, $SD= .523$). This means the studied health centres had in place mechanisms of cost control.

Health administrators were asked to indicate their views on PPP financial support and their influence on health care service delivery in their facilities. It emerged from the results that PPP funded the projects that were initiated at the facility level. This allowed

and promoted effective execution of the health projects that contributed towards health service delivery.

One health administrators stated this:

“Finances are the engine of health care services delivery. Without adequate funds, health care services would be constrained. It is important that the partners avail the required finances on time so as to finance project operations for timely delivery on the set project goals” (Health Administrator A)

Another health administrator said:

“PPP financial support has resulted into increased financial prudence in the management and utilization of funds for better health care service delivery. The finances are normally advanced with strict conditions which when violated, could result in cancellation and recall of all finances advanced” (Male Doctor 1)

An observation checklist was used to gather information. It was evident from this tool that modern cancer treatment machines had been funded through PP financial support. Laboratories were also observed as part of the operations that came as a result of PPP financial support.

4.5.1 Gender and Financial Support

The study set out to analyse the distribution of responses on financial support across gender divide. The results were as shown in the Table 4.3:

Table 4.3***Cross tabulation of Gender and Financial Support***

Question		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Most of operations are funded by our partners	Male	10(5%)	16(7%)	14(6%)	101(46%)	31(14%)
	Female	2(1%)	2(1%)	5(2%)	31(14%)	9(4%)
The partners finance infrastructure projects at the hospital	Male	18(8%)	13(6%)	17(8%)	93(42%)	31(14%)
	Female	3(1%)	3(1%)	4(2%)	25(11%)	14(6%)
The partners dictate how fund utilization will be done	Male	11(5%)	16(7%)	17(8%)	101(46%)	27(12%)
	Female	2(1%)	1(0%)	3(1%)	26(12%)	17(8%)
Partner have measures to control project expenses	Male	8(4%)	24(11%)	21(10%)	99(45%)	20(9%)
	Female	1(0%)	5(2%)	4(2%)	22(10%)	17(8%)
The partners dispatch funds based on the budgetary line	Male	7(3%)	8(4%)	12(5%)	119(54%)	26(12%)
	Female	2(1%)	3(1%)	4(2%)	25(11%)	15(7%)
The project budgets are approved by the PPP partners	Male	6(3%)	15(7%)	18(8%)	107(48%)	26(12%)
	Female	1(0%)	4(2%)	6(3%)	22(10%)	16(7%)

From the findings in Table 4.3, it can be observed that 10(5%) males strongly disagreed, that most of operations are funded by our partners compared to 2(1%) females. A further 16(7%) of male disagreed compared to 2(1%) females. Of those that were neutral 14(6%) were male while 5(2%) were female. Those who agreed were made up of 101(46%) males and 31(*14%) females. A further 31(14%) males strongly agreed whereas 9(4%) female strongly agreed.

On whether partners financed infrastructure projects at the hospital, 18(8%) males strongly disagreed compared to 3(1%) females, a further 13(6%) male disagreed

compared to 3(1%) female that disagreed. Of those who were neutral, 17(8%) were males while 4(2%) were female. Those who agreed were made up of 93(42%) male and 25(11%) female. Those who strongly agreed were made up of 31(14%) male and 14(6%) female.

On whether partners dictated how fund utilization was to be done, 11(5%) of those who strongly disagreed were male compared to 2(1%) females. Of those who disagreed, 16(7%) were male compared to 1(0%) female. Of those who were neutral, 17(8%) were male and 3(1%) was female. Of those that agreed, 101(46%) were males and 26(12%) were female. Those that strongly agreed comprised 27(12%) males and 17(8%) females. It can be observed that the agreement with the statement was distributed more towards agree and strongly agree on both genders.

On whether Partner had measures to control project expenses, 8(4%) of those that strongly disagreed were male compared to 1(0%) female. Of those that disagreed, 24(11%) were male while 5(2%) were female. Of the neutral ones, 21(10%) were male while 4(2%) were female. Those who agreed were made up of 99(45%) male and 22(10%) female. Those that strongly agreed comprised 20(9%) male and 17(8%) female.

Regarding partners dispatch of funds based on the budgetary line, those that strongly disagreed comprised of 7(3%) male and 2(1%) female. Those that disagreed comprised 8(4%) male and 3(1%) female. The neutral comprised of 12(5%) male and 4(2%) female. Those that agreed were made up of 119(54%) male and 25(11%) female. Those that strongly agreed comprised 26(12%) male and 15(7%) female. On project budgets being approved by the PPP partners, those that strongly disagreed comprised of 6(3%) male and 1(0%) female. Those who disagreed were made up of 15(7%) male and 4(2%)

female. Those that were neutral comprised of 18(8%) male and 6(3%) female. Those that agreed were made up 107(48%) male and 22(10%) female. Those that strongly agreed comprised 26(12%) male and 16(7%) female. These findings show that both genders held similar views on the question. The responses posted a similar trend on both gender divides.

4.5.2 Cross tabulation of Education and Financial Support

The study conducted cross tabulation analysis on education level and financial support.

The findings are shown in the Table 4.4

Table 4.4:

Education and Financial Support

Question		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Most of operations are funded by our partners	Certificate	1(0%)	4(2%)	3(1%)	8(4%)	4(2%)
	Diploma	3(1%)	6(3%)	9(4%)	63(29%)	14(6%)
	Degree/ Post-graduate	8(4%)	8(4%)	7(3%)	62(28%)	21(10%)
The partners finance infrastructure projects at the hospital	Certificate	2(1%)	3(1%)	4(2%)	7(3%)	4(2%)
	Diploma	8(4%)	5(2)	6(3%)	63(29%)	13(6%)
	Degree/ Post-graduate	11(5%)	8(4%)	11(5%)	48(22%)	28(13%)
The partnership ensures adequate funding for operations in the hospital	Certificate	2(1%)	10%)	2(1%)	9(4%)	6(3%)
	Diploma	4(2%)	6(3%)	5(2%)	56(25%)	24(11%)
	Degree/ Post-graduate	7(3%)	10(4%)	13(6%)	62(28%)	14(6%)
The partners dictate how fund utilization will be done	Certificate	0(0%)	2(1%)	3(1%)	9(4%)	6(3%)
	Diploma	6(3%)	5(2%)	9(4%)	55(25%)	20(9%)
	Degree/ Post-graduate	4(2%)	6(3%)	13(6%)	71(32%)	12(5%)
	Certificate	1(0%)	3(1%)	3(1%)	6(3%)	7(3%)

Partner have measures to control project expenses	Diploma	3(1%)	9(4%)	7(3%)	62(28%)	14(6%)
	Degree/Post-graduate	5(2%)	17(8%)	15(7%)	53(24%)	16(7%)
	Certificate	2(1%)	1(0%)	3(1%)	9(4%)	5(2%)
The partners dispatch funds based on the budgetary line	Diploma	3(1%)	4(2%)	5(2%)	72(33%)	11(5%)
	Degree/Post-graduate	4(2%)	6(3%)	8(4%)	63(29%)	25(11%)
	Certificate	0(0%)	2(1%)	3(1%)	8(4%)	7(3%)
The project budgets are approved by the PPP partners	Diploma	2(1%)	5(2%)	8(4%)	56(25%)	25(11%)
	Degree/Post-graduate	5(2%)	12(5%)	13(6%)	65(29%)	11(5%)
	Certificate	0(0%)	2(1%)	3(1%)	8(4%)	7(3%)

From the Table 4.4, it can be observed that on whether most of operations were funded by our partners, of those who strongly disagreed, 1(0%) were had certificate, 3(1%) had diploma and 8(4%) has degree / postgraduate degree as their highest level of education. For those that disagreed, 4(2%) had certificate, 6(3%) had diploma while 8(4%) had degree / postgraduate degree. The neutral ones were made up of 3(1%) had certificate, 9(4%) had diploma whereas 7(3%) had degree / postgraduate degree as their highest level of education. For those that agreed, 8(4%) had certificate, 63(29%) had diploma whereas 62(28%) had degree / postgraduate degree as their highest level of education. For those that strongly agreed, 4(2%) were certificate holders, 14(6%) had diploma while 21(10%) had degree / postgraduate degree as their highest level of education. These findings show that majority of the respondents who agreed with this statement held either a diploma or had degree / postgraduate degree as their highest level of education.

In regard to the partners financing infrastructure projects at the hospital, for those that strongly disagreed, 2(1%) had certificate, 8(4%) held diploma whereas 11(5%) had degree / postgraduate degree as their highest level of education. For those that

disagreed, 3(1%) had certificate, 5(2%) had diploma and 8(4%) had degree / postgraduate degree. For those that were neutral, 4(2%) held certificate, 6(3%) had diploma while 11(5%) had degree level and above. For those that agreed, 7(3%) had certificate, 63(29%) had diploma while 48(22%) had degree level and above. For those that strongly agreed, 4(2%) had certificate, 13(6%) had diploma while 28(13%) held degree level and above. It can be seen that majority of the respondents who agreed with this statement diploma holders while degree and above strongly agreed.

On whether the partnership ensured adequate funding for operations in the hospital, for those that strongly disagreed, the majority had degree and above level at 7(3%). For those that agreed, the majority had degree too at 10(4%). Degree level dominated except for those that strongly agreed where diploma holders formed the majority at 24(11%). These findings show that the level of agreement varied widely across different levels of education.

In relation to the partners dictating how fund utilization would be done, the majority of those that strongly disagreed were diploma holders at 6(3%), on agree, majority were degree and above at 6(3%). Majority of neutral respondents held degree and above same for those that agreed at 71(32%), Diploma holders formed the majority that strongly agreed at 20(9%). These findings show that the level of agreement was uniform across all education levels, hence more representative.

On whether partners had measures to control project expenses, degree and above respondents formed the majority that strongly agreed at 5(2%). And those that agreed at 17(8%). However, for those that agreed, majority of the respondents were diploma holders at 62(28%) whereas those that strongly agreed had degree and above as the

majority at 17(7%). These findings show that the level of agreement varied across different education levels.

In relation to the partners dispatching funds based on the budgetary line, majority of those that strongly disagreed were degree holders at 5(2%) and those that agreed at 12(5%) respectfully. Degree holders formed majority of the respondents among those who were neutral at 13(6%), 65(29%) agreed. For those that strongly agreed, diploma holders formed majority of the respondents at 25(11%). The level of agreement varied along different levels of education.

On whether the project budgets were approved by the PPP partners, degree /post graduate holders formed the majority of those that strongly disagreed at 5(2%) and those that disagreed at 12(5%). Majority of the respondents who agreed held degree / post graduate at 65(29%) agreed whereas majority of those that strongly agreed were diploma holders at 25(11%). This findings shows that the responses were varied across different levels of education.

From the observation checklist, the researcher observed that health facilities observed had been funded in several areas including acquisition of specialized medical equipment that allowed them to offer efficient services in some areas which was initially not possible. The Hospital also got financing for renovations of some of the buildings which have been used for special clinics. The hospital further received finance for specialized new technologies in different medical procedures which would otherwise be difficult to acquire. More wards were also financed to expand the bed capacity of the hospital.

4.6 Managerial Support

The findings of descriptive statistics on managerial support were determined and summarized as shown in Table 4.5.

Table 4.5:
Managerial Support

Statement	F	%	F	%	F	%	F	%	F	%	Mean	Std. Dev
Partners provide management skills necessary in project implementation	10	5	14	6	23	10	112	51	62	28	3.9	0.56
Our partners assist with administrative communication equipment on projects they are involved in	17	8	25	11	16	7	105	48	57	26	3.71	0.923
Our partners have launched training management programs for all staff working on public-private partnership projects	5	2	4	2	12	5	127	57	73	33	4.17	0.528
Our partners provide most of the administrative equipment on projects	5	2	9	9	9	9	116	52	62	28	3.95	0.692
Our partners provide necessary supervision support on public private partnership projects	21	10	17	8	27	12	133	60	23	10	3.53	0.822
Our partners in PPP projects participate in decision making on project implementation	12	5	9	9	20	9	114	52	56	25	3.83	0.929
Partners in PPP help in proving necessary managerial coordination on projects	10	5	9	9	19	9	128	58	45	20	3.8	0.55
PPP partners advise on the appropriate management structure of projects they participate in	14	6	7	8	21	10	137	62	30	14	3.66	1.098

Our PPP Partners help in close monitoring of project implementation progress at KNH	1	9	3	1	2	1	116	52	28	13	3.46	0.951
PPP Partners offer specialized advice on projects we implement together with them	1	5	1	9	2	1	126	57	43	19	3.77	0.447
Average											3.78	0.75

The results in Table 4.5 indicate the managerial support was highly evident to the health centres that were studied as indicated in the average of means ($M=3.78$, $SD=0.750$). It shows that the respondents agreed that managerial support played an important role in ensuring that project activities happened according to the schedule besides ensuring that the resources at their disposal were optimally utilized.

On the specific statements, respondents observed that their partners had launched training management programs for all staff working on public-private partnership projects ($M=4.17$, $SD=.528$). This is further exhibited in 57% of respondents agreeing while 33% strongly agreed. This means that the partners trained the health care staff in the studied organization as a demonstration of their support towards the health service delivery. The finding concurs with Kaziba et al. (2017) who showed that supervisory leadership aspects include participatory decision making, period evaluation of staff performances, enhance professionalism through staff trainings, increase skill transfer and create conducive work environments. Al-Hanawi et al. (2019) observe that attaining of Vision 2030 in securing job opportunities for youths can be attained by training them and absorbing them in healthcare sector.

The study established that the partners provided health centres with management skills necessary in project implementation ($M=3.90$, $SD=.563$). Partners understood the importance of management skills in project success. This is supported by 51% of respondents who agreed and 28% who strongly agreed. This means that the health care staff was well versed with project management skills required for effective health service delivery. Wairiuko et al. (2018) shared that the influence of human resource capacity covered the technical skills, project management skills, and communication and presentation skills, availability of supportive and technical staff.

Respondents further observed that their partners provided most of the administrative equipment on projects ($M=3.95$, $SD=.692$). A large proportion of respondents (52% agreed with the statement while 28% strongly agreed. Administrative equipment is important in execution of any project because it determines the speed and precision with which projects get implemented. This means that the partners played an instrumental role in equipping the health centres for effective health service delivery.

Respondents shared that their partners in PPP projects participated in decision making on project implementation ($M=3.83$, $SD=.929$). More than half of the respondents at 52% agreed whereas 25% strongly agreed. Incorporating all stakeholders in decision making helps in reducing the general level of resistance during implementation phase. This implies that there was collective and participatory decision making in the health centres that were covered in the study.

The study further established that partners in PPP helped in providing necessary managerial coordination on projects ($M=3.80$, $SD=.550$). This can be seen in 58% of the respondents agreeing as 20% strongly agreed. Ensuring adequate managerial coordination is present in any project is necessary for precise delivery of project

objectives. In cases where there lacks managerial coordination, activities will not flow well hence delays and misappropriation of resources is highly likely. This means that the partners coordinated the execution of the project activities that probably contributed towards effective health service delivery.

It was established that the PPP Partners offered specialized advice on projects that they implemented together with them (M=3.77, SD=.447). A majority of the respondents agreed at 57% whereas 19% strongly agreed. Majority of the partners in PPP projects normally have some specialized skills which they bring on board for smooth and seamless project implementation. This means that the partners played an advisory role as far as the projects aimed at improving health care service delivery in the studied institutions were concerned.

The study established that the partners assisted with administrative communication equipment on projects they were involved in (M=3.71, SD= 0.923). This is further supported by 48% who agreed and 26% who strongly agreed. Communication is important in implementation of any project. Breakdown in communication can have serious implications on the way activities flow and get executed. This means that there was effective flow of information in the studied health centres because of the communication equipment that were received from partners.

Respondents were in agreement with the statement that their PPP partners advised on the appropriate management structure of projects they participated in (M=3.66, D=1.098) besides providing necessary supervision support on public private partnership projects (M=3.53, SD= 0.8220. This was mainly offered through budgetary allocations where only budgeted staff were provided for in the financial budget. This is

supported by 60% who agreed and 10% who strongly agreed. This means that partners contributed to the design of the management structures besides supervising the projects.

The hospital administrators were asked to indicate the views on the influence of Public Private Partnership managerial support on healthcare service delivery. It was shown that PPP managerial support supervised the projects that were being implemented by the health care providers. Management support was offered in terms of having one of their technical staff seconded to the project for the purposes of manning the implementation. They also offered some managerial training to staff working on the PPP projects. It also emerged from the health administrators that due to PPP, there was seamless coordination of activities during the execution of the projects in the health facilities that were covered in the study.

One health administrators shared this:

“Through PPP managerial support, the top leadership of this facility has enhanced the decision-making ability. The partners sponsored various trainings aimed at equipping project management teams with necessary knowledge and skills for optimal decision making. This contributed towards improved efficiency and effectiveness in operations.” (Health Administrator 1)

Results from the observation checklist were that some of the partners were actively being involved in boards to strengthen the corporate governance mechanisms for better health care service delivery.

4.6.1 Gender and Managerial Support

The results obtained from bivariate analysis of age and managerial support was as shown in the Table 4.6:

Table 4.6:

Cross tabulation of Gender and Managerial Support

Statement	Gender	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Our partners provide us with management skills necessary in project implementation	Male	6 (3%)	9 (4%)	15(7%)	95(43%)	47(21%)
	Female	4 (2%)	5(2%)	8(4%)	17(8%)	15(7%)
Our partners assist with administrative communication equipment on projects they are involved in	Male	11 (5%)	18(8%)	13(6%)	86 (39%)	43(19%)
	Female	6 (3%)	7(3%)	3(1)	19(9%)	14(6%)
Our partners have launched training management programs for all staff working on public-private partnership projects	Male	4(2%)	4(2%)	9(4%)	99(45%)	56(25%)
	Female	1(0)	0(0%)	3(1%)	28(13%)	17(8%)
Our partners provide most of the administrative equipment on projects	Male	3(1%)	16(7%)	15(7%)	88(40%)	50 (23%)
	Female	2(1)	3(1%)	4(2%)	28(13%)	12(5%)
Our partners provide necessary supervision support on public private partnership projects	Male	17 (8%)	14(6%)	24(11%)	104 (47%)	14(6)
	Female	5(2%)	3(1%)	3(1%)	29(13%)	9(4%)
Our partners in PPP projects participate in decision making on project implementation	Male	8(4%)	17(8%)	13(6%)	89(40%)	45(20%)
	Female	4(2%)	2(1%)	7(3%)	25(11%)	11(5%)
Our partners in PPP help in proving necessary managerial coordination on projects	Male	8(4%)	16(7%)	15(7%)	102(46%)	31(14%)
	Female	2(1%)	3(1%)	4(2%)	26(12%)	14(6%)
Our PPP partners advise on the appropriate management structure of projects they participate in	Male	11(5%)	15(7%)	17(8%)	108(49%)	21(10%)
	Female	3(1%)	2(1%)	4(2%)	31(14%)	9(4%)
Our PPP Partners help in close monitoring of project implementation progress at KNH	Male	16(7%)	28(13%)	24(11%)	91(41%)	13(6%)
	Female	3(1%)	4(2%)	2(1%)	25(11%)	15(7%)

Our PPP Partners offer specialized advice on projects we implement together with them	Male	9(4%)	16(7%)	17(8%)	97(44%)	33(15%)
	Female	2(1%)	3(1%)	5(2%)	29(13%)	10(5%)

From the results in Table 4.6, it can be observed that 6 (3%) male respondents disagreed strongly to the statement asking whether partners provided the health facility with management skills necessary in project implementation compared to 4 (2%) female that disagreed strongly, 9(4%) male disagreed compared to 5(2%) female that disagreed. Additionally, 95(43%) males agreed as 47(21%) strongly agreed compared to 17(8%) female that agreed and 15(7%) female that strongly agreed. In general, more male respondents agreed to the statement compared to the female that agreed.

On the statement asking whether partners assisted with administrative communication equipment on projects they were involved in, 11(5%) male disagreed strongly compared to 6(3%) female, 18(8%) males disagreed while 7(3%) female disagreed. 86(39%) of the males agreed, 43(19%) strongly agreed compared to 19 (9%) females that agreed and 14(6%) that strongly agreed. It can be observed that in general more respondents from either gender agreed to the statement compared to those that disagreed.

On partners having launched training management programs for all staff working on public-private partnership projects, 99(45%) and 56(25%) of the respondents that agreed and strongly agreed respectively were male compared to 28(13%) and 17(8%) that agreed and strongly agreed respectively who were female. In general, however, more respondents from both genders agreed with the statement.

On partners providing most of the administrative equipment on projects, 88(40%) and 50 (23%) of male respondents agreed and strongly agreed respectively compared to

28(13%) and 12(5%) of female respondents who agreed and strongly agreed respectively. It can be observed that about 63% of the male respondents agreed compared to 18% of female gender that agreed with the statement. On whether partners in PPP projects participated in decision making on project implementation, 89(40%) and 45(20%) of male respondents agreed and strongly agreed respectively compared to 25(11%) and 11(5%) of female respondents who agreed and strongly agreed respectively. These findings show that majority of the respondents agreed across the gender divide.

As to whether partners in PPP helped in providing necessary managerial coordination on projects, 102(46%) and 31(14%) of male respondents agreed and strongly agreed respectively. For the female, 26(12%) agreed while 14(6%) strongly agreed. The proportion of those who disagreed on either gender was not significant. On whether PPP partners advised on the appropriate management structure of projects they participated in, 108(49%) of men agreed while 21(10%) strongly agreed. For female, 31(14%) agreed while 9(4%) strongly agreed. It can be seen that most male respondents agreed with the statement as compared to their female counterpart.

On PPP Partners helping in close monitoring of project implementation progress at KNH, 91(41%) of those who agreed were male, and 13(6%) males strongly agreed compared to female who made up 25(11%) of those that agreed and 25(11%) of those that agreed strongly. On PPP Partners offering specialized advice on projects, we implement together with them, 97(44%) of men agreed while another 33(15%) strongly agreed. For female respondents, 29(13%) and 10(5%) agreed and strongly agreed respectively. These findings show that respondents from both genders agreed with the statement as they made up the largest percentages.

4.6.2 Education and Managerial Support

The study carried out a cross tabulation between education level and managerial support. The findings are shown in the Table 4.7.

Table 4.7:

Cross Tabulation of Education and Managerial Support

	Education	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Partners provide us with management skills necessary in project implementation	Certificate	2(1%)	3(1%)	2(1%)	7(3%)	6(3%)
	Diploma	3(1%)	4(2%)	8(4%)	44(20%)	36(16%)
	Degree/	5(2%)	7(3%)	13(6%)	61(28%)	20(9%)
	Post-graduate					
Partners assist with administrative communication equipment on projects they are involved in	Certificate	3(1%)	4(2%)	2(1%)	8(4%)	3(1%)
	Diploma	4(2%)	7(3%)	5(4%)	49(20%)	30(16%)
	Degree/	10(5%)	14(6%)	9(4%)	48(22%)	25(11%)
	Post-graduate					
Partners have launched training management programs for all staff working on public-private partnership projects	Certificate	1(0%)	0(0%)	2(1%)	11(5%)	6(3%)
	Diploma	2(1%)	1(0%)	4(2%)	60(27%)	28(13%)
	Degree/	2(1%)	3(1%)	6(3%)	56(25%)	39(18%)
	Post-graduate					
Partners provide most of the administrative equipment on projects	Certificate	0(0%)	2(1%)	1(0%)	9(4%)	8(4%)
	Diploma	2(1%)	5(2%)	8(4%)	51(23%)	29(13%)
	Degree/	3(1%)	12(5%)	10(5%)	56(25%)	25(11%)
	Post-graduate					
Our partners provide necessary supervision support on public private partnership projects	Certificate	3(1%)	2(1%)	5(2%)	6(3%)	4(2%)
	Diploma	6(3%)	3(1%)	8(4%)	65(29%)	13(6%)
	Degree/	12(5%)	12(5%)	14(6%)	62(28%)	6(3%)
	Post-graduate					
Our partners in PPP projects participate in decision making on project implementation	Certificate	2(1%)	3(1%)	2(1%)	9(4%)	4(2%)
	Diploma	3(1%)	5(3%)	4(2%)	58(26%)	25(11%)
	Degree/	7(3%)	11(5%)	14(6%)	47(21%)	27(12%)
	Post-graduate					
Our partners in PPP help in providing necessary managerial coordination on projects	Certificate	1(0%)	3(1%)	4(2%)	8(4%)	4(2%)
	Diploma	3(1%)	5(2%)	7(3%)	54(24%)	26(12%)
	Degree/	6(3%)	11(5%)	8(4%)	66(30%)	15(7%)
	Post-graduate					
Partners advise on the appropriate	Certificate	2(1%)	3(1%)	4(2%)	9(4%)	2(1%)
	Diploma	4(2%)	3(1%)	8(4%)	61(28%)	19(9%)

management structure of projects they participate in	Degree/ Post-graduate	8(4%)	11(5%)	9(4%)	67(30%)	11(5%)
Partners help in close monitoring of project implementation progress at KNH	Certificate	2(1%)	4(2%)	3(1%)	9(4%)	2(1%)
	Diploma	4(2%)	7(3%)	6(3%)	57(26%)	21(10%)
	Degree/ Post-graduate	13(6%)	21(10%)	17(8%)	50(23%)	5(2%)
Partners offer specialized advice on projects we implement together with them	Certificate	1(0%)	4(2%)	5(2%)	8(4%)	2(1%)
	Diploma	4(2%)	6(3%)	4(2%)	62(28%)	19(9%)
	Degree/ Post-graduate	6(3%)	9(4%)	13(6%)	56(25%)	22(10%)

From the findings illustrated in the Table 4.7, it can be seen that on the partners providing us with management skills necessary in project implementation, majority of the respondents agreed at 7(3%) certificate, 44(20%) Diploma and 61(28%) being holders of Degree/ Post-graduate. Most of the respondents that agreed with the statement held Degree/ Post-graduate level of education. On partners assisting with administrative communication equipment on projects they were involved in, 8(4%) of certificate holders agreed, while 3(1%) strongly agreed. For Diploma holders, 49(20%) agreed while 30(16%). For Degree/ Post-graduate, 48(22%) agreed while 25(11%) strongly agreed. From these responses, it can be inferred that all levels of education agreed with the statement.

On partners having launched training management programs for all staff working on public-private partnership projects, Majority of those who agreed held diploma education at followed by Degree/ Post-graduate at 56(25%)60(27%). Certificate holders came in third at 11(5%). All levels of education agreed with the statement. On partners providing most of the administrative equipment on projects, most of those that agreed with the statement held Degree/ Post-graduate at 56(25%) agreed followed by those with diploma at 51(23%). Those with Certificate came in third at 9(4%). These

findings show that the Degree/ Post-graduate were confident that partners provided most of the administrative equipment on projects.

On partners providing necessary supervision support on public private partnership projects, Majority of those that agreed held a diploma at 65(29%) followed by those holding degree / post graduate studies at 62(28%). Those with certificate that agreed were 6(3%). These findings show that diploma holders agreed more with the statement than any other level of education. On partners in PPP projects participating in decision making on project implementation more diploma holders agreed at 58(26%) followed by Degree and post graduate holders at 47(21%).

On whether PPP partners advised on the appropriate management structure of projects they participated in, more degree and post graduate respondents agreed at 67(30%) followed by diploma holders at 61(28%). However, more diploma holders agreed that PPP Partners helped in close monitoring of project implementation progress at KNH at 57(26%) followed by degree holders at 50(23%). On whether PPP Partners offered specialized advice on projects that were implemented together with them more diploma holders agreed at 62(28%) followed by degree / post graduates at 56(25%). It can therefore be inferred that more diploma holders agreed with the statement.

From the observation checklist, the researcher observed that health facilities observed had received managerial support in diverse ways including: specialized training for their personnel in different medical fields. Additionally, there was mentorship and apprenticeship programs for junior medical staff which helped improve the proficiency of existing staff.

4.7 Human Resource Support

The findings of descriptive statistics on human resource support by the PPP were determined and summarized as indicated in Table 4.8.

Table 4.8:
Human Resource Support

Statement	F	%	F	%	F	%	F	%	F	%	Mean	Std. Dev
Our PPP partners second some of their technical personnel to projects being implemented at KNH	10	5	17	8	14	6	126	57	54	24	3.89	0.87
Seconded personnel support works to implement and monitor the PPP activities	9	4	15	7	21	10	117	53	59	27	3.91	1.034
The support in human resources by PPP partners has helped implement a culture of quality in our project implementation	15	7	17	8	18	8	131	59	40	18	3.74	1.005
Our PPP partners help in supervision of project teams	5	2	18	8	11	5	127	57	60	27	3.99	0.768
Our PPP partners help in training of project staff	9	4	21	10	22	10	131	59	38	17	3.76	0.686
Our PPP partners help in motivating staff in executing the project	13	6	15	7	19	9	123	56	51	23	3.85	0.834
Our PPP partners arrange for staff exchange programs to improve on skills set of our staff	9	4	20	9	9	4	138	62	45	20	3.86	0.922
Average											3.86	0.874

Table 4.8 indicate that on average, human resource support was practiced by the PPP to the studied health centres as indicated by the overall mean of (M=3.86, SD=0.874).

Human resources play a critical role in promoting project execution. The study

observed that the PPP partners helped in supervision of project teams ($M=3.99$, $SD=.768$). This means that the project teams reported to the PPP partners on the deliverables. Kaziba et al. (2017) revealed that the relationship between supervisory leadership was significant to child healthcare services, maternal healthcare services, STI/HIV/AIDS services, tuberculosis services and outpatient curative services. Findings also showed that supervisory leadership aspects include participatory decision making, period evaluation of staff performances, enhance professionalism through staff trainings, increase skill transfer and create conducive work environments.

It was noted that the seconded personnel support worked to implement and monitor the PPP activities ($M=3.91$, $SD=1.034$) since the PPP partners seconded some of their technical personnel to projects being implemented at KNH ($M=3.89$, $SD=.870$).

These findings are supported by a high proportion of respondents who agreed and strongly agreed at 53% and 27% respectively. The partners in a PPP arrangement normally possess some technical human resource which would otherwise be expensive for the Government either to engage in assignment basis or on permanent employment basis. This means some staff from PPP were seconded to the projects in question which probably contributed to effective service delivery in the health centres in question. Secondment of experienced and skilled staff to PPP projects help in ensuring that the desired quality and completion timelines are achieved.

The findings indicated that the PPP partners arranged for staff exchange programs to improve on skills set of the staff ($M=3.86$, $SD=.922$). This is supported by 62% of respondents who agreed and another 20% that strongly agreed. This shows that exchange programs were in place between the partners and the health centres and this led to transfer and sharing of experiences which might have contributed towards health

service delivery. Al-Hanawi et al. (2019) indicate that healthcare human resource development capacity is for meeting needs for healthcare HRD and absorption of young, trained Saudis in the healthcare facilities

The findings were that the PPP partners helped in motivating staff in executing the project ($M=3.85$, $SD=.834$). This is supported by 56% of respondents who agreed and 23% who strongly agreed. By having experienced and skilled staff join the project implementation teams, internal staff get to learn how activities are planned and executed for timely completion of a project within the set timeframe. This means that the staffs in the studied health centres were motivated and perhaps it contributed to effective health service delivery.

The study established that the PPP partners helped in training of project staff ($M=3.76$, $SD=.686$). This is supported by 59% of respondents that agreed and 17% that strongly agreed. This means that the staff working in the studied health centres were fully trained to allow them provides quality health care services. The support in human resources by PPP partners has helped implement a culture of quality in the project implementation ($M=3.74$, $SD=1.005$). This implies that quality was valued in the studied health centres. Goryakin et al. (2020) observed that the Adoption of high quality public financial management systems has positively impacted the service delivery and performance aspects.

The study sought to document the influence of Public Private Partnership human resource support on healthcare service delivery. The findings were that PPP HR support involved training of the existing staff in health-related matters to ensure they were competent and qualified enough as they executed their duties. Apart from the health care staff like nurses and clinicians, the study established that the project managers

implementing health care projects in the service providers were trained by the PPP on such issues as risk management.

“Human resource support has been instrumental in enhancing the skills and knowledge of the staff in this facility. The same has led to an improvement in health service delivery landscape in the facility” (Female Doctor 2)

From the observation checklist, it was observed that HR support led to engagement of such experts as cardiologists, surgeons as well as gynaecologists.”

4.7.1 Gender and Human Resource Support

The cross tabulation between gender and human resource support was extracted as shown in the Table 4.9.

Table 4.9:

Gender and Human Resource Support

	Gender	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Partners second some of their technical personnel to projects being implemented at KNH	Male	8(4%)	14(6%)	8(4%)	99(45%)	43(19%)
	Female	2(1%)	3(1%)	6(3%)	27(12%)	11(5%)
Seconded personnel support works to implement and monitor the PPP activities	Male	8(4%)	12(5%)	17(8%)	93(42%)	42(19%)
	Female	1(0%)	3(1%)	4(2%)	24(11%)	17(8%)
The support in human resources by PPP partners has helped implement a culture of quality	Male	13(6%)	14(6%)	17(8%)	94(43%)	34(15%)
	Female	2(1%)	3(1%)	1(0%)	37(17%)	6(3%)

in our project implementation						
Our PPP partners help in supervision of project teams	Male	4(2%)	16(7%)	10(5%)	98(44%)	44(20%)
	Female	1(0%)	2(1%)	1(0%)	29(13%)	16(7%)
Our PPP partners help in training of project staff						
	Male	7(3%)	18(8%)	17(8%)	105(48%)	25(11%)
	Female	2(1%)	3(1%)	5(2%)	26(14%)	13(5%)
Our PPP partners help in motivating staff in executing the project						
	Male	11(5%)	13(6%)	15(7%)	92(42%)	41(19%)
	Female	2(1%)	2(1%)	4(2%)	31(14%)	10(5%)
Our PPP partners arrange for staff exchange programs to improve on skills set of our staff						
	Male	7(3%)	17(8%)	7(3%)	110(50%)	31(14%)
	Female	2(1%)	3(1%)	2(1%)	28(13%)	14(6%)

From the results in Table 4.9, it can be observed that on the statement concerning the PPP partners seconding some of their technical personnel to projects being implemented at KNH, 8(4%) of those that strongly disagreed were male compared to 2(1%). Of those that disagreed, 14(6%) were male compared to 3(1%) female. Those that were neutral comprised on 8(4%) male and 6(3%) female. The respondents that agreed comprised on 99(45%) male and 27(12%) female. Those that strongly agreed comprised on 43(19%) male and 11(5%) female. These findings show that majority of the respondents agreed from either gender.

On seconded personnel supporting works to implement and monitor the PPP activities, 8(4%) of those that strongly disagreed were male compared to 1(0%) female. Those that disagreed comprised of 12(5%) male and 3(1%) were female. Of those that were neutral, 17(8%) were male while 4(2%) were female. Of those that agreed, 93(42%) were male and 24(11%) were female. Those that strongly agreed comprised of 42(19%)

male and 17(8%) female. These findings show that respondents from either gender were distributed across the various levels. However, majority agreed with the statement.

On whether the support in human resources by PPP partners had helped implement a culture of quality in our project implementation, 13(6%) of those that strongly disagreed were male while 2(1%) were female. This that disagreed comprised of 14(6%) male and 3(1%) female. Those that were neutral comprised of 17(8%) male and 1(0%) female. Those that agreed with the statement comprised of 94(43%) male and 37(17%). Those that strongly agreed comprised of 34(15%) male and 6(3%) female. From the responses, the respondents that agreed to strongly agree with the statement formed a bigger majority. There was no significant difference in responses across gender.

On our PPP partners helping in supervision of project teams, 4(2%) of those that strongly disagreed were male compared to 1(0%) female. Those that disagreed comprised of 16(7%) male and 2(1%) female. Those that were neutral were made up of 10(5%) male and 1(0%) female. Those that agreed with the statement comprised of 105(48%) male and 26(14%) female. Those that strongly agreed comprised of 25(11%) male and 13(5%) female.

With regard to our PPP partners helping in motivating staff in executing the project, 11(5%) of those strongly disagreed were male while 2(1%) were female. Of those that disagreed, 13(6%) were male, 2(1%) were female. Of those that were neutral, 15(7%) were male while 4(2%) were female. Of those that agreed, 92(42%) were male while 31(14%) were female. Of those that strongly agreed, 41(19%) were male while 10(5%) were female.

On our PPP partners arranging for staff exchange programs to improve on skills set of our staff, 7(3%) were male compared to 2(1%) females strongly disagreed. Of those that disagreed, 17(8%) were male compared to 3(1%) females. Those that were neutral comprised of 7(3%) male and 2(1%) female. Those that agreed were made up of 110(50%) male and 28(13%) female. The strongly agreed group were made up of 31(14%) male and 14(6%) female. These findings show that the level of agreement was fairly distributed across both genders.

4.7.2 Education and Human Resource Support

The results from the cross tabulation between educational level and human resource support was extracted as shown in the Table 4.10 below:

Table 4.10:

Education and Human Resource Support

	Education	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Our PPP partners second some of their technical personnel to projects being implemented at KNH	Certificate	1(0%)	3(1%)	4(2%)	7(3%)	5(2%)
	Diploma	4(2%)	6(3%)	3(1%)	54(24%)	28(13%)
	Degree/ Post-graduate	5(2%)	8(4%)	7(3%)	65(29%)	21(10%)
Seconded personnel support works to implement and monitor the PPP activities	Certificate	2(1%)	3(1%)	4(2%)	6(3%)	(2%)
	Diploma	4(2%)	2(1%)	6(3%)	54(24%)	29(13%)
	Degree/ Post-graduate	3(1%)	10(5%)	11(5%)	66(30%)	16(7%)
The support in human resources by PPP partners has helped implement a	Certificate	2(1%)	3(1%)	3(1%)	8(3%)	4(2%)
	Diploma	4(2%)	6(3%)	9(4%)	57(26%)	19(9%)
	Degree/ Post-graduate	9(4%)	8(4%)	6(3%)	66(30%)	17(8%)

			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
culture of quality in our project implementation	Our PPP partners help in supervision of project teams	Certificate	1(0%)	2(1%)	2(1%)	9(4%)	6(3%)
		Diploma	2(1%)	4(2%)	1(0%)	73(33%)	15(7%)
		Degree/ Post-graduate	2(1%)	12(5%)	8(4%)	45(20%)	39(18%)
Our PPP partners help in training of project staff	Our PPP partners help in motivating staff in executing the project	Certificate	2(1%)	2(1%)	3(1%)	11(5%)	2(1%)
		Diploma	4(2%)	5(2%)	8(4%)	64(29%)	14(6%)
		Degree/ Post-graduate	3(1)	14(6%)	11(5%)	56(25%)	22(10%)
Our PPP partners arrange for staff exchange programs to improve on skills set of our staff	Our PPP partners help in motivating staff in executing the project	Certificate	1(0%)	3(1%)	4(2%)	8(4%)	4(2%)
		Diploma	3(1%)	5(2%)	6(3%)	61(28%)	20(9%)
		Degree/ Post-graduate	9(4%)	7(3%)	9(4%)	54(24%)	27(12%)
Our PPP partners arrange for staff exchange programs to improve on skills set of our staff	Our PPP partners help in motivating staff in executing the project	Certificate	2(1%)	3(1%)	1(0%)	12(5%)	2(1%)
		Diploma	2(1%)	5(2%)	3(1%)	69(31%)	16(7%)
		Degree/ Post-graduate	5(2%)	12(5%)	5(2%)	57(26%)	27(12%)

From the Table 4.10, it can be seen that on our PPP partners seconding some of their technical personnel to projects being implemented at KNH, of those that strongly disagreed, 1(0%) were certificate holders, 4(2%) were diploma holders, 5(2%) were Degree/ Post-graduate holders. Of those that disagreed, majority had Degree/ Post-graduate at 8(4%) same to those who were neutral at 7(3%). Of those that agreed, 7(3%) had certificate, 54(24%) had diploma while 65(29%) had Degree/ Post-graduate. Of the respondents that strongly agreed, 5(2%) had certificate, 28(13%) were diploma

holders whereas 21(10%) were Degree/ Post-graduate. These findings show that the respondents were distributed across all educational levels.

On the seconded personnel supporting works to implement and monitor the PPP activities, those that disagreed comprised of 2(1%) certificate, 4(2%) Diploma and 3(1%) degree and postgraduate. Those that disagreed comprised of 3(1%) certificate, 2(1%) diploma and 10(5%) degree / postgraduate. The neutral respondents included 4(2%) certificate, 6(3%) diploma and 11(5%) degree/postgraduate. Of those that agreed, 6(3%) had certificate, 54(24%) diploma and 66(30%) degree/postgraduate. Of those that strongly agreed, 5(2%) had certificate, 29(13%) diploma and 16(7%) degree/postgraduate. These findings show that the respondents were distributed across different educational levels.

On the support in human resources by PPP partners having helped implement a culture of quality in our project implementation, those that disagreed comprised of 2(1%) certificate, 4(2%) Diploma and 9(4%) degree and postgraduate. Those that disagreed comprised of 3(1%) certificate, 6(3%) diploma and 8(4%) degree / postgraduate. The neutral respondents included 3(1%) certificate, 9(4%) diploma and 6(3%) degree/postgraduate. Of those that agreed, 8(3%) had certificate, 57(26%) diploma and 66(30%) degree/postgraduate. Of those that strongly agreed, 4(2%) had certificate, 19(9%) diploma and 17(8%) degree/postgraduate.

On our PPP partners helping in supervision of project teams, those that disagreed comprised of 1(0%) certificate, 2(1%) Diploma and 2(1%) degree and postgraduate. Those that disagreed comprised of 2(1%) certificate, 4(2%) diploma and 12(5%) degree / postgraduate. The neutral respondents included 2(1%) certificate, 1(0%) diploma and 8(4%) degree/post graduate. Of those that agreed, 9(4%) had certificate, 73(33%)

diploma and 45(20%) degree/post graduate. Of those that strongly agreed, 6(3%) had certificate, 15(7%) diploma and 39(18%) degree/post graduate.

On the statement relating to our PPP partners helping in training of project staff, those that disagreed comprised of 2(1%) certificate, 4(2%) Diploma and 3(1%) degree and postgraduate. Those that disagreed comprised of 2(1%) certificate, 5(2%) diploma and 14(6%) degree / postgraduate. The neutral respondents included 3(1%) certificate, 8(4%) diploma and 11(5%) degree/postgraduate. Of those that agreed, 11(5%) had certificate, 64(29%) diploma and 56(25%) degree/postgraduate. Of those that strongly agreed, 2(1%) had certificate, 14(6%) diploma and 22(10%) degree/postgraduate.

On our PPP partners helping in motivating staff in executing the project, those that disagreed comprised of 1(0%) certificate, 3(1%) Diploma and 9(4%) degree and postgraduate. Those that disagreed comprised of 3(1%) certificate, 5(2%) diploma and 7(3%) degree / postgraduate. The neutral respondents included 4(2%) certificate, 6(3%) diploma and 9(4%) degree/postgraduate. Of those that agreed, 8(4%) had certificate, 61(28%) diploma and 54(24%) degree/postgraduate. Of those that strongly agreed, 4(2%) had certificate, 20(9%) diploma and 27(12%) degree/postgraduate.

On our PPP partners arranging for staff exchange programs to improve on skills set of our staff, those that disagreed comprised of 2(1%) certificate, 2(1%) Diploma and 5(2%) degree and postgraduate. Those that disagreed comprised of 3(1%) certificate, 5(2%) diploma and 12(5%) degree / postgraduate. The neutral respondents included 1(0%) certificate, 3(1%) diploma and 5(2%) degree/postgraduate. Of those that agreed, 12(5%) had certificate, 69(31%) diploma and 57(26%) degree/postgraduate. Of those that strongly agreed, 2(1%) had certificate, 16(7%) diploma and 27(12%) degree/postgraduate.

From the observation checklist, the researcher observed that health facilities received support in human resources in the form of attachment and seconding of specialized medical experts in different medical fields. Other professional experts were drawn from engineering, project management and evaluation. The experts were many most of whom were availed on need basis.

4.8 Risk Sharing

The findings of descriptive statistics on risk sharing by the PPP were determined and summarized as indicated in Table 4.11.

Table 4.11:
Risk Sharing

Statement	F	%	F	%	F	%	F	%	F	%	Mean	Std. Dev
The partners help in managing risks associated with infrastructure projects	8	4	22	10	11	5	134	61	46	21	3.85	0.79
The PPP partners are informed on risks inherent with the project or program	17	8	22	10	14	6	129	58	39	18	3.68	0.985
Installed monitoring and control measures during the implementation phase ensure quality service delivery	15	7	11	5	21	10	127	57	48	22	3.84	0.947
Partners in the PPP evaluate projects to ascertain whether the impact has been attained	12	5	18	8	21	10	136	62	34	15	3.73	0.936
Our PPP partners help us in choosing	13	6	21	10	14	6	117	53	56	25	3.82	0.705

projects that bear reasonable risks													
Our PPP partners help us minimise exposure to risks inherent in project implementation	14	6	25	11	21	10	124	56	37	17	3.65	0.869	
Our PPP partners train our staff on risk management	8	4	16	7	16	7	135	61	46	21	3.88	0.642	
Average											3.78	0.839	

As per the results in Table 4.11, the study observed that risk sharing between the partners and the health centres were practiced to a great extent as expressed in the average of (M=3.78, SD=0.839). It was observed that the PPP partners trained staff on risk management (M=3.88, SD=.642). This implies that the staffs from the studied health centres were well versed with risk management because of the training they received from the partners. Shrestha et al. (2018) indicate that risk allocation practices are not ideal and they are main cause of project failures. Wang et al. (2020) shared that PPP projects have placed a lot of focus in risk management for success of the projects.

It was noted that the partners helped in managing risks associated with infrastructure projects (M=3.85, SD=.790). This means that the partners were actively involved in risk management practices and activities in the studied health centres, and this contributed to health service delivery. The study documented that installed monitoring and control measures during the implementation phase ensured quality service delivery (M=3.84, SD=.947). This means that the implementation of projects in the studied institutions was supported by strong monitoring and control systems. It was established that the PPP partners helped the health centres in choosing projects that bared reasonable risks (M=3.82, SD=.705). This means that projects in the studied health centres were rated to ensure they had reasonable risks.

It emerged that partners in the PPP evaluated projects to ascertain whether the impact had been attained (M=3.73, SD=.936). This means that impact analysis was conducted on the projects that were implemented in the studied health centres. The findings showed that the PPP partners were informed on risks inherent with the project or program (M=3.68, SD=.985). This means that there was flow of information on risk management activities between the project managers in the health centres and the partners. Respondents observed that the PPP partners helped them minimise exposure to risks inherent in project implementation (M=3.65, SD=.869). This shows that the partners played an instrumental role in the risk management activities of the projects implemented by the health centres. e.g A health workers had the following to say during a key informant interview

“Risk management is an important aspect of a health care system as it helps to mitigate the possibility of occurrence of an event that may have negative implications on the health care services. As such, risk sharing in PPP was instrumental pillar and predictor of quality healthcare service delivery” (Female Nurse 1)

4.7.1 Gender and Risk Sharing

The findings of cross tabulation between gender and risk sharing was as shown in the Table 4.12

Table 4.12:

Gender and Risk Sharing

Statement	Gender	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The partners help in managing risks associated with infrastructure projects	Male	6(3%)	18(8%)	8(4%)	108(49%)	32(14%)
	Female	2(1%)	4(2%)	3(1%)	26(12%)	14(6%)

The PPP partners are informed on risks inherent with the project or program	Male	13(6%)	19(9%)	11(5%)	102(46%)	27(12%)
	Female	4(2%)	3(1%)	3(1%)	27(12%)	12(5%)
Installed monitoring and control measures during the implementation phase ensure quality service delivery	Male	13(6%)	9(4%)	17(8%)	101(46%)	32(14%)
	Female	2(1%)	2(1%)	4(2%)	26(12%)	15(7%)
Partners in the PPP evaluate projects to ascertain whether the impact has been attained	Male	9(4%)	14(6%)	16(7%)	111(50%)	22(10%)
	Female	3(1%)	4(2%)	5(2%)	25(11%)	12(5%)
Our PPP partners help us in choosing projects that bear reasonable risks	Male	11(5%)	18(8%)	12(5%)	89(40%)	42(19%)
	Female	2(1%)	3(1%)	2(1%)	28(13%)	14(6%)
Our PPP partners help us minimise exposure to risks inherent in project implementation	Male	11(5%)	22(10%)	16(7%)	92(42%)	31(14%)
	Female	3(1%)	3(1%)	5(2%)	32(14%)	6(3%)
Our PPP partners train our staff on risk management	Male	6(3%)	13(6%)	12(5%)	111(50%)	30(14%)
	Female	2(1%)	3(1%)	4(2%)	24(11%)	16(7%)

From the results in Table 4.12, it can be observed that on the partners helping in managing risks associated with infrastructure projects, those that strongly disagreed were made up of 6(3%) male and 2(1%) female. Those that disagreed comprised 18(8%) male and 4(2%) female. The neutral lot comprised of 8(4%) male and 3(1%) female. Those that agreed with the statement comprised of 108(49%) male and 26(12%) female. Those that strongly agreed comprised 32(14%) male and 14(6%) female. These findings show that the responses were fairly distributed across both genders. The trends are similar in both genders.

On the PPP partners being informed on risks inherent with the project or program, 13(6%) of those that strongly disagreed were male compared to 4(2%) who were female. Those who disagreed comprised 19(9%) male and 3(1%) female. The neutral group comprised of 11(5%) male and 3(1%) female. Those that agreed were made up of 102(46%) male and 27(12%) female. Of those that strongly agreed, 27(12%) were male while 12(5%) were female.

On whether installed monitoring and control measures during the implementation phase ensured quality service delivery, those that strongly disagreed were made up of 13(6%0 male and 2(1%) female, those that disagreed comprised 9(4%) male and 2(1%) female. The neutral respondents included 17(8%) male and 4(2%) female. Those that agreed were made up 101(46%) male and 26(12%0 female. For those that strongly agreed, 32(14%) were male while 15(7%) were female. On partners in the PPP evaluating projects to ascertain whether the impact had been attained, 9(4%) of those that strongly disagreed were male compared to 3(1%) who were female. Of those that disagreed, 14(6%) were male whereas 4(2%) were female. Of the neutral respondents, 16(7%) were male while 5(2%) were female. Of those that agreed, 111(50%) were male compared to 25(11%) who were female. Of those that strongly agreed, 22(10%) were male while 12(5%) were female.

On our PPP partners helping us in choosing projects that bear reasonable risks, 11(5%) of that strongly disagreed were male compared to 2(1%) females. Those that disagreed comprised of 18(8%) male and 3(1%) female. The neutral respondents comprised of 12(5%) compared to 2(1%) females. Of those that strongly agreed, 89(40%) were male compared to 28(13%) females. The respondents that strongly agreed comprised 42(19%) male and 14(6%) female. These findings show that majority of the respondents across each gender agreed with the statement.

On our PPP partners helping us minimise exposure to risks inherent in project implementation, those that strongly agreed comprised of 11(5%) male and 3(1%) female. Those that disagreed comprised of 22(10%) male and 3(1%) female. Of the neutral respondents, 16(7%) were male compared to 5(2%) female. Those that agreed were made up of 92(42%) male and 32(14%) female. Those that strongly agreed with the statement comprised of 31(14%) male and 6(3%) female. These responses show that the responses were distributed across all response levels regardless of the gender.

On our PPP partners training our staff on risk management, 6(3%) of those that strongly disagreed were male compared to 2(1%) females. Of the respondents that disagreed, 13(6%) were male compared to 3(1%) females. Of the neutral respondents, 12(5%) were male compared to 4(2%) females. Of the respondents that agreed with the statement, 111(50%) were male compared to 24(11%) females. Of those that strongly agreed, 30(14%) were male compared to 16(7%) females.

4.7.2 Education and Risk Sharing

The study further conducted a cross tabulation of education and risk sharing as shown in the Table 4.13.

Table 4.13:

Education and Risk Sharing

Statement	Education	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The partners help in managing risks associated with infrastructure projects	Certificate	1(0%)	3(1%)	2(1%)	9(4%)	5(2%)
	Diploma	4(2%)	6(3%)	4(2%)	66(30%)	15(7%)
The PPP partners are informed on risks inherent with the project or program	Degree/ Post-graduate	3(1%)	13(6%)	5(2%)	59(27%)	26(12%)
	Certificate	2(1%)	3(1%)	2(1%)	9(4%)	4(2%)
Installed monitoring and control measures during the implementation phase ensure quality service delivery	Diploma	4(2%)	8(4%)	5(2%)	55(25%)	23(10%)
	Degree/ Post-graduate	11(5%)	11(5%)	7(3%)	65(29%)	12(5%)
Partners in the PPP evaluate	Certificate	2(1%)	1(0%)	2(1%)	10(5%)	5(2%)
	Diploma	4(2%)	4(2%)	9(4%)	52(24%)	26(12%)
	Degree/ Post-graduate	9(4%)	6(3%)	10(5%)	65(29%)	16(7%)
	Certificate	2(1%)	2(1%)	3(1%)	11(5%)	2(1%)

projects to ascertain whether the impact has been attained		Diploma	4(2%)	6(3%)	5(2%)	54(24%)	26(12%)
		Degree/Post-graduate	6(3%)	10(5%)	13(6%)	71(32%)	6(2%)
Our PPP partners help us in choosing projects that bear reasonable risks		Certificate	3(1%)	3(1%)	3(1%)	8(4%)	3(1%)
		Diploma	4(2%)	6(3%)	2(1%)	71(32%)	12(5%)
		Degree/Post-graduate	6(3%)	12(5%)	9(4%)	38(17%)	41(19%)
Our PPP partners help us minimise exposure to risks inherent in project implementation		Certificate	3(1%)	3(1%)	3(1%)	7(3%)	4(2%)
		Diploma	2(1%)	8(4%)	7(3%)	62(28%)	16(7%)
		Degree/Post-graduate	9(4%)	14(6%)	11(5%)	55(25%)	17(8%)
Our PPP partners train our staff on risk management		Certificate	1(0%)	2(1%)	1(0%)	10(5%)	6(3%)
		Diploma	3(1%)	6(3%)	5(2%)	59(27%)	22(10%)
		Degree/Post-graduate	4(2%)	8(4%)	10(5%)	66(30%)	18(8%)

From the Table 4.13, the responses on the partners helping in managing risks associated with infrastructure projects, those that disagreed comprised of 1(0%) certificate, 4(2%) Diploma and 3(1%) degree and postgraduate. Those that disagreed comprised of 3(1%) certificate, 6(3%) diploma and 13(6%) degree / postgraduate. The neutral respondents included 2(1%) certificate, 4(2%) diploma and 5(2%) degree/postgraduate. Of those that agreed, 9(4%) had certificate, 66(30%) diploma and 59(27%) degree/postgraduate. Of those that strongly agreed, 5(2%) had certificate, 15(7%) diploma and 26(12%) degree/postgraduate.

On the PPP partners being informed on risks inherent with the project or program, those that disagreed comprised of 2(1%) certificate, 4(2%) Diploma and 11(5%) degree and postgraduate. Those that disagreed comprised of 3(1%) certificate, 8(4%) diploma and

11(5%) degree / postgraduate. The neutral respondents included 2(1%) certificate, 8(4%) diploma and 11(5%) degree/postgraduate. Of those that agreed, 9(4%) had certificate, 55(25%) diploma and 65(29%) degree/postgraduate. Of those that strongly agreed, 4(2%) had certificate, 23(10%) diploma and 12(5%) degree/postgraduate.

In relation to installed monitoring and control measures during the implementation phase ensuring quality service delivery, those that disagreed comprised of 2(1%) certificate, 4(2%) Diploma and 9(4%) degree and postgraduate. Those that disagreed comprised of 1(0%) certificate, 4(2%) diploma and 6(3%) degree / postgraduate. The neutral respondents included 2(1%) certificate, 9(4%) diploma and 10(5%) degree/postgraduate. Of those that agreed, 10(5%) had certificate, 52(24%) diploma and 65(29%) degree/postgraduate. Of those that strongly agreed, 5(2%) had certificate, 26(12%) diploma and 16(7%) degree/postgraduate.

On the Partners in the PPP evaluating projects to ascertain whether the impact had been attained, those that disagreed comprised of 2(1%) certificate, 4(2%) Diploma and 6(3%) degree and postgraduate. Those that disagreed comprised of 2(1%) certificate, 6(3%) diploma and 10(5%) degree / postgraduate. The neutral respondents included 3(1%) certificate, 5(2%) diploma and 13(6%) degree/postgraduate. Of those that agreed, 11(5%) had certificate, 54(24%) diploma and 71(32%) degree/postgraduate. Of those that strongly agreed, 2(1%) had certificate, 26(12%) diploma and 6(2%) degree/postgraduate.

On our PPP partners helping us in choosing projects that bear reasonable risks, those that disagreed comprised of 3(1%) certificate, 4(2%) Diploma and 6(3%) degree and postgraduate. Those that disagreed comprised of 3(1%) certificate, 6(3%) diploma and 12(5%) degree / postgraduate. The neutral respondents included 3(1%) certificate,

2(1%) diploma and 9(4%) degree/postgraduate. Of those that agreed, 8(4%) had certificate, 71(32%) diploma and 38(17%) degree/postgraduate. Of those that strongly agreed, 3(1%) had certificate, 12(5%) diploma and 41(19%) degree/postgraduate.

On our PPP partners helping us minimise exposure to risks inherent in project implementation, those that disagreed comprised of 3(1%) certificate, 2(1%) Diploma and 9(4%) degree and postgraduate. Those that disagreed comprised of 3(1%) certificate, 8(4%) diploma and 14(6%) degree / postgraduate. The neutral respondents included 3(1%) certificate, 7(3%) diploma and 11(5%) degree/postgraduate. Of those that agreed, 7(3%) had certificate, 62(28%) diploma and 55(25%) degree/postgraduate. Of those that strongly agreed, 4(2%) had certificate, 16(7%) diploma and 17(8%) degree/postgraduate.

On our PPP partners training our staff on risk management, those that disagreed comprised of 1(0%) certificate, 3(1%) Diploma and 4(2%) degree and postgraduate. Those that disagreed comprised of 2(1%) certificate, 6(3%) diploma and 8(4%) degree / postgraduate. The neutral respondents included 1(0%) certificate, 5(2%) diploma and 10(5%) degree/postgraduate. Of those that agreed, 10(5%) had certificate, 59(27%) diploma and 66(30%) degree/postgraduate. Of those that strongly agreed, 6(3%) had certificate, 22(10%) diploma and 18(8%) degree/postgraduate.

From the observation checklist, the researcher observed that health facilities were able to share different risks with the private partners. This included risks associated with raising finances needed for the project, project monitoring and evaluation. Other risks that were shared included management of financial resources which have always been a scarce resource.

4.9 Service Delivery

The findings of descriptive statistics on service delivery among the PPP was determined and summarized as indicated in Table 4.14.

Table 4.14:

Service Delivery

Statement	Mean	Std. Deviation
PPP financial support has ensured that projects are completed on Time at KNH	3.8778	.97165
PPP financial support has resulted in better Services offered at the 3 HC facilities (H&HC)	3.2941	.85249
PPP financial support has resulted in improved Time taken to deliver services	3.6425	.70311
Managerial support has ensured that projects are completed on Time at KNH	3.6471	.85936
Managerial support has resulted in better Services offered at the 3 HC facilities (H&HC)	3.6878	.77886
Managerial support has resulted in improved Time taken to deliver services	3.6878	.68575
PPP human resource support has ensured that projects are completed on Time at KNH	3.6606	.58600
PPP human resource support has resulted in better Services offered at the 3 HC facilities (H&HC)	3.8371	.88968
PPP human resource support has resulted in improved Time taken to deliver services	3.8009	.91264
PPP risk sharing has ensured that projects are completed on Time at KNH	3.4389	.94970
PPP risk sharing has resulted in better Services offered at the 3 HC facilities (H&HC)	3.3167	.68033
PPP risk sharing has resulted in improved Time taken to deliver services	3.4389	.89042

As shown in Table 4.14, on whether PPP financial support had ensured that projects were completed on Time at KNH, the mean score was 3.8778 with a standard deviation of 0.97165 implying that the respondents agreed with the statement. The respondents were however neutral on whether PPP financial support has resulted in better Services offered at the 3 HC facilities (H&HC) as the mean fell below 3.5 to 3.2941. These

results indicate that the respondents could not ascertain with certainty whether PPP financial support had resulted in better Services offered at the 3 HC facilities or not. They were in different.

On whether PPP financial support had resulted in improved time taken to deliver services, the mean score was 3.6425 with a standard deviation of 0.70311 indicating that the respondents agreed. The respondents also agreed with the statement saying that managerial support had ensured that projects were completed on Time at KNH as supported by a mean of 3.6471 with a standard deviation of 0.85936.

On whether managerial support had resulted in better Services offered at the 3 HC facilities (H&HC), the mean was 3.6878 with a standard deviation of .77886. These findings indicate that the respondents agreed with the statement. The respondents further agreed that managerial support had resulted in improved Time taken to deliver services as supported by a mean of 3.6878 with a standard deviation of 0.68575.

On the influence that PPP human resource support had on the projects the respondents agreed that PPP human resource support had ensured that projects were completed on Time at KNH are completed on Time at KNH as shown by a mean of 3.6606 with a standard deviation of 0.58600. PPP human resource support had resulted in better Services offered at the 3 HC facilities (H&HC) as shown by a mean of 3.8371 with a standard deviation of 0.88968. The respondents further agreed that PPP human resource support has resulted in improved Time taken to deliver services as shown by a mean of 3.8009 with a standard deviation of 0.91264.

On risk sharing, the respondents were somewhat neutral on the statement PPP risk sharing had ensured that projects were completed on Time at KNH as supported by a

mean of 3.4389 with a standard deviation of 0.94970. They further were in different on the statement PPP risk sharing had resulted in better Services offered at the 3 HC facilities (H&HC) as shown by a mean of 3.3167 and a standard deviation of 0.690833. The respondents were further neutral on the statement PPP risk sharing had resulted in improved Time taken to deliver services as shown by a mean of 3.4389 with a standard deviation of 0.89042.

4.10 Pearson of Moment Correlation

In order to establish the strength of the relationship between the independent variable and dependent variable, the study conducted a Moment of Pearson Correlation whose results are shown in the Table 4.15:

Table 4.15:

Moment of Pearson Correlation

Variable		Service Delivery	Financial Support	Managerial Support	Human Resource Support	Risk Sharing
Service Delivery	Pearson Correlation	1				
	Sig (2-tailed)					
	N	221				
Financial Support	Pearson Correlation	.845	1			
	Sig (2-tailed)	.00				
	N	221	221			
Managerial Support	Pearson Correlation	.218	.114	1		
	Sig (2-tailed)	.001	.092			
	N	221	221	221		

Human Resource Support	Pearson Correlation	.685	.556	.072	1	
	Sig. (2-tailed)	.00	.000	.235		
	N	221	221	221	221	
Risk Sharing	Pearson Correlation	.478	.444	.160	.458	1
	Sig. (2-tailed)	.00	.000	.017	.000	
	N	221	221	221	221	221

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

From the results in Table 4.15, it can be noted that financial support together with Human resource support has the greatest strong positive influence on service delivery of 0.845 and 0.685 respectively fully. Risk sharing has a positive weak influence as shown by 0.478 whereas managerial support had 0.218 indicating a weak positive influence with service delivery.

4.11 Model Summary

Regression analysis was conducted to establish the effect of PPP on health service delivery. This was meant to support the drawing of relevant inferences. Table 4.16 is an overview of the regression model summary.

Table 4.16:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.895	.801	.797	1.35648

Table 4.16 indicate that 80.1% change in health care service delivery in Nairobi County Kenya is explained by Public-Private Partnerships ($R^2=0.801$). This has an implication that aside from PPP, there are still some factors that have an influence on health care

service delivery which future studies should focus on. Table 4.7 is the breakdown of the regression beta coefficients and the significance as determined through the p-values.

Table 4.17:

Beta Coefficients and Significance

	Unstandardized		Standardize	t	Sig.
	Coefficients		d		
	B	Std. Error	Beta		
(Constant)	9.388	2.399		3.913	.000
Financial Support	1.428	.087	.631	16.492	.000
Managerial Support	.191	.043	.140	4.433	.000
Human Resource Support	.196	.027	.282	7.381	.000
Risk Sharing	.090	.036	.091	2.488	.014

The resultant model predicting PPP on health care service delivery from Table 4.17 is specified as under:

$$Y = 9.388 + 1.428X_1 + .191X_2 + .196X_3 + .090X_4$$

Where:

Y = Service Delivery

X₁ = Financial Support

X₂ = Managerial support

X₃ = Human Resource Support

X₄ = Risk sharing

The first objective of the study sought to determine the influence of PPP financial support on healthcare service delivery within Nairobi County. From the findings in Table 4.7, PPP financial support ($\beta=1.428$, $p<0.005$) was significant. Thus, the study infers that PPP financial support is a significant predictor of healthcare service delivery

within Nairobi County. This finding concurs with Goryakin et al (2020) who observed that the adoption of high quality public financial management systems has positively impacted the service delivery and performance aspects. The finding is consistent Nyasetia (2020) who showed that PPP managerial support, PPP human support, PPP procurement support and PPP financial support led to improved healthcare service delivery.

The study aimed at ascertaining the influence of PPP managerial support on healthcare service delivery within Nairobi County. From the results, PPP managerial support ($\beta=.191$, $p<0.005$) was found to be significant. Hence, the study deduces that PPP managerial support significantly contributes towards healthcare service delivery within Nairobi County. The result agrees with King'oo (2017) who showed that management support at the county government in Nairobi is through managerial support, structure, change management practices, availing resources and facilities had improved service delivery.

The focus of the study was on establishing the influence of PPP human resource support on healthcare service delivery within Nairobi County. It emerged from the analysis that PPP human resource support ($\beta=.196$, $p<0.005$) had significant effect on healthcare service delivery within Nairobi County. The finding is consistent Nyasetia (2020) who showed that PPP managerial support, PPP human support, PPP procurement support and PPP financial support led to improved healthcare service delivery. Joachim (2020) observed that human resource support works to implement and monitor the PPP activities and create opportunities for partnerships for service delivery.

The study sought to assess the influence of PPP risk-sharing on healthcare service delivery within Nairobi County. The results demonstrated that PPP risk-sharing

($\beta=.090$, $p<0.005$) had significant implication on healthcare service delivery within Nairobi County. This result is supported by Wang et al (2020) who shared that PPP projects have placed a lot of focus in risk management for success of the projects. At the same time, Wang et al. (2020) noted that PPP projects have placed a lot of focus in risk management for success of the projects and some of the risk factors include risk relationship network, individual attributes and cohesion in the sub-groups. The second aspect is the highly vulnerable and easily influenced risk factors like completion risks, insufficient resources and revenues and changes in fee cost. Others included legal changes, public objection and financing risks that affect project delivery.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter details a summary of the analysed findings, the conclusion and recommendations. The areas for further research are also pointed out.

5.2 Summary of the Findings

5.2.1 Financial Support and Healthcare Service Delivery

Regression results indicate that PPP financial support is a significant predictor of healthcare service delivery within Nairobi County. On overall, financial support was among the highly practiced aspect of Public-Private Partnerships in the studied health centres in Nairobi. Respondents agreed that the partners dispatched funds based on the budgetary line. Respondents agreed that the partners dictated how fund utilization was done. The study reported that the project budgets were approved by the PPP partners. The study observed that the partnership ensured adequate funding for operations in the hospital. It emerged from the analysis that most of operations were funded by partners. Respondents observed that their partners financed infrastructure projects at the hospital. Respondents indicated that partners had measures to control project expenses.

5.2.2 Managerial Support and Healthcare Service Delivery

The regression results were that PPP managerial support significantly contributes towards healthcare service delivery within Nairobi County. Managerial support was highly evident to the health centres that were studied. Respondents observed that their partners had launched training management programs for all staff working on public-private partnership projects. The study established that the partners provided the health

centres with management skills necessary in project implementation. Respondents observed that their partners provided most of the administrative equipment on projects. Respondents shared that their partners in PPP projects participated in decision making on project implementation. The study further established that partners in PPP helped in providing necessary managerial coordination on projects. It was established that the PPP Partners offered specialized advice on projects that they implemented together with them. The study established that the partners assist with administrative communication equipment on projects they were involved in. Respondents were in agreement that their PPP partners advised on the appropriate management structure of projects they participated in besides providing necessary supervision support on public private partnership projects.

5.2.3 Human Resource Support and Healthcare Service Delivery

Based on regression analysis, PPP human resource support had significant effect on healthcare service delivery within Nairobi County. On average, human resource support was practiced by the PPP to the studied health centres. The study observed that the PPP partners helped in supervision of project teams. It was noted that the seconded personnel supported worked to implement and monitor the PPP activities since the PPP partners seconded some of their technical personnel to projects being implemented at KNH. The findings indicated that the PPP partners arranged for staff exchange programs to improve on skills set of the staff. The findings were that the PPP partners helped in motivating staff in executing the project. The study established that the PPP partners helped in training of project staff. The support in human resources by PPP partners has helped implement a culture of quality in the project implementation.

5.2.4 Risk Sharing and Healthcare Service Delivery

The study observed that PPP risk-sharing had significant implication on healthcare service delivery within Nairobi County. Risk sharing between the partners and the health centres were practiced to a great extent. It emerged that the PPP partners trained staff on risk management. It was noted that the partners helped in managing risks associated with infrastructure projects. The study documented that installed monitoring and control measures during the implementation phase ensured quality service delivery. It was established that the PPP partners helped the health centres in choosing projects that bared reasonable risks. It emerged that partners in the PPP evaluated projects to ascertain whether the impact had been attained. The findings showed that the PPP partners were informed on risks inherent with the project or program. Respondents observed that the PPP partners helped them minimise exposure to risks inherent in project implementation.

5.3 Conclusion

5.3.1 Financial Support and Healthcare Service Delivery

PPP financial support is a significant predictor of healthcare service delivery within Nairobi County. The commitment of PPP towards health care service delivery was demonstrated through their financial support that was highly practiced. Through this financial support by the PPP, funds were dispatched to the health centres based on the budgetary lines. The partners had an opportunity to dictate the manner which funds were being utilized in the health centres that they partnered with.

5.3.2 Managerial Support and Healthcare Service Delivery

PPP managerial support significantly contributes towards healthcare service delivery within Nairobi County. PPP exhibited their commitment towards supporting healthcare service delivery through offering managerial support. The management support from PPP supported training and skills development. The managerial support of the PPP to the health centres was also demonstrated through administrative support and in decision making processes.

5.3.3 Human Resource Support and Healthcare Service Delivery

PPP human resource support had significant effect on healthcare service delivery within Nairobi County. HR support was provided by the PPP to the health centres that were covered. The HR support allowed the PPP to provide supervisory support and seconding of personnel to the health centres to support the implementation of projects for effective health care service delivery.

5.3.4 Risk Sharing and Healthcare Service Delivery

There was sharing of risks between the PPP and the health centres, and this significantly enhanced the health care service delivery. It was observed that the partners supported the risk management activities of the projects carried out in the health centres through provision of risk management training to employees, risks associated with infrastructure projects were managed by partners and that monitoring, and control measures of risks had been installed in the centres through PPP. Projects that bore reasonable risks were chosen in the studied health centres with the support of the PPP partners.

5.4 Recommendations for Management and Policy

With regard to the first objective of financial support, the study recommends that the finance managers of the health care providers in Nairobi City County in Kenya should exercise prudence in spending of the money disbursed by PPP in executing projects that significantly contribute towards effective health care service delivery. The management team of the PPP should disburse funds to health care providers in Nairobi City County on time for execution of projects.

In view of the second objective of managerial support, the study recommends that the PPP should provide necessary support to the leadership and the top management team working in the health care providers in Nairobi to ensure effective health service delivery is attained.

Based on the third objective, it is recommended that PPP should collaborate and work closely with the HR managers of the health care service providers in Nairobi City County to provide state of the art training to employees so that they are up-to-date with the changing dynamics.

On the last objective, the study recommends that risk managers working in the health care providers in Nairobi should collaborate and work together with the PPP to ensure effective risk management practices are embraced in the projects that are implemented.

5.4 Suggestions for Further Research

In the present study, it was observed that 80.1% change in health care service delivery was explained by PPP. This means that there exist other factors that have an influence on health service delivery which should open a ground for further research. Future

studies should also be conducted to establish the challenges of implementing PPP projects in the health care sector in Kenya. Aside from selecting only three health care facilities providers, future studies should be done using more providers to support robust generation of the findings to the entire health sector in Kenya.

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APPENDICES

Appendix I: Health-Care Providers' Questionnaire

Introduction and Consent

My Name is Winfred Nzioka a post graduate student from Kenya Methodist University. I am conducting a research study titled "Public-Private Partnership and Healthcare Delivery in Nairobi County". There are no direct benefits but the study will inform healthcare partners in improving healthcare delivery in the County. I request that you spare a few minutes of your time and share with me your experience in accessing healthcare services at this health facility. Your response will be handled with highest level of confidentiality. You will be requested to consent verbally to show that the information was shared willingly without being compelled. Thank you.

INSTRUCTIONS

Kindly fill the questionnaire by putting a tick \surd in the appropriate box or by writing your response in the provided spaces.

PART A DEMOGRAPHIC DATA

1. Kindly indicate your age
18-25 [] 26-35 [] 36-45 [] above 46 []
2. Indicate your Gender.
Male Female Other specify.....
3. What is your level of education?
Certificate
Diploma
Degree/ Post-graduate
Others kindly specify.....
4. Indicate the healthcare facility you work in

Kenyatta National Hospital (KNH)

Mbagathi District Hospital (MDH)

Kibera South Health Centre (KSHC)

5. What is your role? a) Clinician [] b) Nurse [] Pharmacist []
Other kindly specify

6. How long have you worked in this facility?

Less than one year

Between 1-4 years

Between 5-10 years

Above 10 years

SECTION B: FINANCIAL SUPPORT AND SERVICE DELIVERY

7. Please mark the number that best reflects your level of agreement in the following statements by selecting the most appropriate.

Key: Sa- Strongly Agree, A: Agree, UD-Uncecided, D: Disagree, SD: Strongly Disagree

Statement	SD	D	UD	A	SA
Most of operations are funded by our partners					
The partners finance infrastructure projects at the hospital					
The partnership ensures adequate funding for operations in the hospital					
The partners dictate how fund utilization will be done					
Partner have measures to control project expenses					
The partners dispatch funds based on the budgetary line					
The project budgets are approved by the PPP partners					

SECTION C: MANAGERIAL SUPPORT AND SERVICE DELIVERY

8. Below are several statements in relation to managerial support offered by public private partners in ensuring project delivery. Kindly indicate the extent of your agreement with each statement in as far as affairs are at Kenyatta National Hospital. **Key: Sa- Strongly Agree, A: Agree, UD-Undecided, D: Disagree, SD: Strongly Disagree**

Statement	SD	D	UD	A	SA
Our partners provide us with management skills necessary in project implementation					
Our partners assist with administrative communication equipment on projects they are involved in					
Our partners have launched training management programs for all staff working on public-private partnership projects					
Our partners provide most of the administrative equipments on projects					
Our partners provide necessary supervision support on public private partnership projects					
Our partners in PPP projects participate in decision making on project implementation					
Our partners in PPP help in proving necessary managerial coordination on projects					
Our PPP partners advise on the appropriate management structure of projects they participate in					
Our PPP Partners help in close monitoring of project implementation progress at KNH					
Our PPP Partners offer specialized advice on projects we implement together with them					

SECTION D: HUMAN RESOURCE SUPPORT AND SERVICE DELIVERY

9. Below are several statements in relation to human support offered by public private partners in ensuring project delivery. Kindly indicate the extent of your agreement with each statement in as far as affairs are at Kenyatta National Hospital. **Key: Sa- Strongly Agree, A: Agree, UD-Undecided, D: Disagree, SD: Strongly Disagree**

Statement	SD	D	UD	A	SA
Our PPP partners second some of their technical personnel to projects being implemented at KNH					
Seconded personnel support works to implement and monitor the PPP activities					
The support in human resources by PPP partners has helped implement a culture of quality in our project implementation					
Our PPP partners help in supervision of project teams					
Our PPP partners help in training of project staff					
Our PPP partners help in motivating staff in executing the project					
Our PPP partners arrange for staff exchange programs to improve on skills set of our staff					

SECTION E: RISK SHARING AND SERVICE DELIVERY

10. Below are several statements in relation to risk sharing offered by public private partners in ensuring project delivery. Kindly indicate the extent of your agreement with each statement in as far as affairs are at Kenyatta National Hospital. **Key: Sa- Strongly Agree, A: Agree, UD-Undecided, D: Disagree, SD: Strongly Disagree**

Statement	SD	D	UD	A	SA
The partners help in managing risks associated with infrastructure projects					

The PPP partners are informed on risks inherent with the project or program					
Installed monitoring and control measures during the implementation phase ensure quality service delivery					
Partners in the PPP evaluate projects to ascertain whether the impact has been attained					
Our PPP partners help us in choosing projects that bear reasonable risks					
Our PPP partners help us minimise exposure to risks inherent in project implementation					
Our PPP partners train our staff on risk management					

SECTION F: SERVICE DELIVERY

- 11.** Below are several statements in relation to service delivery. Kindly indicate the extent of your agreement with each statement in as far as affairs are at Kenyatta National Hospital. **Key: Sa- Strongly Agree, A: Agree, UD-Uncecided, D: Disagree, SD: Strongly Disagree**

Statement	SD	D	UD	A	SA
PPP financial support has ensured that projects are completed on Time at KNH					
PPP financial support has resulted in better Services offered at the 3 HC facilities (H&HC)					
PPP financial support has resulted in improved Time taken to deliver services					
Managerial support has ensured that projects are completed on Time at KNH					
Managerial support has resulted in better Services offered at the 3 HC facilities (H&HC)					
Managerial support has resulted in improved Time taken to deliver services					

PPP human resource support has ensured that projects are completed on Time at KNH					
PPP human resource support has resulted in better Services offered at the 3 HC facilities (H&HC)					
PPP human resource support has resulted in improved Time taken to deliver services					
PPP risk sharing has ensured that projects are completed on Time at KNH					
PPP risk sharing has resulted in better Services offered at the 3 HC facilities (H&HC)					
PPP risk sharing has resulted in improved Time taken to deliver services					

Thank you for taking your time to participate in this study. God bless.

Appendix 11: In-depth Interview Guide for Administrators

Introduction and Consent.

My Name is Winfred Nzioka, a post graduate student from Kenya Methodist University. I am conducting a research study titled “Public-Private Partnership and Healthcare Delivery in Nairobi County”. There are no direct benefits but the study will inform healthcare partners in improving healthcare delivery in the County. I request that you spare a few minutes of your time and share with me your experience in accessing healthcare services at this health facility. Your response will be handled with highest level of confidentiality. You will be requested to consent verbally to show that the information was shared willingly without being compelled.

Thank you.

Name of the Health Care Facility.....

- 1 In your opinion, what would you say is the influence of Public Private Partnership financial support on healthcare service delivery in this facility?
- 2 What would you say is the influence of Public Private Partnership managerial support on healthcare service delivery in this facility?
- 3 What is the influence of Public Private Partnership human resource support on healthcare service delivery in this facility?
- 4 What is the level of beneficiaries’ satisfaction with health services delivered in this facility?
- 5 What services does this health facility offer to community?

- 6 How does this health facility get funding to ensure continued service delivery?

8. What recommendations would you make to improve Public Private Partnership healthcare delivery in this facility?

Appendix 111: Observation Checklist / Protocol for PPP Health Care Delivery

<p>1.Funded operations</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>2. Management skills offered by partners</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<p>3. Expert employees provided by partners</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>4. Risk sharing aspects healthcare provision</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>

Any other, specify

Appendix IV: University Authority Letter



KENYA METHODIST UNIVERSITY

P. O. Box 267 Meru - 60200, Kenya
Tel: 254-064-30301/31229/30367/31171

Fax: 254-64-30162
Email: deanrdg@kemu.ac.ke

DIRECTORATE OF POSTGRADUATE STUDIES

September 27, 2023

Commission Secretary,
National Commission for Science, Technology and Innovations,
P.O. Box 30623-00100,
NAIROBI.

Dear Sir/Madam,

RE: WINFRED MBULA NZIOKA – (REG. NO. HSM-3-1716-2/2017)

This is to confirm that the above named is a bona fide student of Kenya Methodist University, in the School of Medicine and Health Sciences, Department of Health System Management undertaking a Masters' Degree in Health System Management. She is conducting research on: "influence of Public Private Partnership on Healthcare Service Delivery in Nairobi County, Kenya".

We confirm that her research proposal has been presented and approved by the University.

In this regard, we are requesting your office to issue a research license to enable her collect data.

Any assistance accorded to her will be appreciated.

Yours sincerely,


Dr. John Muchiri, Ph.D.
Dean, Postgraduate Studies

Cc: Dean SMHS
CoD, HSM
Postgraduate Co-ordinator-HSM
Supervisors

Appendix V: KEMU Ethical Clearance



KENYA METHODIST UNIVERSITY

P. O. BOX 267 MERU - 60200, KENYA

FAX: 254-64-30162

TEL: 254-064-30301/31229/30367/31171

EMAIL:

INFO@KEMU.AC.KE

September 27, 2023

KeMU/SERC/HSM/20/2023/Renewal

WINFRED MBULA NZIOKA

HSM-3-1716-2/2017

Dear Winfred,

SUBJECT: INFLUENCE OF PUBLIC-PRIVATE PARTNERSHIP ON HEALTHCARE SERVICE DELIVERY IN NAIROBI COUNTY, KENYA

This is to inform you that Kenya Methodist University Scientific Ethics and Review Committee has reviewed and approved your research proposal. Your application approval number is KeMU/SERC/HSM/20/2023/Renewal. The approval period is 27th September, 2023 – 27th September, 2024.

This approval is subject to compliance with the following requirements:-

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by Kenya Methodist University Institutional Scientific Ethics and Review committee.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to KeMU iSERC within 72 hours of notification.

- IV. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to KeMU ISERC within 72 hours.
- V. Clearance for export of biological specimens must be obtained from relevant institutions.
- VI. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- VII. Submission of an executive summary report within 90 days upon completion of the study to KeMU ISERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.



Appendix VI: NACOSTI Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 395852	Date of Issue: 29/September/2023
RESEARCH LICENSE	
	
This is to Certify that Ms. Winfred Mbula Nzioka of Kenya Methodist University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in on the topic: Influence of public private partnership on Healthcare service delivery in Nairobi county, Kenya for the period ending : 29/September/2024.	
License No: NACOSTI/P/23/29247	
395852 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Verification QR Code	
	
NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.	
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