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# Effects of Public Private Partnership on the Provision of Public Health Services in Tanzania: A Case of Amana Regional Referral Hospital

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Abstract: The study assessed effects of public private partnership on the provision of health services in Tanzania. A case of Amana Regional Referral Hospital Dar es Salaam, Tanzania. The objectives were to assess the approaches of public-private partnership (PPP) has influenced the overall quality of health services provided at Amana Regional Referral Hospital in Tanzania, to examine the roles of the public-private partnership (PPP) on the accessibility and affordability of healthcare services at Amana Regional Referral Hospital in Tanzania and to identify the challenges facing the public associated with the implementation of the public-private partnership (PPP) for healthcare provision at Amana Regional Referral Hospital in Tanzania. The study used both primary and secondary data and mixed approaches of both Qualitative and quantitative methods in analyzing the effects of PPP on the performance of provision of health services. The study encompassed 204 respondents, comprising of health workers and unit management, medical officers that work at the hospital, Officials from Ministry of Health, Private Partner and Officials from Ministry of Finance. Data were collected through questionnaires, and interviews and analyzed by using Statistical Package for Social Science (SPSS) version 26 and thematic analysis. The findings from the study revealed that PPPs is the invested in infrastructure, technology and provision of medicine. Through collaborations with private entities, Amana Regional Referral Hospital has been able to access funds and expertise that facilitate the construction of modern facilities and the acquisition of advanced medical equipment. Regarding to the roles of the public-private partnership (PPP) on the accessibility and affordability of healthcare services, the research showed that PPPs increased financial investment in healthcare infrastructure. Private partners often bring additional resources that can be directed toward expanding facilities, acquiring advanced medical equipment, and improving overall service delivery. Finally, the challenges facing the implementation of the public-private partnership (PPP) for healthcare provision revealed that lack of transparency and communication regarding the terms of the partnership can exacerbate public concerns. The study recommends that the effectiveness of the performance of PPP arrangement at Amana Regional Referral Hospital can be enhanced through the increase of transparency in the information of the system of both parties.

*Keywords*: public private partnership, provision of public health services.

Public-Private Partnerships (PPPs) is a world-wide application currently being utilized in both developed and developing countries to facilitate efficient and effective delivery of qualitative services to the customers and the general public. The applications are also aimed at the expansion of the delivered services, increased productivity and profitability in earnings for both the custodians of the arrangements of public and private sector (Almarri, and Abuhijleh, 2017).

The practice of PPPs arrangements within the health care services sector with the aim of facilitating the expansion of health services gained greater legitimacy at the global in the 1990s when multilateral organizations, bilateral organizations, pharmaceutical companies, American Foundations and International non-governmental organizations partnered with global health institutions as well as governments across low-to-middle-income countries. Different forms of interactions and modes of collaboration between the public and private sectors had existed in health care even before this as a means of mobilizing resource to enhance health system capacity and sustainability (Saha, et al., 2018).

In the US and Europe PPPs practices in the health sector between the government organization are cross-sectoral collaborations that promote health services growth and reduction of dependence in the health sector. In the UK, such partnerships are commonly practiced at municipal, county, and state levels, with a combination of local, state, and federal funding specifically in health sector. For example, in terms of finance and matching up private firms with NGOs and/or local communities, USAIDs Global Development Alliance (GDA) is one example. Economic development PPPs can take the form of joint ventures, contracts, or MOUs (Brinkerhoff & Brinkerhoff, 2017).

In the African continent, PPPs began only in the mid- to late-1990s. To date PPPs have been practiced to assist government efforts in improvements to economic (physical) infrastructure, such as telecommunications, electricity and water. However, in recent years, PPPs have also been used to improve social infrastructure, such as health, education, and other services (garbage collection, agriculture extension services, etc (Hamisi,

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PPPs in Kenya were established under PPP statement 0f 2011 and revised in Act 15 of 2013(b) which stipulates that (i) The government remain to the control on the services (ii) The government is mandated to secure new infrastructure which will become the government asset at the end of the contract provided with the private partners in the provision of public health services (Cytonun, 2022).

In case of Rwanda has been actively engaging in PPP since 2018 in the health sector as a strategy to improve health delivery and infrastructures. For example, Maternal and Child Health the PPP arrangement in observed commissions (Demographic and Health Survey for Rwanda 2021). Furthermore, Rwandan government had established the specialty care facilities under PPPs arrangement for example Rwanda Military Hospital which provides advanced medical services including Oncology and neurosurgery to the public (Byomuhangi, 2019).

In Tanzania, the PPPs were introduced in the 1990s to supplement the government efforts in the provision of health services to the public under the Structural Adjustment Programs (SAPs). The introduction of PPP aimed at improving the quality of health services and expanding access to the services in the community, increasing opportunities for the private sector to invest in the health care and formalizing non – profit organizations to engage in healthcare service provision. (Nuhu et al., 2020)

The PPP in the health service delivery in Tanzania are part of the implementation of health care programs under The Ministry of Health and non-governmental organizations which cover various arrears including reproductive and child health, HIV/AIDS, Malaria, provision of equipment and medicines and funding support systems at regional hospitals to the district and Health centers. These services include construction of buildings and pharmacies within the government hospitals provided by private operators. Therefore, the PPP policy does not restrict private operators to provide health services and sells of pharmaceutical products within the government hospitals (Hamisi, 2021).

In the case of Amana Regional Referral Hospital, the PPP arrangement in the health care delivery since it was established in 1992 has continuously being with various private operators who are basically assisting in the areas of provision and sells of medical equipment and medicines, HIV/AIDS, TB and LEPROCY with clear demarcation which stated in Memorandum of Understanding (MOU). The private operator or Prime Vendor in medical supply including UMOJA, NEBULA, VINE and ANUDHA, they are used to supply medicines and medical equipment when they are Out of Stock at Medical Store Department in accordance to the MOU. Also there are NGOs dealing with HIV/AIDS by funding and providing the ARVs for the Victims which is known as Management Development for Health (MDH) (Klingberg, 2019).

Moreover, there is International Agencies namely GLOBAL FUND, Agakhan Development Network (AKDN) and AMREF which support treatment and surveillance for TB and LEPROCY at Amana Hospital. Amana Regional Referral Hospital is provided by the government budget for catering a number of activities including the expenditure for payment of employee's incentives, utilities (fuel, water and electricity) and buying of medical equipment and medicine from MSD. However, these provisions do not meet the demands hence is involved in that arrangement to facilitate the sharing of provision of health to the public (Klingberg, 2019).

# A. Statement of the Problem

Public-Private Partnerships (PPPs) have emerged as a crucial strategy for enhancing the efficiency and effectiveness of public service delivery across various sectors, particularly in healthcare. By facilitating collaboration between government entities and private organizations, PPPs aim to mobilize resources, share risks, and improve the quality of services provided to the public. In many countries, including Tanzania, PPPs have been instrumental in addressing critical challenges in the healthcare sector, enabling the expansion of access to essential services and the introduction of innovative solutions.

Despite the potential benefits of PPPs, the implementation at Amana Regional Referral Hospital has faced significant challenges that undermine their effectiveness. The hospital, which serves a crucial role in providing healthcare to a vulnerable population, has been struggling with inadequate resources. A notable issue is the inefficiency in disbursing funds through the National Health Insurance Fund (NHIF), which has adversely affected the availability of medical supplies and services. Recent statistics indicate a troubling increase in child mortality rates, reflecting systemic inadequacies in service delivery amidst the existing PPP framework.

Furthermore, reports highlight that the hospital is only receiving about 50% of the required medicines from the Medical Store Department (MSD), leading to severe shortages for both inpatients and outpatients. This situation compels patients to seek medications from private pharmacies, often at exorbitant prices, thereby exacerbating health inequities. The intended benefits of the PPP arrangements—such as improved accessibility and affordability of healthcare services—are thus not being realized, leading to a critical examination of the current operational dynamics at Amana Regional Referral Hospital.

The statistics for the last two years (2022-2023) to the current moment indicate a slight increase of child mortality rate from 0.006 to 0.008 (population of 182,014 with deaths of 1251 and population of 180710 with deaths of 1489). The medicine delivered by MSD for the months of January 2024 to May 2024 indicate a volume of 50% per month; therefore, there is scarcity of medicines for inpatients and outpatients for almost 50%. This problem has resulted in a few patients who are wealth to purchase prescribed medicines by the doctors and specialists from the pharmacy around the hospital owned by these same private medical health providers who are in PPP arrangements with Amana hospital.

Several studies have demonstrated the significance of Public Private Partnership (PPP) in Tanzania in many areas of infrastructure building, telecommunications, information and communication technology (ICT), agricultural sector, education (World Bank, 2020). Furthermore, some studies have indicated within the health sector. The focus has been mainly on service provision and challenges associated with the arrangements of PPP (Nuhu et al., 2020). As a result, there is a scant literature on the nature of PPP and effects on health care provision in Tanzania. That is why, this study seeks to uncover and fill this knowledge gap in order to contribute to the body of scientific knowledge in understanding the complexity of PPP in healthcare provision in Tanzania using Amana Regional Referral Hospital as a case study.

In light of these challenges, this study seeks to explore the implications of the existing PPP framework on healthcare provision at Amana Regional Referral Hospital. By identifying the specific barriers to effective implementation and assessing the overall impact of PPPs, the research aims to contribute to a more comprehensive understanding of how these partnerships can be optimized to enhance healthcare delivery in Tanzania.

B. Research Objective

- 1. To assess approaches of public-private partnership (PPP) that influenced the overall quality of health services provided at Amana Regional Referral Hospital in Tanzania.
- 2. To examine the roles of the public-private partnership (PPP) on the accessibility and affordability of healthcare services at Amana Regional Referral Hospital in Tanzania.

## 2. Literature Review

A study conducted by Agyepong et al. (2020) highlights the important role that well-structured public-private partnerships (PPPs) can play in improving service delivery outcomes within public health systems, especially in contexts characterized by underfunding and chronic inefficiencies. The authors argue that effective PPPs can foster a culture of accountability among healthcare providers, which is necessary to improve the quality and efficiency of healthcare services.

Nuhu et al. (2020) discusses how public-private partnerships (PPPs) in Tanzania have contributed significantly to improving the quality of health services by facilitating resource mobilization and sharing of expertise. Their research highlights how these partnerships provide an opportunity to integrate private sector efficiencies and innovation into health systems in the context of limited government resources. By leveraging the strengths of both public and private organizations, PPPs can address critical gaps in service delivery, ultimately leading to improved health outcomes for communities that may lack access to essential health services.

Murg and Kingombe (2017) highlight that effective publicprivate partnerships (PPPs) can lead to significant improvements in health infrastructure and service delivery, directly impacting the quality of care provided to patients. Their study found that if well-structured, PPPs can facilitate the sharing of resources, expertise and innovative practices from both sectors, leading to better health facilities and better access to quality services.

Fabre and Straub, (2019) conducted a study of the Economic Impact of State private partnerships (PPP) in the field of infrastructure, health and education: in their study, they have shown that 'It is interesting to understand if the program has been translated into qualitative changes in the analysis of objects of the satisfaction of the medical worker and the availability of medicines and equipment is also carried out. The authors believe that the program has considerably improved their satisfaction with regard to the general physical conditions of the installation building, as well as the quantity and quality of the equipment available in a medical institution, which is confirmed by the analysis of 'Equipment for medical institutions, which has increased significantly over time compared to control objects. Additionally, the number of nurses per facility also increased significantly over time in participating facilities compared with control facilities.

Tabrizi, et al., (2020) conducted research on the public private partnership policy of primary health care: scope. Their research stated that the private sector was regarded as an opportunity to realize the PPP and the market growth and profits. This provides appropriate facilities and innovative management to the public sector. Governments use PPPs as an efficient and cost-effective mechanism to implement their goals and policies.

Swere's (2016) literature review on the challenges associated with access to health services in Tanzania mentions several barriers to access such as lack of funding, inadequate training of health workers, poor communication and transport infrastructure, etc. One of the authors' recommendations to address these affordability issues is that the government should support the private sector involved in the delivery of health services in terms of subsidies and lower tax rates, encouraging more private partners to be involved in the delivery of health services.

## 3. Methodology

This study used descriptive research design because it enabled the researcher to collect information about respondent's opinions, attitudes and strategies (cooper and Shindler, 2003). Hence, the major purpose of using this of descriptive survey as a method of collecting information by administering a questionnaire to a sample individual and employed quantitative research approach (Kothari 2004). The target population consisted of the registered 411 respondents and researcher selected Amana Regional Referral Hospital due to its historical engagement with PPPs, the pressing healthcare challenges it faces, and its strategic significance within the urban healthcare framework of Tanzania. The researcher used Slovin's formula to obtaining sample size of 204 respondents, included top management of Amana Regional Referral Hospital, healthcare providers (such as nurses, doctors, laboratory scientist and pharmacists), representatives from the government (officials from the Ministry of Health), and partners from the private sector. The researcher used Purposive sampling and simple random sampling in order to give equal chances to all the respondents to participate. In order to collect the data needed, the researcher used interview guide and questionnaire for collecting primary data and the questionnaire was closed ended that was developed objectives.

# 4. Research Findings

### A. General Profile of the Respondents

In this section the researcher aimed at finding out characteristics of the population under study and their livelihood to contribute to the theme of the study. Therefore, the section includes; gender, age and level of education.

## 1) Gender

Findings from Table 1 indicate that out of the 204 respondents involved in the study, 108 (52.9%) were female, and 96 (47.1%) were male. These findings imply that the majority of the respondents were female. Additionally, females were more willing to provide information concerning the study compared to males.

Ge	Table 1 ender of respor	idents
	Frequency	Percent
Male	96	47
Female	108	53
Total	204	100
Source: Fie	eld Data, 2024	

## 2) Marital Status

The results in Table 2 reveal that the majority of the respondents, 120 (58.9%) were married, while 67 (32.8%) of respondents were single, 6 (2.9%) were widowed, 6 (2.9%) were separated, and 5 (2.5%) of respondents were divorced. These findings reflect that the majority of the respondents were married, since they constituted the majority during the study. This suggests that a high number of married people in the organization helped to improve work performance. This is because married individuals are highly committed to their work, given the multiple responsibilities within families that motivate both husbands and wives to work hard.

Table 2 Marital status					
Percent	Frequency	Variables			
32.8	67	Single			
58.9	120	Married			
2.5	5	Divorced			
2.9	6	Separated			
2.9	6	Widow			
100.0	204	Total			
		Total ource: Field			

## 3) Age of Respondents

Table 3 indicates that, out of the 204 respondents involved in the study, the majority (103, 50.5%) were aged between 25 and 35 years old. Additionally, 68 (33.3%) of respondents were aged between 35 and 55 years old, 29 (14.2%) were below 25 years old, and 4 (2.0%) were above 55 years old. These findings imply that the majority of the respondents were aged between 25 and 35 years old, which is a fertile age for individuals capable of working and delivering health services. The remaining age groups have more experience working within an organization, enabling them to share their experiences with the younger generation regarding the practice of public private partnership and the delivery of health services within the institution.

Table 3 Age of respondents				
Frequency	Percent			
29	14.2			
103	50.5			
68	33.3			
4	2.0			
204	100.0			
	Frequency 29 103 68 4			

B. To Assess the Approaches of Public-Private Partnership
(PPP) Has Influenced the Overall Quality of Public Health
Services Provided at Amana Regional Referral Hospital in
Tanzania

The respondents agreed with a total mean value of 1.9477 and a standard deviation of .97463, respectively. This suggests that the majority of respondents agreed that approaches of PPPs are the investment in infrastructure and technology, whereby through collaborations with private entities, Amana Hospital has been able to access funds and expertise that facilitate the construction of modern facilities and the acquisition of advanced medical equipment. This upgrade in infrastructure not only enhances the hospital's capacity to provide quality care, but also improves patient experiences by creating a more comfortable and efficient environment. Another critical approach is capacity building and training. Private partners often bring specialized knowledge and skills that can be transferred to public healthcare staff. By implementing training programs and workshops, PPPs help enhance the capabilities of healthcare workers at Amana Hospital. This investment in human resources ensures that staff are well-equipped to deliver high-quality care, ultimately leading to better patient outcomes. This finding aligns with those of Turner, & Brown, 2021) their findings revealed that, these partnerships have attracted substantial private funding, leading to the modernization of health facilities and the introduction of innovative healthcare technologies. The authors argue that such investments are crucial for enhancing public health outcomes.

In another development, an interview was conducted with the top management of the organization, here is what private partner said:

"Private sector partners often bring expertise in management and operational efficiency that can greatly benefit public healthcare institutions. At Amana Hospital, collaborations with private entities have introduced best practices in service delivery, including streamlined patient processing and improved administrative workflows. These enhancements reduce wait times and increase patient satisfaction, leading to a more effective healthcare system".

The above findings from the private partners imply that Private sector partners possess a wealth of knowledge in management practices and operational strategies, often honed in competitive environments where efficiency is critical. When these partners collaborate with public healthcare institutions,

Approaches of PPP	1	2	3	4	5	Mean	Std. Deviation
(PPP) resulted in an improvement in the overall quality of health services	91	89	11	13	0	1.7353	.82958
Patients experiencing better healthcare outcomes since the introduction of the public-private partnership	58	113	8	25	0	2.0000	.90429
Public-Private Partnership contributed to the reduction of waiting times for receiving medical treatment	80	105	0	19	0	1.7941	.85198
Implementation of the public-private partnership affected patient satisfaction with healthcare services	71	89	11	23	10	2.0784	1.13768
Public-private partnership led to an increase in the availability of medical equipment and technology	75	89	20	13	7	1.9608	1.01634
Public-Private Partnership improved working conditions and access to resources for healthcare professionals	59	105	9	19	12	2.1176	1.10791
Overall mean value						1.9477	0.9746

Role of the Public-Private Partnership							
Role of the Public-Private Partnership	1	2	3	4	5	Mean	Std. Deviation
Implementation of the public-private partnership (PPP) improved the accessibility of healthcare services	68	99	11	13	13	2.0392	1.10459
Number of healthcare facilities or clinics increased at Amana Regional Referral Hospital as a result of the public-private partnership	73	90	8	25	8	2.0441	1.11550
Patients reporting improved access to specialized healthcare services at Amana Regional Referral Hospital due to the public-private partnership	80	105	0	19	0	1.7941	.85198
Public-Private Partnership led to an increase in the availability of essential medical supplies and medications at Amana Regional Referral Hospital	71	89	11	23	10	2.0784	1.13768
Individuals in remote or underserved areas reporting improved access to healthcare services at Amana Regional Referral Hospital	61	103	20	13	7	2.0294	.98216
Overall mean value						1.9970	1.03838

Source: Field Data, 2024

they introduce innovative approaches that can transform how services are delivered. For instance, at Amana Hospital, such collaborations have facilitated the implementation of best practices that streamline patient processing. This means that patients experience shorter wait times and a more organized flow from admission to treatment, ultimately enhancing their overall experience. This finding aligns with those of Johnson and Lee (2022) highlighted how private partners introduced performance metrics and accountability frameworks that enhanced resource allocation and service delivery in hospitals. These practices not only streamlined operations but also fostered a culture of continuous improvement, enabling healthcare providers to respond more effectively to patient needs.

Regarding to the roles of the public-private partnership (PPP) on the accessibility and affordability of public health services, the r respondents agreed with a total mean value of 1.9970 and a standard deviation of 1.03838, respectively. This showed that majority of respondents agreed that PPPs increase financial investment in healthcare infrastructure. Private partners often bring additional resources that can be directed toward expanding facilities, acquiring advanced medical equipment, and improving overall service delivery. This financial influx allows Amana Hospital to enhance its capacity to treat more patients, thereby increasing the availability of essential healthcare services. As a result, waiting times reduced, and more individuals can receive timely care. PPPs often focus on community engagement and outreach programs. Private partners assist in organizing health campaigns, awareness programs, and preventive services that directly target underserved populations. These initiatives help raise awareness about available services and encourage individuals to seek care, thereby improving overall accessibility. By reaching out to vulnerable groups, the hospital ensure that healthcare services are equitably distributed across the community.

Furthermore, interviews were conducted to examine the role of the public-private partnership (PPP) on the accessibility and affordability of healthcare services at Amana Regional Referral Hospital in Tanzania.

Here is what one of the top management officials said:

"PPPs have facilitated the expansion of both our infrastructure and the range of services we offer. With private investment, we have been able to upgrade our facilities and acquire essential medical equipment, which has increased our capacity to serve more patients effectively".

The above findings suggest that emphasizes that private investment has been pivotal in upgrading healthcare facilities. This includes constructing new buildings, renovating existing spaces, and enhancing the overall environment of the hospital. Such improvements are essential for creating a conducive atmosphere for patient care, ensuring that the hospital can accommodate a growing number of patients comfortably and efficiently. This finding concurs with those of Williams et al. (2023) indicate that upgraded facilities not only enhance operational efficiency but also foster a healing environment, ultimately benefiting patient care. Their research highlights the critical role that a well-designed physical space plays in the overall healthcare experience. When hospitals invest in modernizing their facilities, they often focus on creating environments that promote comfort and well-being for patients.

Table 4 pproaches of Public-Private Partnership

Features such as natural light, spacious waiting areas, and patient-centered design contribute to reduced stress and anxiety, which are vital for recovery.

### 5. Summary, Conclusion and Recommendation

#### A. Summary

The findings from the study revealed that PPPs is invested in infrastructure, technology and provision of medicine. Through collaborations with private entities, ARRH has been able to access funds and expertise that facilitate the construction of modern facilities and the acquisition of advanced medical equipment

Regarding to the roles of the public-private partnership (PPP) on the accessibility and affordability of healthcare services, the research showed that PPPs increased financial investment in healthcare infrastructure. Private partners often bring additional resources that can be directed toward expanding facilities, acquiring advanced medical equipment, and improving overall service delivery

## B. Conclusions

The study concluded that the collaboration between public sectors and private partners has resulted in better management practices and operational efficiencies, which have streamlined patient processing and improved administrative workflows. These enhancements have not only alleviated the burden of overcrowding but have also allowed for the expansion of specialized services, thereby increasing the hospital's capacity to serve a larger patient population. Finally, evidence presented in this chapter strongly supports the notion that public-private partnerships play a vital role in enhancing the quality and accessibility of healthcare services at Amana Regional Referral Hospital.

## C. Recommendation

- 1. Strengthen the collaboration between public and private sectors by establishing clear memorandum of understanding and communication channels
- 2. Ongoing training and capacity-building programs for healthcare professionals should be implemented
- 3. To enhance transparency and accountability in the management of PPP projects.
- 4. Engaging the community in the planning and implementation of PPP initiatives will foster trust and ensure that the healthcare services provided meet the specific needs of the population.

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