Tackling Uganda's Medical Expenditures Abroad: Exploring the role of NHIS as a policy choice of financing Medical Tourism

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Abstract

Medical tourism is an integral part of the tourism economy in Uganda. Whereas, in bound medical tourism is still far from Uganda's potential owing to the meagre investments in health sector more government officials are now traveling abroad than ever before spending a lot of taxpayers' money for high quality care. Despite the increasing medical referrals abroad there is a paucity of data in the medical tourism sector. The objective of this study was to determine the role of a National Health Insurance Scheme in reducing the costs of medical referrals abroad. An exploratory cross-sectional mixed study was done from September 2023 to August 2024. Stratified and snowball sampling was used to select 34 participants. Quantitative data was analyzed using SPSS version 16.0 and thematic analysis was used for qualitative data. The findings indicated that the National Health Insurance scheme is proposed as a possible option to provide affordable high-quality care to all developing an excellent health system for prompt and quality medical treatment when needed both for medical tourists and Ugandans. The National Health insurance scheme is a policy choice most likely to provide equal access to quality healthcare and reduce on high costs of medical referrals abroad of the government officials. This paper recommends the development of a medical tourism policy as a main driver of the industry.

Keywords: Health Insurance, Medical Tourism, Medical Expenditures Abroad, Universal Health Coverage, Uganda.

Introduction

In Sub-Saharan Africa, limited access to high quality medical care is a continuous crisis to its 49 nations' inhabitants including Uganda [1]. Most Ugandans struggle daily with accessing quality and expensive healthcare which is beyond their reach [2]. Despite the momentous strides to improved connectivity, technological advancements ease of travel, and economic development, equitable access to quality, affordable healthcare remains a farfetched dream for many Ugandans. Only the elite rich and privileged government officials access care through medical referrals abroad. The governments, hospitals and insurance companies are investing more in health industry to meet this growing demand of medical tourism attracting millions of individuals seeking high-quality and innovative healthcare abroad annually shaping the future of tourism, medicine and health system strengthening. This phenomenon has gained momentum due to new patient expectations and technological advancements [3-5]. The focus on patient safety and quality, personalized care, and increased cost transparency continue to attract a growing mass of medical tourists.

The global medical tourism market is valued at about US\$439 billion annually, according to international payment systems. The estimated amount for each medical visit is US\$3,800-\$6,000, and globally the total spent every year is estimated at U\$45-\$72 billion. As more people seek affordable quality healthcare abroad, the medical tourism (MT) market is poised for tremendous growth in the coming years to increase by 25% per year [6, 7]. The majority sought-after treatments comprise cosmetic surgery, dental treatments, orthopaedic surgeries, and cardiac procedures. Based on the 2020-2021 statistics. The Medical Tourism Index-MTI ranking i.e. Country-based performance metric is used to appraise a country's appeal as a medical tourist destination [8]. Canada ranks as the first country in medical tourism market in the World, 7th in the medical tourism industry dimension, and 4th in the quality of facilities [9, 10]. Africa is concurrently a source and destination of patients who form the medical tourism (MT) [11]. Medical tourism services are largely provided by the private sector and payments are out-of-pocket. In Africa, medical tourism is dominated by North Africa and three regional hubs: Kenya, Nigeria and South Africa [12]. The majority of Ugandans, spending for healthcare in preference to other competing needs is an insurmountable challenge. Uganda fares far worse than its peers on coverage and most dimensions of value. Coverage and cost are entangled. Many Ugandans cannot afford healthcare; As a result, 12% of Ugandans suffer catastrophic health expenditures using the 10% threshold which is a Sustainable Development Goals (SDG) indicator 3.8.2 [13]. The United Nations (UN) SDGs 2030 emphasizes the role of healthcare in

development as to "ensure healthy lives and promote well-being for all at all ages," and one of the targets, 3.1 is to "achieve universal healthcare coverage (UHC), including access to quality and affordable healthcare, and financial risk protection. The UN Human Development Index ranking of Uganda is 159 out of 193 countries for 2023/24 [14]. To that end, it is profound to conduct studies to identify the major challenges confronting African health systems, particularly Uganda in regard to medical tourism.

Medical Tourism Industry and Its Mechanism

A country's history, economy, values and political model have a direct effect on how its health care system is organized and sustained. differences Despite the policy in implementation, there are four models which describe healthcare system of the majority of countries' healthcare schemes. The discrepancy in healthcare coverage leads patients to seek other ways to meet their needs. So, individuals become the target population for medical tourism destinations. Though, these theoretical frameworks serve as a foundation to build up customized healthcare service provision models in most of the countries. The first model is out-of-pocket system such as Egypt, Cambodia, Greece and until recently India, the individuals are required to pay for their own healthcare. The model is market-driven and largely seen in uninsured populations. Thus, the poor cannot afford to pay for healthcare while the rich can afford [15]. This denies millions of the impoverished people from accessing care. When the poor are forced to pay private medical services, they face pauperization. Although, healthcare in India is at low cost making it a hub for medical tourism, 40 per cent of Indians who are in-patients sell their assets or borrow money and 25 percent are pushed below the poverty line [16]. However, a country with out-of-pocket system may have a mixed financing mechanism such as USA and Malawi which finances healthcare through taxes and third payer insurance company forprofit whereas Jordan finances through taxes, third payer insurance and other pre-payment schemes [17]. The Beveridge model or national health model such as United Kingdom and Cuba healthcare is entirely financed through taxes [18]. The Bismarck model is a statutory public scheme of healthcare financing based on earmarked contributions of specified actors to stand-alone funds. The healthcare providers and payers are distinct units, jointly financed by employees and employers, given that their insurance plan varies they cover each beneficiary without making profit. In Germany, the financing mechanism is tax based with social health insurance and out-of-pocket. In contrast, Turkey uses similar financing mechanisms as Germany but employs the national coverage health service provision model [19]. Finally, the National Health Insurance or Tommy Douglas model is a mix of Bismark and Beveridge models- financed through taxes and delivered by health providers Care is publicly administered, all-inclusive in coverage, and accessible to all eligible country residents such as Canada, Taiwan, South Korea and Benin [20-22]. However, unlike Canada, in the Australian tax funded universal healthcare system individuals can pay for their private care directly if they choose to or pay for private insurance to cover (among other things) care received as a private patient in a private or public hospital [23].

Models of Health Insurance in Medical Tourism

One of the solutions for the medical referrals abroad in Uganda's context is health insurance. Globally, health insurance is managed by different sectors [24]. The social health insurance scheme may be offered by Government, Group health insurance offered by others (i.e. governments, insurance companies, communities) and individual health insurance offered by stand-alone health insurers and other insurers [24].

Globally, health insurance for medical tourists is practiced in more than 50 countries by governments, private insurers and publicprivate partnerships between governments and insurance companies to facilitate the growth of tourism medical with the insurance infrastructure. Five models and numerous policies relating to health insurance and medical tourism are operational in different countries. Two -tier Insurance model is where a group of countries tied up or regional bloc are included in one of the products produced by an insurance company using this model. Patients who receive health insurance from an insurer in these countries are entitled for healthcare facilities in a departure country for example insured patients from one of the 19 countries of LAC (Latin America and the Caribbean) qualifies for care from health facilities in US. In 2018, a two-tier arrangement raised the health insurance fund of US to US\$120 billion and a scale to over US\$169 billion [25]. Voluntary Health Insurance model (VHI) serves a group of countries with an interest to generate medical tourism between them for example VHI in the European Union serves 34 countries including Belgium, Czech Republic Germany, Portugal, Luxembourg, Greece, Hungary, Ireland, Italy, Lithuania, Slovenia. Latvia. Malta, Netherlands, Poland, France. Romania, Slovakia, Spain, Sweden, Austria, Republic of Cyprus, Denmark, Estonia, Finland, among others [26]. Insurer and provider model where a stand-alone insurer designs the insurance product for their patients with a health provider in a departure country for care like the UnitedHealth Group in US designed a package with "Apollo Hospitals in India and International Bumrungrad Hospitals in Thailand" for Americans seeking care in India and Thailand [27]. Insurer to insurer model where an insurer from a source country

contracts another insurer in a departure country for medical tourism. Another example is the Malaysia Healthcare Travel Council (MHTC) partnered with Quality Healthcare Bangladesh to offer accessible healthcare for Bangladeshi patients in its hospitals including the 22 elite hospitals [28]. Insurer's group model where an insurer teams up with health insurers in different countries offering insurance policies that enable the people to travel abroad for care at affordable cost rather than the costly expenditures in their home country. An example is the. Blue Cross Blue Shield Association is a US insurance company which teamed up with health insurers in Costa Rica, Singapore, Thailand, Turkey and US for medical tourism.

Uganda's proposed National health insurance scheme comprise of 3 sectors.; social health insurance, community-based health insurance and the private health insurance. The Uganda's draft NHIS Bill 2023 is part of milestones in a roadmap to achieving Universal Health Coverage by 2030. Budgetary allocations cannot establish hospitals with state-of-the-art equipment. Attempts at public–private partnership (PPP) is still at a low level. This makes a compelling case for Uganda to adopt a compulsory NHIS system to cater for all the eligible citizens especially the indigents who cannot afford healthcare. NHIS itself by design can spur private sector development by guaranteeing market to private providers hence strengthening PPP frameworks. Thus, the purpose of this study is to determine the role of a National Health Insurance Scheme in reducing the costs of medical referrals abroad.

Though, Uganda has a tourism policy it does not have a medical tourism policy. Also, the financing of the health sector is still a limitation to establishing a resilient health system to achieve universal health coverage. Although the average gross domestic product growth is 6 % annually as reported in the FY 2023/24, in the FY 2024/25 Uganda allocated 4% to health of its 72.13 trillion UGX National budget [29].

Furthermore, the draft NHIS Bill 2023, still awaits approval by the Cabinet and Parliament so as to become a law and operational in a country with the lowest health insurance penetration in the East African region at 1%. However, both are still demanding urgent attention and action. Uganda's healthcare system is mainly a curative based 3 tier system comprising of the public healthcare, profit-for-profit and not-for-profit healthcare regulated by the Ministry of Health. The public hospitals remain dominant in the sector focusing on the scale of the healthcare services rather than the quality. With service quality and disease prevention less prioritized in the system, the preventable and low-cost treatable communicable diseases are still a distressing phenomenon, and with the increasing burden of non-communicable diseases coupled with the low ratio of doctors to patients 1: 25,000 (the WHO recommends 1:1000) contribute significantly to morbidity and mortality [30]. Despite, Uganda's over 71 public hospitals and an extensive network of over 6,937 health facilities, the country poses of a handful stateof-art facilities for MT. This, compounded with the rising costs of medical services and insufficient technology have established the phenomenon of medical referrals abroad and an industry of outbound medical tourism. The number of medical tourists preferring Uganda for medical purposes is limited, whereas the country is chosen by international tourists due to its tourist attractions and wellness destinations and ranked as one of the top 10 best tourist destinations in the World [31]. Needless to say, Uganda is still far from achieving yet the high level of other developing countries where medical tourism is more prominent such as Kenya, South Africa, India, Thailand and Mexico. Yet in terms of medical tourism, Uganda is one the emerging markets of medical tourism sector in the region. In 2001 less than 1000 medical tourists

visited the country compared to over 10,000 Ugandans travelling abroad to seek specialised medical care [32].

Uganda has a vibrant outbound industry which may be converted to its social economic development. The Ugandan patients mainly travel for treatments which require expertise and technology such as congenital heart abnormalities and other cardiac conditions, Kidney transplants, cancer treatment. orthopaedic cases, bone marrow transplant, liver conditions and transplant, and neurosurgical conditions. The country's recent investments in hospital capacity, focus on procurement of medical equipment and reforms under the auspices of international institutions such as WHO and World Bank, Global Fund are expected to improve quality of healthcare. In addition to its attributes such as geographical location, touristic attractions and price competitiveness the country can be a potential destination offering inbound medical tourism.

The objective of this study is to determine the envisaged role of a National Health Insurance Scheme in reducing the costs of medical referrals abroad.

The growing body of literature on medical tourism remains scanty and there is need to address the policy challenges it creates for national health systems. The article findings will be a forerunner in this MT sector to generate policy options to benefit the study population and the country at large in addressing their health needs and costs incurred on medical referrals abroad and any other similar settings. It will also contribute to filling the knowledge gap regarding this topical issue.

This study was conducted from private and public institutions both health and non-health based in Kampala city and Wakiso District and was entirely focused on tackling Uganda's medical expenditures abroad. The study was conducted in Kampala city and Wakiso district. Kampala city is the capital of Uganda located in central region of the country. The capital city is bordered by Wakiso district to the West, Mukono district in the East, Mpigi district in the South and Luwero in the North. The study assessed the situation analysis of medical tourism globally and in Uganda, cost data, models and practices of medical tourism specifically in low-income counties. This is because of the poor health systems in these countries compounded with corruption risking their citizens to poor health service delivery. The search encompassed articles published in English until October 22, 2024.

Methodology

Study Design

An exploratory, cross-sectional mixed study design was conducted from 1, September, 2023 to 29 August, 2024 involving both qualitative and quantitative methods of data collection and analysis. The study was exploratory because it derived new meanings and gathered rich contextual data and its interpretation enhance evidence-based to decision-making, while a cross-sectional design was used because the study measured medical expenditures abroad for several financial years which was a one point in time without follow-up.

Study Population

The study population included all participants who offer medical referral services abroad, policy makers, legislators and those affected by the policy as well as those that influence policy agenda.

Study Unit and Participants

The study units were 5 Hospitals (Mulago national referral hospital, Kiruddu national referral hospital, Nakasero hospital, Kampala International, Entebbe regional referral hospital), 4 MDAs (Ministries, Departments and Agencies namely the Medical Advisory Board of the Ministry of Health, Uganda Heart Institute, Ministry of Health departments, Uganda Cancer Institute and Parliament of Uganda. Others were the Development partners, Private sector, Civil society and Academia. The health care facilities provide specialized medical care services and refer patients outside the country or through the Medical Board. The participants were those who have experience and play a role in Uganda's health system, policy agenda, knowledge on financing and medical referrals abroad. Therefore, these were in a better position to provide contextual information on the implementation of Uganda's medical referrals abroad.

Sample Size Determination

In this study, the data saturation criterion was used to determine the sample size. Interviews with 34 participants saturated the data. The participants were persons knowledgeable in medical referrals abroad from any of the sampled units.

Sampling Technique

Stratified sampling and snowball sampling techniques were used. A two-stage sampling technique was used to select a total of 34 participants in the study areas. In the first stage, the strata created were for public sector and private sector. The stratified random sampling was used to control and organize distribution of sample by sector category into public and private category (sectors). In the second stage, snowball sampling was used within each selected sector. The first participants were recruited for the studypreferably those in their sectors and their knowledge of the surveyed community. The first participants indicated the next participants who can be included in the study, and these participants indicated the next participants in the study and so on, driving the sampling process. The adaptation of snowball sampling techniques, as used in this study, helped the research team to gain access to the participants.

Inclusion and Exclusion Criterions

The participants were selected based on their role on medical referrals abroad and related health care sectors (policy making process, legislation, service delivery, resource mobilization and allocation). Also, all submitted medical referral abroad reports from the FY 2017/18 to FY 2023/2024 were assessed. To be included in the study, the report had to mention the reason for referral broad. diagnosis and others context information of the referrals. The individuals who were not knowledgeable on medical referrals abroad and reports assessing other issues other than medical referrals abroad were excluded from the study.

Data Collection

The studies and reports were screened using titles and abstracts, reading the full text of selected studies. Quantitative including cost data were collected manually from reports. A literature searches for evidence published from 2017/2018 to FY 2023/2024 was FY performed using the search strategy of desk review of the reports. Literature search of material was done by using PubMed.com, Scholar. Web of Google Science. ScienceDirect and the keywords used were medical referrals abroad AND medical tourism. The search guide was based on the developed respondent questionnaire and a literature review, Comparison, Outcome (ROCl) questions. We prioritized evidence from Ministry of Health (MoH) Board databases and the national level hospitals. The case referral and Newspaper series on medical referral abroad were considered where evidence from MoH Board databases and hospitals was limited or absent. All the newspapers assessed were daily press from Ugandan media houses- the Daily Monitor, New Vision, the Observer and the Independent Uganda. Guidelines from the Ministry of Health and Ministry of Finance Planning and Development were also reviewed. The GRADE system was used to evaluate evidence to formulate and rate the strength of data (i.e. Lack of data for the medical board FY 2017/18-2019/20, initiated obtaining data for the FY 2021/22 to 2023/24 from the Medical Board at MoH. For the other institutions, years ranging from FYs 2018/19 to 2021/22 were obtained varying from one institution to another. The key informant interviews (KIIs) were done using a semi-structured interview guide. The interviews were face-to-face. A pre-test was done in October 2023 at Entebbe and Kiruddu referral hospitals to check for validity and reliability of the key informant's guide. Both expert and respondent driven pretest was conducted. Results from the pre-test were used to improve the contents and clarity of the questionnaire.

Data Analysis and Management

Quantitative data was entered into Epi-data software version 2.0.8.56 and exported to SPSS software version 20 for analysis. Univariate analysis was done for both the independent variables (demographic and medical factors) and dependent variables (referral abroad) and their descriptive statistics done. Cost analysis was performed using expenditures calculated in the financial years studied. For qualitative data analysis the interviews were recorded and transcribed. The articles were screened using titles and abstracts, and reading the full text of selected studies. Both respondent and newspaper interviews were thematically analyzed.

Ethical Review and Approval

The ethical clearance was sought from the Research Ethics Committee Nsambya (SFHN-2023-105) and introductory letter from the MoH (N° ADM: 100/224/26). The study received approval from Texila American University. The informed consent was sought from respondents and concerned authorities before collecting data. The respondents were informed of their right to withdraw from the interview whenever they so wished. Privacy and confidentiality of the data was observed.

Results

A total of 34 respondents participated in the study, from the total of 7 institutions surveyed including 5 Hospitals. Many of the respondents were males at 85 percent. Most of the participants had been in service close to 10 years and all are highly skilled.

Characteristics of Respondents

A total of 34 respondents participated in the study. Many of the respondents were males at 85 percent (n=29). Most of the participants had been in service close to 10 years and all are highly skilled.

Category	Public	Private	Total
Government policy makers and Technocrats	12	0	12
Legislators	2	0	2
Civil Society organizations and health Development Partners	0	6	6
Private health care mangers and leaders	0	4	4
Health professionals /Practioners & Health Facility Managers	6	4	10
Grand total	20	8	34

 Table 1. Characteristics of Respondents

Establishing the Potential Role of an NHIS in Reducing High Medical Expenditures Abroad

The participants were provided with the options to establish the most appropriate way of tackling the choice dilemma of Uganda's Medical Expenditures Abroad. Among the choices were public, private and publicprivate partnership mechanisms for medical tourism. The most chosen frameworks could serve as a foundation to build up customized healthcare service provision in Uganda. The notion to establish the potential role of NHIS as a financing mechanism to addressing the medical referrals abroad was subjected to indepth analysis in this study. Four themes were generated and responses from participants were mixed. The themes were health system strengthening, Universal health coverage, reducing burden of medical referrals abroad and health infrastructure.

Health System Strengthening

The majority of the respondents indicated that a National Health Insurance Scheme (NHIS) if in place will help in strengthening the national primary health care system. One of the respondents said:

"The NHIS will free resources to invest in low end cost of treatment." Health Advocate.

Another respondent expressed the option of national budget allocation to health. He said:

"The government should increase the allocation to the health sector and financing of health investments." Health Policy Specialist.

However, some respondents also expressed caution on the financing of medical tourism sector. The respondent continued to explain that:

"Although Increasing funding allocated to the health sector is good, having a strict referral system for those seeking medical referrals abroad on government sponsor is highly recommended. "Hospital Director.

Another respondent said:

"Government should invest and progressively allocate resources to the health sector." Development Partner official.

Then added: ''There is need in the short term to include collaboration with certain hospitals abroad to treat referred patients at negotiated prices to reduce the cost." Development Partner Official.

From an expert in the Observer newspaper interview done with patient returning from USA in 2023, upon a medical referral abroad expressed dismay of the poor health system in Uganda. She was tasked to explain the reason of spending a lot of taxpayers' money over US\$ 180,0000 (Shs. 666 million) on her treatment.

"First, that is blackmail. But blackmailing a mature and seasoned politician like me does not work. People think Ugandans are gullible. They can't understand things in their proper context. I believe we should work on our health systems here so that we stop spending money in foreign hospitals." Member of Parliament.

And then she continued:

"Me going abroad and spending a lot of money only emphasizes what I have been campaigning for all the time....., but let us get the whole list of those getting treatment abroad and discuss it. We know the government spends a lot of money. But how I wish I could be treated here!" Member of Parliament.

And in the context of the citizenry who continue receiving poor service delivery she said:

"We are already so brave to have our families here....." Legislator.

And, finally she said:

"...... I feel sad that all that money was spent on me when it could be used to benefit the health sector. But I am sure of one thing; if I had chosen not to go for treatment, that money would not have been invested in the health sector. They would eat (sic) that money, and I would be dead." Legislator.

Universal Healthcare Coverage

Several respondents expressed realization in reducing medical referral abroad through the achieving of the universal health coverage by 2030 in Uganda.

One respondent regarding on Universal health coverage elucidated that:

"Ugandans are eagerly waiting for the National Health Insurance Scheme which will help them access equitable, affordable and quality health care." Health Economist /Civil Society.

In regard to outbound medical tourism the respondent expressed confidence in the NHIS to cater for all individuals who might require treatment abroad upon referral. She said:

'The scheme will act as a guarantee for medical payments, it will also pool resources to buy medicines and equipment, create ownership, solidarity among members.'' Civil Society).

Another respondent emphasized the role the NHIS will play upon its implementation for the development of inbound medical tourism sector which will encourage patients from abroad to seek for healthcare services from Uganda. He elucidated that:

"The scheme can attract healthcare investors, mobilizing domestic resources, increase access and capacity to care for example carrying out complicated diagnostics such as for cardiac diseases, and sustainability of universal Healthcare coverage." Manager, Private Sector.

Reducing Burden of Medical Referrals Abroad

The majority of the respondents indicated that the NHIS will be an established means of creating a pool of money that can be used to buy medicines and equipment. Additionally, will help to reduce the out-of-pocket expenditures for medical care. In turn, increase access to medical care. Early treatment and diagnosis would reduce the burden of diseases. This was reiterated by a respondent who said that:

"It can have more impact to reduce the burden of diseases due for medical referrals abroad." Hospital Manager.

However, some participants were optimistic. They indicated that the NHIS may not solve all the challenges related to medical referrals abroad because it is based on contributions. But from looked at from another angle, members' contributions would create ownership of the scheme, enhance seeking of services early and play a big role in reducing medical referrals abroad particularly for the government officials.

On a different dimension, in the Observer newspaper report interview with a returning patient from USA expressed the burden experienced by the patients referred abroad for care [33]. The experience was given and below:

"I did not get discharged; I returned to see my family. Waiting for the next surgery in Manhattan had become too expensive for me. I still have three more pending surgeries, which are months apart. So, sitting in Manhattan, a very expensive city, didn't make a lot of sense." Legislator. Experience continued:

"I didn't choose Manhattan just for the sake of it; I was given only three options: Israel, Germany, or America. There were many things that I considered. Personally, I'm not fond of Israel, and it is also very expensive. Furthermore, I had undergone medical treatment in India, where I could not communicate directly with doctors. I promised myself that I would never go for treatment where I could not express myself fully. So, America became the only option. Despite its expense, it was the cheapest option available" Legislator.

Health Infrastructure

The majority proposed that there is a need to improve on the health infrastructure especially specialized equipment, training and equipping human resources to handle cases for which many Ugandans are referred for abroad. A respondent said:

"......The government should procure equipment, recruit human resource, promote access and equity for all." University Lecturer. He then added:

"There is already existing human resource capacity locally that needs only to be paid well and facilitated with necessary equipment to perform well." University Lecturer.

Any Other Option that can be Considered in Addressing the Medical Referrals Abroad

Although, under this theme the respondents recommended that Government should subsidize the cost of accessing services by the population through the NHIS. They expressed different options. One respondent recommended:

"Government should put emphasis on good nutrition and regular exercises programs to prevent diseases that may require referrals abroad." Health Consultant.

He further explained that:

"...... government should focus on prevention of NCDs, build confidence in local facilities and health system." Consultant /Health. And finally said:

"The government should encourage regular medical checkups help the population working towards prevention other than treatment" Consultant/ Health.

Another option proposed by some participants is to create public partnerships. He said:

"Government should create partnerships with organizations that support patients for example NGOs so as to improve quality through standardization, increase specialized health facilities as well as putting in place a clear policy on referral to guide treatment abroad." Health Manager.

Cost Analysis for Medical Referrals Abroad

Overall, the estimated amount of money the government of Uganda spent on medical

referrals to other countries in the financial years from FY 2021/2022 to 2023/2024 was Ug Shs 26,596,082,700, covering 399 patients. In the FY 2021/22, Ug Shs12,730,718,200 was spent on 85 patients, Ug Shs 6,777,184,950, on 166 patients in FY 2022/2023 and UgShs7,088,179,550 on 148 patients in the FY 2023/24 (1 USD = 3,722 BOU exchange rates). The average estimated total annual cost on medical referrals abroad was UgShs 23,467.222,800 Bn (USD \$6.3 million) for the 3 years (FY 2021/2022, 2022/2023 and 2023/2024).

Discussion

Uganda presents an exceptionally unique and captivating context in which to situate this study. This is because of the disparity in the healthcare Ugandan landscape: whereas medical referrals abroad are a mainstay of the elite and government officials. Uganda, on the other hand, has a large population enduring an overwhelmed basic health system, and the only country in the region without National health insurance scheme (save for South Sudan and Democratic Republic of Congo). The aim of this study was to explore the potential role of a national health insurance scheme in reducing high medical expenditures abroad.

The medical tourism financing scheme of countries is determined by financing domestic healthcare infrastructure given that. governments may treat their citizens inbound or allocate budget for medical tourism. However, tackling Uganda's medical expenditures abroad, is a choice of dilemma because this includes going public, only private or public-private partnership. In this study findings show the NHIS as the second most popular choice next to public. However, there is contested discourse that public private partnerships in health will not achieve equity in health and cannot reach the poorest [34]. Additionally, Uganda's Draft NHIS Bill 2023 has stagnated in Cabinet and hence cannot be presented to Parliament for enactment and pave way to implementation of the national scheme for the first time in Uganda's history. And, given that different policies and models applying to health insurance and medical tourism vary, the growth of medical tourism with the facilities of insurance and hospitals makes Uganda's tackling of medical referrals abroad a dilemma. To the contrary, health insurance saves expenditures for medical tourism for example India saves 65% to 90% spending on medical tourism [24]. To this perspective, more than 50 countries and their governments have embraced and practice health insurance for medical tourism for example patients who receive health insurance from an insurer. A total of 21 countries of the LAC (Latin America and the Caribbean) region are eligible for healthcare facilities in USA [35] The probability of reducing medical referrals abroad for medical treatment is based on the consumption of quality healthcare services in a home country. The findings of this study clearly show that respondents expressed interest in the increased allocation of resources to health sector, increased health infrastructure. Fast tracking of the universal health coverage by 2030- also with regard to the respondents' previous experiences of medical referrals abroad interest can be observed in using the NHIS scheme to reduce the referrals abroad. This could be due to the fact that out- of- pocket for health has bene as is high as 41% of total health expenditure, raising the question of how many can afford care. Given that 30% of Ugandans live below the poverty line significantly has always excluded the poor from seeking medical care within and abroad. While the high cost of treatment abroad, even affects the middle and upper middle class and less than 5% of Ugandans have health insurance. However, even for those with private health insurance, the insurance limit for companies is low at 5 million UgShs (\$1,348.80 USD). This would only cover the initial deposit fee at some

facilities abroad, excluding the cost of treatment and would fail to meet facilities which require twice the limit of insurers initial deposit. Fundraising drives have also been held to meet these costs when patients are referred abroad for care. So, most medical referrals abroad are privileged for the government officials whom government can afford to cater for. As such, the NHIS scheme will not only potentially reduce the medical referrals abroad but will strengthen the health system and provide opportunities of establishing infrastructure in Uganda. As such, more Ugandans, shall be able to access services within the country. This will contribute to achieving equity to all and potentially reach the poorest faster.

However, some of the current attention focused on medical tourism concerns in Uganda is its implications on the higher foreign exchange losses to the country, in comparison to the lower costs and high quality of treatment abroad the respondents declare that they would most willingly opt for quality medical services available in Uganda through the financing mechanism of a National Health Insurance or a Tommy Douglas model similar to one used in Canada [21]. Given that, NHIS scheme is still lacking and less is known about medical tourism and its different aspects including inbound MT and its related costs such comparison trends do not emerge from the medical tourism presented herein. These medical tourism concerns are similar to other countries [36]. Also, belonging to a NHIS scheme could play a potential role to finance or subsidize the medical services in a destination country. This arrangement could be similar to 5% of Germans who seek medical treatment abroad based on their membership of an insurance fund [37]. In addition, the NHIS members upon referral through the scheme may benefit from medical services that are cheapest similar to the British who are commonly referred to Czech Republic and Ukraine, where medical services are cheapest [38]. However, the Universal Health Coverage context of the NHIS scheme could be frustrating and may not serve to the expectations of the beneficiaries. For example, the Canadian Universal Health Coverage established in the 1970's is associated with long waiting lists and as such Canadians seek for medical care abroad [39]. Finally, based on findings of this study, there is a need to implement the NHIS as one of the healthcare financial options in Uganda that will increase the fund availability for providing healthcare services. The NHIS will enable citizens to maximize improving their health while spending less than they would in foreign countries. Thus, save foreign exchange for the country and stimulate development of health infrastructure and quality of care. This will increase the capacity of the healthcare system to be able to deliver quality healthcare services affordable to all.

This study has strengths and limitations. The study was conducted in some areas where a pre-test was done. As a result, pre-test sensitisation bias and social desirability bias were expected to occur. However, these biases were minimised by using mixed research designs and diverse sampling methods.

To our knowledge, this is the first medical tourism study that attempts to expound on the role NHIS on the outbound medical tourism as it relates to Uganda's healthcare systems. Thus, the critical necessity to investigate the extent of evidence to establish research gaps in medical tourism in Uganda. On the hand, the limitation of this study is that the NHIS is still a concept most preferred to achieve Universal health coverage. Also, there could be response bias which is based on the exclusively experienced effects of outbound MT.

Nevertheless, the findings of this study will provide guidance and inform the NHIS policy once its enrolled to the Ugandans. For future research, it is recommended to determine the impact of medical tourism vis-à-vis other financing mechanisms aimed to reduce referrals abroad and increase efficiency in Uganda's healthcare system.

Conclusion

Medical tourism has gained significant popularity in recent years, particularly in the sub-Saharan African region. This study proposes the National health insurance scheme as the policy choice of financing Medical Tourism in Uganda by offering a variety of excellent options for medical tourism at different tiers of expense or domains, and widening access to essential care to Ugandans. This is likely to reduce on the medical referrals abroad of the government officials. Thus, develop a robust health system based on the country's combination of skilled healthcare professionals, advanced medical facilities, and cost-effective treatment options, all of which will serve to make Uganda an attractive medical tourism hub.

Recommendations

To reduce medical referrals abroad, the Government and entire health sector could consider:

- 1. Fast tracking policies to implement the NHIS Bill and subsequent implementation of the scheme so as to advance Uganda's commitment to excellence in healthcare, by establishing its position as a leading destination for medical tourists seeking world-class medical treatments and a seamless healthcare experience.
- 2. Developing a medical tourism policy to guide the medical tourism industry in Uganda.
- 3. Increasing the resource envelope to the health sector to establish a resilient health system for provision of affordable and high-quality medical care.

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Conflict of Interest

The authors declare no conflicts of interest.

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