

Assessment of the Frequency, Pattern, and Practice of Inbound Medical Tourism in Tertiary Hospitals in the Federal Capital Territory (FCT), Nigeria

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Abstract

Inbound medical tourism describes a form of medical tourism where patients from other countries travel to the country to receive medical care. This occurs because patients are attracted to the health system in the country. This study seeks to assess the frequency, pattern, and practice of Inbound medical tourism in Tertiary Hospitals in the Federal Capital Territory (FCT), Nigeria. A descriptive cross-sectional study design was carried out among 160 Medical Practitioners in Tertiary Hospitals in the Federal Capital Territory (FCT), Nigeria. A multi-stage sampling technique was used in this study, and data was collected using an Interviewer-administered structured questionnaire. The mean age was 45.8 ± 9.2 years. Ninety-two (57.50%) were males, and 68 (42.5%) were females. 84 (52.50%) were Christians, and 76 (47.5%) were Muslims. The majority were married 105 (65.63%), 48 (30.0%) were single, and 23 (14.38%) of the doctors reported receiving foreign referrals. The commonly reported sources of these referrals included Ghana, the UK, the USA and Cameroun [5 (21.74%), 2 (8.70%), 1 (4.35%), and 8 (34.78%) respectively]. Most treatments lasted for 6 months: 13 (56.52%), 8 (34.78%), and only 1 (4.35%) stayed for over 1 year. Routine checkup was the reason for these referrals among 9 (39.13%) of the doctors, while 4 (17.39%) indicated relocation of the patient and post-operative follow-up. However, 18 (78.26%) reported an improvement in their conditions after these treatments. Nigeria can enhance its inbound medical tourism industry, attract more international patients, and establish itself as a reputable healthcare destination.

Keywords: Frequency, Inbound Medical Tourism, Pattern of Medical Tourism.

Introduction

To distinguish between various forms of health-related travel, researchers have recognized several distinct types of medical tourists, including transplant tourists, stem cell tourists, reproductive tourists, suicide tourists, and others. Some of these terms are rather odd, and researchers have applied them to various forms of cross-border medical travel [1-4]. The phrase "medical tourism" is widely used by scholars and international travel organizations. Medical tourism combines medical operations with the vacationing, pleasure-seeking, leisure, and rest that the name "tourism" connotes. Therefore, there are still chances for funfair and

celebration for those who are sick and require a cure for their condition. [2, 5, 6]. However, a simple look at the term "medical tourism" does not accurately reflect the reality of the patient's situation or the advanced medical care provided in these destinations. Nevertheless, this phrase has come into general usage, especially in newspaper articles, policy documents, guidelines for patients, and peer-reviewed publications [7-11]. Medical tourism can also be described using the direction of patient movement as outbound, inbound, and intra-bound medical tourism [2, 12].

Inbound medical tourism describes a form of medical tourism where patients from other

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countries travel to the country to receive medical care. This occurs because patients are attracted to the health system in the country. There are different forms of medical tourism, like outbound medical tourism, which is a form of medical tourism where patients travel to other countries to receive medical care. Inbound medical tourism occurs when patients travel within the country to receive medical care outside their geographic area, typically to a Center of Excellence in another state/region. [8, 9, 11]

Inbound medical tourism in Nigeria can be described as rudimentary or poorly developed. This may be due to a lack of organized efforts to make it formal to harness its potential. Nigeria is largely characterized by outbound medical tourism as most clients are interested in leaving the country to seek medical care in foreign lands. This situation is increasingly becoming a status symbol as our health facilities still struggle with infrastructural gaps, low human resources and poor funding and political will to invest in the health system. Despite these challenges in the Nigerian health sector, successive governments have made efforts to improve the sector. However, decades of low funding and systemic decay have made these reforms difficult. As outbound medical tourism thrives, there are pockets of health facilities hosting people from other countries. This situation is not well documented and tracked as these foreign patients seek care, have surgeries done, and utilize healthcare services in Nigeria without any formal tracking. This is a huge untapped opportunity for Nigeria to grow the medical tourism industry. Some researchers believe that well-established private tertiary hospitals can take the lead in inbound medical tourism investment and development [13-15]. Generally, it can be said that as a country develops, its health systems also enjoy massive funding and investments. This translates to good population health and makes the health system attractive to foreigners. It is interesting to note that some doctors and health facilities in

Nigeria receive referrals from other countries. These referrals usually are continuation of care or new cases. This can be harnessed to establish a referral route for foreign patients seeking health care in Nigeria. This is a clear demonstration of confidence in the health system. The sociodemographic characteristics of doctors receiving referrals may help tailor their strategies to better meet the needs of international patients and receiving doctors, ultimately enhancing the quality and effectiveness of care. Understanding the demographics, specialties, and referral patterns of receiving doctors can help tailor marketing efforts to effectively reach and engage with them. Medical tourism stakeholders can enable personalized communication, building trust and establishing strong relationships. Similarly, understanding the referral patterns and preferences of receiving doctors can help optimize referral processes, reducing administrative burdens and improving patient care.

There are limited verifiable data regarding the magnitude of inbound medical tourism, ¹ this study forms part of a database and provides frequency information, referral patterns, the procedures they undergo, and the country they are coming from. Globally, most peer-reviewed publications on medical tourism focus on a theoretical approach, qualitative reviews, and secondary data analysis of medical tourism, its prospects, and its benefits [16-18]. There is limited academic research relating to medical tourism in Nigeria, especially inbound medical tourism in Nigeria. A few local academic references could be found on the subject. This study quantitatively explores inbound medical tourism looking at the frequency, pattern, and practice in Tertiary Hospitals in the Federal Capital Territory (FCT), Nigeria.

Methodology

A descriptive cross-sectional study design was carried out among 160 Medical Practitioners in Tertiary Hospitals in the

Federal Capital Territory (FCT), Nigeria. Abuja-FCT. Abuja is a city in central Nigeria that serves as the country's capital and is located within the Federal Capital Territory (FCT). The Federal Capital Territory (FCT) occupies around 250 square kilometers of the landmass, with a population count of 778,567 for the Abuja Municipal Area Council. [19-21]. Abuja was chosen for this study as it is now one of Nigeria's ten most populous cities and one of the world's fastest-growing cities with an increasing population with the representation of all tribes living in Nigeria, it has 3 major government-owned teaching hospitals. University of Abuja Teaching Hospital, Gwagwalada; National Hospital, Abuja, and Federal Medical Center, Jabi, Abuja, who have easy access to experts who can recommend treatment outside the country. The study population for this study were fully licensed medical doctors practicing in Government-owned tertiary hospitals in Abuja City. The study was done in 2024 and carried out over six months. Data collection was carried out over four months, while analysis and write-up of the study were done for eight weeks. The minimum sample size for medical doctors was calculated using Cochran's formula for minimum sample size determination in a cross-sectional study:[22] A minimum of 160 questionnaires was used for data collection amongst the medical doctors.

Respondents were selected using a multi-stage sampling technique. Data on the frequency and pattern of inbound medical tourism was collected using an interviewer-administered questionnaire. This structured, interviewer-administered questionnaire was based on a simplified set of questions. The first section contains information on the socio-demographic characteristics of the medical doctors, while the second section assesses the frequency, pattern, and practice of medical tourism. These questions were adapted from medical tourism publications in Canada, the United States, Malaysia, and India [16, 23-26].

A one-week training program was conducted for 6 research assistants who were medical interns. Training covered the use of questionnaires on the research topic, ethical considerations, and quality control. Emphasis was laid on proper conduct during interviews and discussions as well as how to recognize the progression of interviews in line with themes. The study instruments were pretested among medical doctors in Federal Medical Center Keffi, Nasarawa State, located about 120km away from the study area. All ambiguous questions were reviewed to reduce the possibility of information bias. Questions were rewritten or deleted to reflect specific aspects of medical tourism related to the study objectives. Questionnaires were screened for completeness, coded, and entered by the researcher into the Statistical Package for Scientific Solutions (SPSS) version 22.0 software for analysis. Discrete data was presented as proportions (percentages) while continuous variables such as age were expressed as means \pm standard deviation. Where continuous data are skewed, median values were stated as well.

Ethical approval was requested and granted by the Bingham University Teaching Hospital Research Ethics Committee. All of the medical facilities that were used in this investigation were asked for permission to conduct it. Before conducting interviews, each respondent provided written informed consent after the interviewers had adequately informed them about:

1. The researcher's and the university's identity.
2. The purpose of the research.
3. The nature of the questions.
4. The estimated time needed to complete the survey.
5. How to file a complaint with the university if desired.

During the interview, privacy and confidentiality were maintained. Participants will receive respectful and deserving treatment.

All information will be kept private and accessible only to the researcher. The results of this study will be released to the public and further scientific understanding.

Results

Socio-demographic Characteristics of the Medical Doctors

Table 1 shows that 71 (44.38%) of the doctors were 41 – 50 years of age, 13 (8.31%) were 51 – 60 years old, 52 (32.50%) were 31 – 40 years of age, 24 (15.0%) were less than 30 years old, And the mean age of 45.8 ± 9.2 years respectively. Ninety-two (57.50%) were males, 68 (42.5%) were females. 84 (52.50%) were Christians and 76 (47.5%) were Muslims.

Eighteen (11.25%) of the doctors were Hausa, 45 (28.13%) were Igbo and 26 (16.25%) were Yoruba, 12 (7.5%) were Gbagyi, 17 (10.6%) were Fulani, and 42 (26.3%) were other ethnic groups like Igbira, Tiv. The majority were married, 105 (65.63%), 48 (30.0%) were single.

Doctors' Reception of Foreign Referrals, Frequency, Source, Reasons of Referrals, and Outcome of Treatment via Inbound Medical Tourism

Table 2 reveals that 23 (14.38%) of the doctors reported receiving foreign referrals. Of this proportion, 15 (65.22%) had received 1 – 5 referrals while 3 (13.04%) had received more than 10 referrals.

The commonly reported sources of these referrals included Ghana, the UK, the USA and Cameroun [5(21.74%), 2 (8.70%), 1 (4.35%), and 8 (34.78%) respectively].

Most treatments lasted for 6 months: 13 (56.52%), 8 (34.78%), and only 1 (4.35%) stayed for over 1 year. Routine checkup was the reason for these referrals among 9 (39.13%) of the doctors while 4 (17.39%) indicated relocation of the patient and post-operative follow-up. However, 18 (78.26%) reported an improvement in their conditions after these treatments.

Table 1. Socio-demographic Characteristics of the Medical Doctors

Variable	Frequency (n=160)	Percent
Age (years)		
≤ 30	24	15.00
31 – 40	52	32.50
41 – 50	71	44.38
51 – 60	13	8.13
Sex		
Male	92	57.50
Female	68	42.50
	160	100.00
Religion		
Christianity	84	52.50
Islam	76	47.50
Marital status		
Single	48	30.00
Married	105	65.63
Separated	4	2.50
Widowed	3	1.88
Ethnic group		
Hausa	18	11.25
Igbo	45	28.13

Gbagyi	12	7.50
Fulani	17	10.63
Yoruba	26	16.25
Others (eg Igbira, Tiv, Idoma,)	42	26.25

Mean age= 43.8 ± 9.2years

Table 2. Doctors' Reception of Foreign Referrals, Frequency, Source, Reasons of Referrals, and Outcome of Treatment via Inbound Medical Tourism

Variable	Frequency	Percent
Received foreign referrals (Inbound) (n=160)		
Yes	23	14.38
No	137	85.63
Frequency of in referrals (since start of practice) (n = 23)		
1 – 5	15	65.22
6 – 10	5	21.74
> 10	3	13.04
Source of in referrals (n=23)		0.00
Ghana	5	21.74
United Kingdom	2	8.70
United States of America	1	4.35
Cameroun	8	34.78
Benin Republic	6	26.09
Brazil	1	4.35
Reasons for referral* (n=23)		0.00
Routine check-up	9	39.13
Relocation of patient	4	17.39
Post-operative follow-up	8	34.78
Lack of expertise (abroad)	2	8.70
Lack of facilities (abroad)	0	0.00
Treatment duration (n=23)		0.00
< 6months	13	56.52
6 -12months	8	34.78
>12months	1	4.35
Outcome of treatment (n = 23)		
Improved	18	78.26
Condition worsened	5	21.74

Discussion

The mean age among doctors was 43.8 (\pm 9.2 years) with a higher proportion above forty years. This indicates that most experienced doctors are involved in these referrals both

inbound and outbound. They may have observed that services or treatment may be available in Nigeria too, thus their decision to accept the referrals from foreign countries. This presents an opportunity for practitioners who would like to manage these ailments within

their facilities. Studies have shown that this may present a learning and skill improvement situation for doctors who are eager to learn new skills and medical technologies [27, 28].

Understanding the sociodemographic characteristics of medical doctors can improve patient matching, ensuring that patients receive appropriate care. Furthermore, understanding the cultural backgrounds and preferences of receiving doctors can help provide culturally sensitive care, improving patient satisfaction and outcomes. There is also a business development and partnerships component as studying the characteristics and referral patterns of receiving doctors can inform strategic partnerships, collaborations, and business development initiatives. Analyzing the demographics and referral patterns of receiving doctors can provide valuable market research insights, informing business decisions and investments. The cultural and ethnic diversity expressed in the findings where we have Christians and Muslims. Various ethnic groups, languages, and marital statuses help to promote inclusivity and diversity in the health system to make it more attractive to foreign patients.

The majority of the doctors are well experienced as the Mean experience was 17.6 years (± 9.5 years), and a third had worked for 11- 20 years. This level of experience is well documented, as Nigerian medical doctors are usually well experienced but lack the necessary facilities [29,30] They would have ordinarily seen similar cases in the past and observed that it would not be managed in any hospital in Nigeria.

Taking a look at the doctors' reception of foreign referrals, frequency, source, reasons for referrals, and outcome of treatment via Inbound Medical tourism, it has always been the desire for the health system of nations to be attractive to the global health community. This attraction stems from the standard of care, quality of facilities, cost of services, waiting time, availability of expertise, etc. This form of medical tourism is when patients from other

countries travel to the country to receive medical care. The desire is to have global patients.

One in every 7 doctors (14%) reported receiving foreign referrals from foreign countries; commonly, they had received 1 – 5 referrals. It is important to note that medical doctors in Nigeria have received referrals from Ghana, the UK, the USA, and Cameroun for treatments lasting for 6 months or more. This is good news for those who are interested in the growth of the medical tourism industry in Nigeria. It means that with improved health infrastructure, improved health resources, and better indices, the Nigerian Health system can become a hub for medical tourism. The Routine checkup (39%), relocation (17%), and postoperative follow-up were the main reasons for the referral. An in-depth review of the services attracting these patients shows that patients came for mainly follow-up treatments, and medical checkups. Thus, there is a huge need to make other interventional or treatment services to global standards. This will help expand the services available and the clients that can be reached.

Conclusion

Concerning inbound medical tourism, 14.4% of the doctors received foreign referrals, most referrals were from Ghana, the UK, the USA, and Cameroun. They managed most of the patients for up to 6 months. The main reason for the referral to Nigeria was for routine medical checkups, relocation of the patient, and post-operative follow-up. However, 78% improvement in their conditions after these treatments.

Recommendations

Nigeria can enhance its inbound medical tourism industry, attract more international patients, and establish itself as a reputable healthcare destination by implementing these recommendations.

To the Government and Health Sector Stakeholders

There is a great need to establish partnerships with Ghana, UK, USA, and Cameroun to harness and foster relationships with healthcare providers, hospitals, and medical associations in these countries to increase referrals and collaborations. The country can develop memoranda of understanding (MOUs) with international healthcare providers to facilitate patient referrals, knowledge sharing, and best practices.

Invest in modernizing healthcare infrastructure, equipment, and technology to provide high-quality services and attract more international patients.

Reinvigorate the specialized centers for routine medical checkups, post-operative follow-up care, and other services in demand by international patients.

We can improve Patient Experience and Outcomes by developing an efficient referral process to ensure seamless transitions for international patients, including timely communication and coordination with referring healthcare providers. This can be improved by better patient support services including language interpretation, cultural adaptation,

and logistical assistance, to ensure a positive experience for international patients.

There is a need to promote Inbound Medical Tourism in Nigeria by creating marketing campaigns targeting healthcare providers, hospitals, and medical associations in Ghana, UK, USA, Cameroun, and other potential source markets. There is a need to leverage on digital platforms including social media, websites, and online forums, to promote Nigeria's healthcare services and attract international patients.

It is important to include a Monitoring and Evaluation process in inbound Medical Tourism like developing a system to collect data on international patient referrals, treatments, and outcomes to monitor the effectiveness of inbound medical tourism initiatives. Regularly evaluate the performance of inbound medical tourism initiatives and make data-driven decisions to improve services and attract more international patients.

Conflict of Interest

No conflict of interest.

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