



Knowledge and Attitude of Health Care Professionals in Obstetrics and Gynecology Department to Women's Health Physiotherapy Services

Ogbutor Udoji Godsdai^{1*}, Omoijahe Benedicta², Ephraim Chukwuemeka³, Awele Maria Nworah⁴, Ezunu Emmanuel⁵, Ezunu Ngozi Esther⁶, Ogbutor Emeke Godson⁷

^{1,7}Faculty of Basic Medical Sciences, Delta State University Abraka, Delta State, Nigeria

^{2,3,4}Department of Physiotherapy, Federal Medical Centre Asaba, Delta State Nigeria

⁵Department of Internal Medicine, Federal Medical Centre Asaba, Delta State, Nigeria

⁶Department of Nursing Services, Federal Medical Centre Asaba, Delta State, Nigeria

ARTICLE HISTORY

Received: 03-10-2024

Revised: 05-12-2024

Accepted: 10-12-2024

Online: 12-12-2024

KEYWORDS

Women's health

Physiotherapy

Health care professionals

Obstetrics and gynecology

ABSTRACT

The attitude of obstetrics and gynecology specialists at Federal Medical Centre (FMC) Asaba, Delta State, Nigeria, towards engaging the services of women's health physiotherapists is at best described uncooperative. This has been attributed to the fear of the purported adverse effect of physical exercise in pregnancy. However, current evidence shows that women's health physiotherapy is an essential component of the multidisciplinary team approach towards a productive antenatal patient management. This study was therefore designed to assess the knowledge, attitude and involvement of women's health physiotherapists among health care professionals (HCPs) in obstetrics and gynecology clinic at FMC Asaba, Delta State, Nigeria. This study employed a descriptive cross-sectional survey involving 108 participant which constituted of 66 nurses, 36 physicians, 5 pharmacists and 1 medical laboratory scientist. A purposive sampling technique was used to select the study participants. Results shows that 56.5% of HCPs had moderate knowledge of the roles of women's health physiotherapy, with a positive to neutral (36.4%) attitude towards involvement of women's health physiotherapists in the management of obstetrics and gynecology conditions and only 38.2% of physicians that participated in this study refer patients for women's health physiotherapy. This study has been able to show that the awareness and recommendation for women's health physiotherapy services among obstetrics and gynecology specialists at FMC, Asaba, is contemptible. Effective collaboration and a multidisciplinary team approach should be encouraged to enhance cross-fertilization of ideas for the overall interest of the patients. In addition, the department of physiotherapy should advocate for a hospital management policy that should enforce best practice in clinical management of patients in the department of obstetrics and gynecology at FMC Asaba, Delta State, Nigeria.

*Address for correspondence

Faculty of Basic Medical Sciences, Delta State University Abraka, Delta State, Nigeria

Email: udojiogbutor@delsu.edu.ng; gcclinics@yahoo.com

DOI: DOI: <https://doi.org/10.55006/biolsciences.2024.4405>

Introduction

There has been a continued reluctance on the part of the Obstetrics and Gynecology specialists at Federal Medical Centre (FMC) Asaba, Delta State, Nigeria, to engage and involve the services of women's health physiotherapists. This has been attributed to the fear of the purported adverse effect of physical exercise in pregnancy. However, physical inactivity has been identified as one of the major modifications in lifestyle that has resulted in the onset of various disease conditions and the increased prevalence of chronic diseases [1]. According to Ogbutor et al, the global interest amongst researchers in physical exercise for health promotion has increased [2]. This has resulted in the frequent recommendations of physical exercise by both National and International committees in health and disease conditions.

The goals of the 2030 Agenda for Sustainable Development has Reproductive health as one of its essential elements for effective realization [3]. The World Health Organization states that approximately 830 women die on a daily basis from avoidable causes associated to pregnancy and childbirth [4]. The International Conference on Population Development (ICPD) defines reproductive health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Despite the declining rate in maternal deaths over the past decades, these deaths have continued to be a challenge, particularly in developing nations such as Nigeria [3]. The wellbeing of a woman is reflected in her specific physiology and the sociocultural, economic, and physical environments and these factors affect both the duration and the quality of life [5]. The primary concern is to enhance the quality of those additional years of life towards a healthy and productive period. Similarly, improved attention during the antenatal period, decreases the occurrence of neonatal mortality. According to the United Nations, some 40 percent of deaths that occur within the first 28 days of birth could be avoided [3].

A number of targets relating to reproductive health were outlined in the 2030 Agenda for Sustainable Development and specifically calls for safeguarding universal access to sexual and reproductive health-care services, including family planning, information and education, and the integration of reproductive health into national strategies and programmes by 2030 [5]. Emphasis was also placed on the need for ensuring universal access to sexual and reproductive health and reproductive rights. Moreover, reducing the global maternal mortality ratio to less than 70 per 100,000 live births, ending preventable deaths of newborns and children under 5 years of age and eliminating all harmful practices, such as child, early

and forced marriage and female genital mutilation were foremost concern [5].

Women's health physiotherapy is a specialty in physiotherapy with particular interest and extra training in a range of female-oriented concerns across the lifespan, ranging from childbearing age to menopausal and the elderly, by providing health promotion, prevention and rehabilitation services [6]. Women's health physiotherapy has improved in scope to include other concerns of women such as incontinence, pelvic (vaginal pain, prenatal and postpartum) musculoskeletal pain, education, prevention and wellness.

There are numerous conditions that women face which require the input of a woman's health physiotherapist. These include urinary incontinence, pelvic organ prolapse, post-mastectomy complications, pre and postoperative complications developmental/neurological disorders, pre and postnatal musculoskeletal dysfunctions, hysterectomy, postpartum depression, osteoporosis, postural abnormalities [7,8]. Women's health physiotherapy plays a major role in all of these conditions. However, physiotherapy treatment and services are often overlooked for individuals with these conditions as other healthcare professionals have insufficient knowledge of the role of physiotherapy [8]. Consequently, patients tend to suffer from the complications that arise with these conditions as there are no early referrals for physiotherapy, being that physiotherapists in Nigeria mainly operate on a referral basis as opposed to their counterparts in the developed world where physiotherapists are seen on a first contact basis. Although physiotherapists adopt referral approaches to patient management, professional societies have developed guidelines recommending patient treatment that encompasses a multidisciplinary approach for effectiveness. These includes professionals such as the physicians, nurses, medical laboratory scientists, pharmacists within the field of obstetrics and gynaecology (O&G) of which physiotherapy is inevitable.

Therefore, there is a need for effective communication between healthcare professionals to aid the knowledge of each other's roles for optimal patient care [9]. Having the right attitude and knowledge of the roles of different healthcare professionals and, in this regard, women's health physiotherapy may help to appropriately utilise its professional skills [9].

The teamwork approach for healthcare professionals cannot be overemphasised, as failure to imbibe this often leads to poor patient management and satisfaction [10,11]. Lack of teamwork impairs the utilisation of other healthcare professionals. Previous

studies showed that negative attitudes and poor knowledge of the roles of women's health physiotherapy led to poor referral practices, and few that refer do so with prescriptions which are sometimes not adhered with due to the bureaucracy involved [14]. Despite numerous studies showing good knowledge and positive attitudes of healthcare professionals toward the roles of women's health physiotherapy from the southwestern part of Nigeria [6,13], there appears to be limited information from the southeastern part. This is important because there are geographical variations in health systems and cultural beliefs. Therefore, this study aimed at assessing the knowledge, and attitude of the roles of women's health physiotherapy and utilization of women's health physiotherapy among health care professionals in the obstetrics and gynaecology department, Federal Medical Centre, Asaba, Delta State, Nigeria.

Materials and methods

The study employed a descriptive cross-sectional survey involving one hundred and eight participants. The study became necessary following repeated resistance from the Department of Obstetrics and Gynaecology in accommodating physiotherapy involvement and management of Obstetrics and Gynaecology cases and the frequent litigations against the Hospital bothering on negligence and mismanagement of patients in the Department of Obstetrics and Gynaecology, Federal Medical Centre, Asaba, Delta State, Nigeria.

Sampling technique

A purposive sampling technique was used to select the study participants because the members of the population are within the same department and are convenient to sample. This research is focused on specific group of professionals thereby making the choice of purposive sampling a more suitable method for time and resource effectiveness.

Study setting

Federal Medical Centre, Asaba is a federal tertiary health institution located in the capital city of Delta State. It occupies a strategic position as it receives referrals from all parts of the states and outside the states. The Department of Obstetrics and Gynaecology is accredited for post-graduate residency training. A search on the Hospitals websites did not reveal much about the department but it's on record that the department has several litigations from patients in time past but efforts are being made to position the department as a referral centre of excellence nationally. Asaba is situated along the bank of the River Niger with the Niger

Bridge linking it with Onitsha in Anambra State. The historic River Niger is a trans-African link beginning from East Africa and down into the Atlantic Ocean. Asaba forms a connector between western, eastern and northern Nigeria through the River Niger from the north and via the Asaba Niger Bridge, an east-west link and a Nigeria landmark. It lies approximately 6 degrees north of the equator and about the same distance east of the meridian; about 100 miles north of where the River Niger flows into the Atlantic Ocean. Since becoming the Delta State capital, Asaba has grown in population to over half a million people and now maintains a cosmopolitan population of predominantly nonindigenous People.

Study population

This study was carried out in the Department of Obstetrics & Gynecology in collaboration with the Department of Physiotherapy, Federal Medical Centre Asaba. The participants were Obstetrics and Gynaecology specialists, resident doctors and medical officers, nurses, pharmacists and medical laboratory scientists in the Department of Obstetrics and Gynaecology.

Sample size

The Sample size was calculated using an online Raosoft calculator with a margin error set at 5%, 95% confidence level, with a population size of 157 and response distribution of 50%. Therefore, Sample size was 112.

Instruments

The study instrument was a structured questionnaire adapted from standardized questionnaires from previous studies. The questionnaires were in four sections: demographic characteristics, HCPs' knowledge of the roles of women's health Physiotherapy in Obstetrics and gynecological conditions, Attitudes of health care professionals towards the involvement of women's health physiotherapists in obstetrics and gynaecology and utilisation of women's health physiotherapy services. The utilization of women's health physiotherapy was tested only on the physicians as they are the only professionals with the sole rights of referrals of patients. The knowledge, attitude and utilisation scales were in Likert format, and three open-ended questions were asked for cases often referred by the physician. A Chief physiotherapist, a data analyst and a statistician checked for the questionnaire's face and content validity. Furthermore, the Inter-Rater reliability was ascertained by comparing the scores of three independent judges on the responses of the participants which was found to be consistent (varied only between 0%-4%). Written informed consent was

obtained from the participants and the questionnaire was anonymous.

Ethical approval

Ethical approval was obtained from the institutional research ethics committee of Federal Medical Centre Asaba, Delta state, Nigeria (FMC/ASB/A81/VOL. X11/265).

Results

Demographic characteristics of study participants

A total of 108 participants completed this survey out of the one hundred and twelve (112) questionnaires distributed, four could not be retrieved. Of the 108 participants, nurses constituted 61.7%, physicians 33.6%, pharmacists 3.7%, and medical laboratory scientists 0.9%. The age range of participants was 21-50 years (modal age 36-40). Regarding years of practice, respondents with 1-3 years, 4-6 years, 7-10 years and >10 years of practice constituted 19.4%, 7.4%, and 34.3% respectively, most participants (38.9%) had more than ten years of practice. The result showed that 17.6% of the participants had poor knowledge, 56.5% had moderate knowledge and 25.9% had good knowledge of women's health physiotherapy. The attitude of HCPs in Obstetrics and gynaecology about women's health physiotherapy was assessed in this study. Table 3 shows that most respondents had either neutral or positive attitudes towards women's health physiotherapy. However, a good proportion of them (27.3%) had a negative attitude.

HCP (physician) involvement of women's health physiotherapy services

This study explored the level of involvement of physiotherapy services among the physicians who participated in this study. Over 61% of the physicians rarely refer patients for physiotherapy services, while 38.2% refer them regularly.

Association between knowledge of and attitude towards the roles of women's health physiotherapy and the involvement of physiotherapy services

Pearson's tests for independence were carried out to determine the association between the physicians' knowledge and attitude of roles in women's health physiotherapy, and their involvement of physiotherapy services in the management of patients. From the result of the analysis, there was a significant association between the knowledge and involvement of physiotherapy services ($X^2=5.3(1)$,

$p=0.02$). There was also a significant association between *involvement* of physiotherapy services and attitude towards women's health physiotherapy ($X^2=14.2(2)$, $p=0.00$). The knowledge of the roles of HCPs was dichotomized into good and poor to check for the association of parameters.

Association between knowledge of the roles of women's health physiotherapy and domains of involvement of physiotherapy services

Pearson's chi-square tests for independence were carried out to assess the association between the doctors' knowledge of the roles of women's health physiotherapy and their involvement of physiotherapy services in Obstetrics and gynaecology cases. There was a significant association between the knowledge of the roles of women's health physiotherapy and referral practices of the physicians who participated in this study ($p=0.00$) and a request for feedback on patients referred ($p=0.03$). There was no significant association between the knowledge and other domains of the involvement of physiotherapy services (see Table 6).

Common O&G cases referred to women's health physiotherapy

The medical physicians were asked to list three cases they usually refer to physiotherapy. The common conditions are pelvic organ prolapse, urinary and faecal incontinence, pubic symphysis diastasis, obstetric palsy, and eclampsia with cerebrovascular accident. Table 7 provides a comprehensive list of women's health conditions referred to physiotherapy.

Discussion

This study aimed to explore the knowledge and attitude of HCPs in Obstetrics and gynaecology on the roles of women's health physiotherapy, and how physicians' knowledge about the roles of women's health physiotherapy in Obstetrics and gynaecology influence their involvement of physiotherapy services in Federal Medical Centre, Asaba. Regarding the role of Physiotherapists in women's health, 82% of respondents, and 17.6% had moderate-to-high knowledge and poor knowledge, respectively. In addition, 73% of respondents had positive-to-neutral attitudes toward women's health physiotherapists and 27% demonstrated negative attitudes. Only very few physicians refer patients to women's health Physiotherapists regularly with most referrals including prescriptions. All the physicians practice some form of interprofessional communication with physiotherapists with regard to referrals.

Table 1. Demographic characteristics of participants.

Variable	Frequency	Percentages
Age (years)		
21-25	9	8.3
26-30	13	12.0
31-35	26	24.1
36-40	39	36.1
41-50	19	17.6
Above 50	2	1.9
Gender		
Male	36	33.3
Female	72	66.7
Profession		
Pharmacist	5	3.7
Nurse	66	61.7
Medical lab scientist	1	0.9
Doctor	36	33.6
Education		
First degree	73	69.5
Postgraduate	21	20
Fellowship	11	10.5
Years of practice		
1-3	21	19.4
4-6	8	7.4
7-10	37	34.3
>10	42	38.9

Source: Computed from Author's survey data, 2023. Knowledge of HCPs in O&G about the roles of women's health physiotherapy.

Table 2. HCP's level of knowledge of women's health physiotherapy.

Variable	Frequency	Percentages
Poor	19	17.6
Moderate	61	56.5
Good	28	25.9

Source: Computed from Author's survey data, 2023. The attitude of HCPs towards roles of women's health physiotherapy.

Table 3. Attitude of HCPs towards women's health physiotherapy.

Variable	Frequency	Percentages
Negative	27	27.3
Neutral	36	36.4
Positive	36	36.4

Source: Computed from Author's survey data, 2023.

Table 4. Utilisation of physiotherapy services by the doctors.

Variable	Not at all n(%)	Rarely n(%)	Occasionally n(%)	Regularly n(%)
Do you refer patients to the physiotherapist?	0(0.0)	9(26.5)	23(67.6)	2(5.9)
Do you refer cases with prescriptions of what to be done?	4(11.8)	8(23.5)	22(64.7)	0(0.0)
Do you request feedback on patients referred?	2(5.9)	6(17.6)	17(50.0)	9(26.5)
Do you practice interprofessional communications with the physiotherapist regarding the referral?	0(0.0)	16(47.1)	13(38.2)	5(14.7)
Do you receive referrals from the physiotherapist?	26(76.5)	6(17.6)	2(5.9)	0(0.0)

Source: Computed from Author's survey data, 2023.

Table 5. Association between Knowledge, attitude, and involvement of physiotherapy services.

Variable	Utilisation		X ² (df)
	Rarely n(%)	Regularly n(%)	
P value			
Knowledge 0.02*			5.3(1)
Poor	0(0.0)	3(8.8)	
Good	21(61.8)	10(29.4)	
Attitude 0.00*			14.2(2)
Negative	2(5.9)	8(23.5)	
Neutral	8(23.5)	5(14.7)	
Positive	11(32.4)	0(0.0)	

Source: Computed from author’s survey data, 2023. * Denotes significance with p-value less or equal to 0.05.

Table 6. Association between knowledge and involvement of physiotherapy services.

Variable	Knowledge		X ² (df)	P value
	PK n(%)	GK n(%)		
Do you refer O & G cases to the physiotherapist?			9.1(2)	0.01*
Rarely	3(8.8)	6(17.6)		
Occasionally	0(0.0)	23(67.6)		
Regularly	0(0.0)	2(5.9)		
Do you refer cases with prescriptions of what to be done?			1.8(2)	0.41
Not at all	0(0.0)	4(11.8)		
Rarely	0(0.0)	8(23.5)		
Occasionally	3(8.8)	19(55.9)		
Do you request feedback on patients referred?			9.14(3)	0.03*
Not at all	0(0.0)	2(5.9)		
Rarely	0(0.0)	6(17.6)		
Occasionally	0(0.0)	17(50.0)		
Regularly	3(8.8)	6(17.6)		
Do you practice interprofessional communications with the physiotherapist regarding the referral?			5.3(2)	0.07
Rarely	0(0.0)	16(47.1)		
Occasionally	3(8.8)	10(29.4)		
Regularly	0(0.0)	5(14.7)		
Do you receive referrals from the physiotherapist?			1.0(2)	0.63
Not at all	3(8.8)	23(67.6)		
Rarely	0(0.0)	6(17.6)		
Occasionally	0(0.0)	2(5.9)		

*Denotes significance with p-value less or equal to 0.05.

Table 7. Association between knowledge and involvement of physiotherapy services.

Condition	Frequency	Percentages
Pelvic Organ Prolapse	34	94.4
Symphyseal Diastasis	25	69.4
Faecal and Urinary Incontinence	30	83.3
Obstetric Palsy	11	30.5
Eclampsia and complication	7	19.4
Pelvic and pudendal nerve injuries	4	11.1
Complications of prolonged labour (e.g., foot drop)	5	13.9
Chronic back pain	30	83.3
Neuromyalgia	2	5.6
Birth trauma	1	2.8
Respiratory complications	1	2.8

Source: Computed from author’s survey data, 2023.

The result showed that 17.6% of the participants had poor knowledge, 56.5% had moderate knowledge while 25.9% had good knowledge of women’s health physiotherapy. This result is in contrast with an earlier

study on the Attitude and practices of obstetricians and gynecologists towards involvement of physiotherapists in management of obstetrics and gynecologic conditions by Odunaiya et al., [6]. In their

study, 75.5% of the participants had good knowledge of women's health physiotherapy. The dissimilarity in the result could be attributed to the difference in geographical location of the study as their study was conducted in the western part of Nigeria where the physiotherapy professional practice and education started in Nigeria as compared to the southeastern region where physiotherapy as a profession is still evolving [14]. It is noteworthy that of over six universities in Delta State offering medicine, basic and allied medical sciences, none is offering Physiotherapy as a programme/course

Another study [12] opined that physicians do not understand the scope of physiotherapy. This is evident in this study as the majority of participants have poor to moderate knowledge of the roles of women's health physiotherapists. The findings from the study of Bolarinde et al., reported similar findings with this present study and showed that 59.1%, 39.4%, and 1.5% of physicians had moderate, good and poor knowledge of physiotherapy respectively [15]. Some other studies have reported that healthcare professionals have higher knowledge in orthopaedics, neurology and sports physiotherapy than any other subspecialties in physiotherapy [14,16]; this might also be a reason why there is moderate knowledge on the subject of the roles of women's health physiotherapy among HCPs in Federal Medical Centre Asaba. This finding shows the need for physiotherapists to increase their efforts to always educate other healthcare professionals about different specialities in physiotherapy and physiotherapy in general by attending grand ward rounds, and clinical meetings and improving interprofessional communications among other healthcare professionals. A study by Ramanandi et al. [17] reported that the greatest challenge facing physiotherapists is creating awareness about physiotherapy roles and services among healthcare professionals and the masses at large. According to Achterbergh and Vriens [18], good awareness about a profession can enhance its practise, while poor awareness can lead to misconception and inadequate practise.

This study explored the attitude of HCPs towards women's health physiotherapy. It established that 27.3%, 36.4% and 36.4% had negative, positive and neutral attitudes toward women's health physiotherapy respectively. This result agrees with two earlier studies by Odunaiya et al. and Maruf et al. [6,19]. Nevertheless, the 27.3% that demonstrated a negative attitude towards women's health physiotherapy implies that there is need to aggressively create awareness be done in that Department.

This study further explored the level of utilisation of physiotherapy among the physicians who

participated in this study. The result show that 61% of the Physicians rarely refer patients to Physiotherapists while 38.2% refer on a regular basis. This result is similar with the study by Okonkwo et al. [12] where 81.9% of physiotherapists argued that physicians rarely refer patients for physiotherapy management. In contrast, a study by Talpur et al. [20] shows that 84% of physicians refer patients for physiotherapy. Also, another study stipulated that out of 1054 participants, 678(56.9%) referred patients to physiotherapy [21]. This finding may be attributed to the training background of the physicians and their practice environment. In their study, it was found that most the clients were referred from Physicians who had training in physiotherapy or trained from institutions that also has training facilities for physiotherapists. It was reported by Odebiyi et al. [21], that physicians who had an introduction to physiotherapy or had physiotherapy in their school of training did not include a prescription in their referrals.

Some of the physicians in this study (11.8%) indicated that they do not include a prescription of the treatment plan for the physiotherapist. However, 64.7% occasionally include prescriptions. This result confirms the argument in the study of Okonkwo et al. [12] where 75.4% of physiotherapists agreed that physicians refer with a recommendation or treatment plan for the patient. Also, a study in California reported that 83.4% of physicians use physiotherapy as a prescription [22]. This implies a wrong attitude and poor knowledge of the roles of Physiotherapy by physicians towards health care delivery as previous studies have shown that physicians view physiotherapists as technicians who lack the skills of examination and evaluation [23].

The finding that the majority of physicians do not regularly seek feedback on the patients being referred for women's health physiotherapy or practice interprofessional communication with women's health physiotherapists is in line with a previous study which showed that physicians do not seek feedback on patients being referred for physiotherapy [12]. Feedback is important in patient management as it helps to not only track the progress of administered physiotherapy intervention but also helps the physicians to know the efficacy of physiotherapy intervention [12]. Interprofessional communication should be established by increasing association between physiotherapists and physicians to enable an environment of feedback [24].

Conditions frequently referred for women's health physiotherapy include pelvic organ prolapse, faecal and urinary incontinence, Chronic back pain and symphyseal pubis diastasis. This implies that these physicians are familiar with the roles of physiotherapy in some obstetrics and gynaecology conditions more

than others [6]. Previous studies reported that participants had the highest knowledge about physiotherapy roles in uterine prolapse [6] and urinary incontinence [13] which agrees with this study that shows that the physicians refer patients with pelvic organ prolapse and urinary incontinence for physiotherapy.

The significant association reported between the knowledge of the roles of women's health physiotherapy and utilisation of women's health physiotherapy is in tandem with previous studies which reported that the level of knowledge about a profession is related to the level of utilization of such profession's services [16,18]. A study in Saudi Arabia also found that the low level of utilization of physiotherapy services in all areas of its specialities was a result of poor knowledge of other healthcare professionals mostly the physicians as they are the sole referral of patients for physiotherapy [25].

The significant association reported between the knowledge of the roles of women's health physiotherapy and referral practices of the physicians and a request for feedback on patients referred is in line with previous studies that opined that physicians who have adequate knowledge of physiotherapy from their institution of training refer patients for physiotherapy than those who did not undergo training in institutions where there is training in physiotherapy programmes [21].

Conclusion

The results of this study have been able to elucidate the knowledge and attitude of health care professionals in Obstetrics and Gynecology Department of Federal Medical Centre, Asaba, Delta State, Nigeria, on the roles of physiotherapists in women's health. This study has been able to show that the awareness and recommendation for women's health physiotherapy services among Obstetrics and Gynecology specialists at Federal Medical Centre, Asaba, is interesting. Physiotherapists in the Centre should explore opportunities to improve their skills and engage their counterpart in productive conversation that would enhance the appreciation of their roles in the Department of Obstetrics and Gynecology of Federal Medical Centre, Asaba. It is also necessary to broaden the curriculum of the specialists in Health care to appreciate the roles of other professionals in the field of medical practice. In addition, the Department of Physiotherapy should advocate for a hospital management policy that should enforce best practice in clinical management of patients in the Department of Obstetrics and Gynecology at Federal Medical Centre Asaba, Delta State, Nigeria.

Contribution of authors

Concept development- Ogbutor Udoji Godsday, Ephraim Chukwuemeka. Design- Ogbutor Udoji Godsday, Ephraim Chukwuemeka, Awele Maria Nworah Omoijahe Benedicta. Data collection- Ogbutor Udoji Godsday, Omoijahe Benedicta, Ephraim Chukwuemeka, Awele Maria Nworah, Ezunu Emmanuel, Ezunu Ngozi Esther, Ogbutor Emeke Godson. Analysis of data- Ogbutor Udoji Godsday, Omoijahe Benedicta, Ogbutor Emeke Godson. Supervision- Ogbutor Udoji Godsday, Ephraim Chukwuemeka. Writing of manuscripts- Ogbutor Udoji Godsday, Omoijahe Benedicta and Ogbutor Emeke Godson. Literature Search- Ogbutor Udoji Godsday, Omoijahe Benedicta and Ogbutor Emeke Godson

Acknowledgments

The authors wish to acknowledge the enthusiastic participants in the department of Obstetrics and Gynaecology

Conflict of Interest

The authors wish to declare that there are no potential conflicts of interest that could partially or fully prejudice the research report.

Funding

No funding or grants was received

References

1. Godsday Udoji Ogbutor, Ephraim Chukwuemeka, Nworah Awele Maria, Ogbutor Great Emeke et al., The Enablers and Barriers Associated With the Performance of Physical Exercise in Patients with Gestational Diabetes Mellitus. *Journal of Behavioral Health*, 2023;12(3);1 - 6
2. Ogbutor UG, Nwangwa EK, Agbonifo CE, Nwabueze Z, Ephraim C, et al. Acute Blood Pressure and Pulse Rate Response to Isometric Handgrip Exercise at 30% Maximum Voluntary Contraction in Prehypertensive Subjects. *Advances in applied physiology*. 2022; 7(1): 8-14.
3. United Nations Children's Fund (2015). *Committing to Child Survival: A Promise Renewed - 2015*, UNICEF, New York. UNICEF global databases and the United Nations Inter-agency Group for Child Mortality Estimation, *Levels and Trends in Child Mortality: Report 2015*, UNICEF, New York, 2015.

4. World Health Organization. Regional Office for Europe. (2017). Maternal health: fact sheet on Sustainable Development Goals (SDGs): health targets. World Health Organization. Regional Office for Europe. <https://iris.who.int/handle/10665/340843>
5. Jolivet, R.R., Moran, A.C., O'Connor, M. et al. Ending preventable maternal mortality: phase II of a multi-step process to develop a monitoring framework, 2016-2030. *BMC Pregnancy Childbirth* 18, 258 (2018).
6. Odunaiya NA, Ilesanmi T, Fawole AO, Oguntibeju OO. Attitude and practices of obstetricians and gynecologists towards involvement of physiotherapists in management of obstetrics and gynecologic conditions. *Int J Womens Health*. 2013;5:109-14.
7. Britnell SJ, Cole J, Isherwood L, Sran MM, Britnell N, Burgi S, Candido G, Watson L. Postural Health in Women: The Role of Physiotherapy. *Journal of obstetrics and gynaecology canada*. 2005;27(8):780-780.
8. Balogun JA. Physiotherapy in Obstetrics and Gynaecology. In *Contemporary Obstetrics and Gynecology for Developing Countries 2021*; 27(493):553-569.
9. O'Reilly P, Lee SH, O'Sullivan M, Cullen W, Kennedy C, MacFarlane A. Assessing the facilitators and barriers of interdisciplinary team working in primary care using normalisation process theory: an integrative review. *PLOS ONE*. 2017;12(5):e0177026.
10. Rosen MA, DiazGranados D, Dietz AS, Benishek LE, Thompson D, Pronovost PJ et al. Teamwork in healthcare: key discoveries enabling safer, high-quality care. *Am Psychol*. 2018;73(4):433-50.
11. Zajac S, Woods A, Tannenbaum S, Salas E and Holladay CL (2021) Overcoming Challenges to Teamwork in Healthcare: A Team Effectiveness Framework and Evidence-Based Guidance. *Front. Commun.* 6:606445. doi: 10.3389/fcomm.2021.606445.
12. Okonkwo UP, Ihegihu EY, Maruf FA, Umunnah JO, Maduagwu SM, Okoye EC et al. Physiotherapists' perception of physicians referral of patients for physiotherapy in the Nigerian health system. *Bull Fac Phys Ther*. 2021;26(1):32-41.
13. Tahir A, Maqsood Umer, Arshad H. Awareness of obstetricians and gynecologist regarding role of physical therapy in managing obstetric and gynecological patients in private and government hospitals; *Journal of the Society of obstetricians and gynaecologists of Pakistan*. 2017;7(3): 144-8.
14. Hulme, J. B., Bach, B. W., & Lewis, J. W. (1988). Communication between physicians and physical therapists. *Physical Therapy*, 68(1):26-31.
15. Bolarinde S, Omoniyi O, Joseph E. Awareness and knowledge about the roles of physiotherapy in healthcare among clinical and non-clinical staff. *Int J Clin Case Rep*. 2021;4(13):6-16.
16. Agni PN, Battin S. Awareness of physiotherapy among general practitioners: a pilot study. *Int J Physiother*. 2017;4(4):253-61.
17. Ramanandi V, Panchal D, Prabhakar M, Shah D, Mavani J. Awareness, attitude, belief, and utilization of physiotherapy services among the general public in major cities of Gujarat state. *Physiother - J Indian Assoc Physiother*. 2019;13(2).
18. Achterbergh J, Vriens D. Managing viable knowledge. *Syst Res Behav Sci*. 2002;19(3):223-41.
19. Maruf FA, Ekediegwu EC, Akinpelu AO, Nwankwo MJ. Awareness, belief, attitude and utilization of physiotherapy services in a Nigerian population. *Journal of the Nigeria Society of Physiotherapy*. 2012;20(26):7-16.
20. Talpur M, Khanzada S, Khowaja A. Assessment of the referral of patients for physiotherapy among medical professionals of Isra University Hospital. 2015;14(5):73-6.
21. Odebiyi, Daniel & Amazu, A. & Akindele, Mukadas, Igwe, Emeka S, Olaogun, Matthew. Evaluation of the mode of referral of patients for physiotherapy by physicians. *Af Jrl Phys Rehab Sci*. 2010;2(1).
22. Silva DM, Clark SD, Raymond G. California physicians professional image of physical therapists. *Phys Ther*. 1981;61(8):1152-7.
23. Dunkel BH. Survey of attitudes of Arkansas physicians and physiotherapists, towards the professional capacity of the physiotherapist. *Physiotherapy*. 2004;25(18):584-7.
24. Hulme JB, Bach BW, Lewis JW. Communication between physicians and physical therapists. *Phys Ther*. 1988;68(1):26-31.
25. Alshehri MA, Alhasan H, Alayat M, Al-Subahi M, Yaseen K, Ismail A et al. Factors affecting the extent of utilization of physiotherapy services by physicians in Saudi Arabia. *J Phys Ther Sci*. 2018 F;30(2):216-22.