Knowledge and Practices of Female Traditional Healthcare Givers to Mothers on Referral System for Care and Immunization against Childhood Killer Diseases in Hard-to-Reach Areas of Adamawa State - Nigeria

Takwi, Relester¹*, James Hamuel Doughari² ¹College of Nursing and Midwifery, Yola, Adamawa State, Nigeria ²Modibbo Adama University Yola. Northeast, Nigeria

Abstract

Female Traditional Healthcare Givers' (FTHGs) knowledge, attitude, and practice on maternal and infant survival from pregnancy, delivery, and after birth has been a contextual matter throughout the globe, especially where the incidence of infant mortality rate is high. This often poses questions as to why, what happened, and where women of childbearing go for health seeking when pregnant, at birth, and after delivery? The impact of FTHGs activities to mothers and infants on their education and referral of mothers and children for treatment and immunization was studied in the three Senatorial Districts of Adamawa State. Self-structured questionnaires with both open and closed-ended responses and oral interviews were used for the purpose of the study and analyzed electronically on SPSS version 25.0. Approaches to improve the knowledge and practice of Female Traditional Healthcare Givers include seminars and workshops by Non-Governmental Organizations', Antenatal Care at government health facilities, and health professionals' effort in-home visits and formal education. These have improved FTHGs knowledge, skills, and acceptance of immunization programme against childhood killer diseases in most of the Senatorial District communities. Maternal and infant morbidity and mortality has experienced a great reduction in the process as FTHGs made referrals to health facilities on cases needing treatment and immunization. This underlies the need for training in epidemiological findings to prevent the incidence of infant morbidity and mortality since education is the key to a healthy live.

Keywords: Childhood killer diseases, Epidemiological, Female Traditional Health care Givers, Healthcare, Immunization, Infant morbidity, Mortality, and Referral.

Introduction

Childhood killer diseases are diseases that mostly affect children of 0 to 5 years and have been a global public health concern as the diseases claim several millions of children's lives yearly [1]. Despite the introduction of the Expanded Programme for Immunization Initiative by the World Health Organization and the United Nations as a cost-effective and successful Public Health intervention program, diseases remain a problem due to poor coverage in most parts of the world. Child-care and health outcomes are interconnected phenomena both within and across various domains of development. Child health and ill health is dependent on early support and positive interactions between parents and healthcare givers. The function of one domain of development that have influence over the other may have a long-lasting impact on the child's development across the life course [2].

According to Masten and Cicchetti [3], and Breiner [4], "effectiveness in one domain of competence in one period of life becomes the scaffold on which later competence in newly emerging domains develops -competence begets

Received: 16.10.2022 Accepted: 17.01.2023 Published on: 30.03.2023 *Corresponding Author: rtakwi@gmail.com competence". Parenting knowledge, attitude and practices are shaped by the number of factors which include parents' own experiences and circumstances, expectations or things learned from others such as traditional healthcare, family, cultural systems, friends and social networks, children's characteristics such as temperature, gender etc. The contextual factors relevant to this study that influence parents' knowledge, attitudes, and practices include support from the traditional healthcare givers and ones available within the larger community of which they belong and the ones provided by policies affecting the availability to succeed in their parental role [5]. Attitude usually determines the use of knowledge one has about something or not, which will be transformed into practice. If one does not value or believe knowledge received, he is less likely to practice it or act upon it [6, 7]. These three components, knowledge, attitude, and practice are intertwined and reciprocal in theory, bidirectional, and empirical, forming each other.

Traditional healthcare givers and traditional healers have been an integral part of the majority of African communities and form the belief systems of the same. Traditional healers have received value among the communities' time immemorial [8]. Before the advent of conventional medicine, Female Traditional Health Care Givers (FTHGs) has been in existence, aiding pregnant women through herbal and spiritual solutions. They are depended upon for solution to various health issues and are viewed as the first and last line of defense against debilitating and contagious plagues that affects lives of people. History documents that traditional midwifery is an inherited occupation for untrained individuals who believe in facilitating natural childbirth. With the poor economic situation in the country, over 10 percent of the population live in poverty and some women use the services of FTHGs. Patients most often prefer traditional healthcare givers, whose services are easily accessible and affordable without the demand for any cash off front.

Most of the uneducated mothers who see no difference or prefer patronizing FTHGs may not be opportune to have full knowledge on the prevention of childhood killer diseases. Besides, due to delays experienced in many Primary Health Care Centers, (FTHGs) are more popular among the rural populace. Furthermore, FTHGs use both spiritual and herbal methods and experience, which resonates well with the rural women to utilize their services. Many women grumble about the accessibility of adequate care from health workers and the cost of services, and this made them patronize FTHGs, traditional healers, and prayer houses believed to give adequate care and cheaper services, though unprofessionally [9]. Midwives believe in facilitating natural childbirth as much as possible, which is one of the major factors preventing women from utilizing primary health care services. They claim the health centres attendants are not willing to assist them but rather subject them to caesarean section especially if the baby is big. Consequently, they prefer to use traditional birth homes because they put more effort in care, assistance and prayers to ensure the women give birth successfully.

Access to skilled health care accounts for a reduction in maternal/infant mortality and morbidity. For instance, in 2021, the cholera epidemic in Nigeria affected nearly 100,000 persons and killed over 3,000 due to poor hygiene practices, lack of water facilities and inadequate medical intervention, 918 primary healthcare centres in 32 states remained closed, a situation which worsened the plight of the poor who use the facilities. The flexibility of FTHGs is such that every woman chooses where she wants to give birth to her child due to family background, culture, and beliefs that medical practitioners may not be able to handle [10]. This serves as an indicator to plan a program for FTHGs and educate them on remedies for the killer diseases, which will serve as the medium for awareness to mothers in their communities, as most of them are skeptical with different perceptions on the program (immunization) let alone of promoting it [11-13].

The rate of child mortality in Nigeria poses a great concern as Nigeria accounts for 12% of stillbirths globally, as stated by UNICEF, this serves as a threat to the attainment of Millennium development Goal 4 of reducing neonatal mortality to 12% or fewer per 1000 live births and under-fives to 25% by 2030. 50 percent of these stillbirths occur during intrapartum and delivery period, just like in many underdeveloped countries. In Nigeria, there are quite a lot of challenges, including poverty, religious restrictions, and Patriarchal cultural control, accessibility to health facilities, rigid culture, which makes mothers not to comply with immunization schedules. Poverty for instance, is a major factor greatly affecting the health of children in Yola Adamawa State, Nigeria. Many people live under a poverty level of less than a dollar per day [14]. Studies showed about 216, 000 children die yearly, with an average of 600 per-day and 100,000 children liable to physical disability consequent of killer diseases [11, 12].

Child morbidity and mortality is a great public health issue that brings the world stakeholders together into deliberation on the way forward [15]. Consequently, in 1979, Expanded Programme on Immunization (EPI) was introduced in Nigeria to curtail the childhood killer diseases and mortality of underfives under the auspices of Primary Healthcare Department. However, challenges confronted at the Local Government levels and at households made the exercise ineffective. Also, funds from Federal and state allocations were either inadequate or not forthcoming for the purchase of vaccines, logistics, and mobilization of volunteers for vaccine administration. Moreover, the success of the campaign became difficult due to inadequate skilled manpower [11, 12].

To effectively prevent infant mortality, Female Traditional Health care Givers must be knowledgeable on the preventive measures against these diseases and be able to effectively utilize referral systems to healthcare facilities to safe life.

The World Health Organization noted that in most developed countries, more than 90 percent of all births benefit from the presence of a trained midwife, doctor or nurse. However, fewer than of all births in developing and half underdeveloped nations are assisted by such skilled health personnel. Primary health care services in recent times have aimed at forestalling maternal mortality rate but the ease of access to these facilities in rural areas is farfetched. The proper practices of Traditional Healthcare Givers and Mothers on childhood killer diseases- a public health concern, is of important that would greatly reduce morbidity and mortality among the population of underfives in the globe, since Female Traditional Healthcare play a great role in childcare within the communities. A lot of precious lives of children are claimed yearly by these killer diseases worldwide especially Asian and African countries being third world [16]. There is, therefore the need to determine the practices of Female Traditional Health care Givers on the referral system as it relates to childhood killer diseases with a view to adopting measures that will improve the practices to safer standards.

Materials and Methods

The study utilized descriptive survey methods in a quantitative technique to assess the attitude and practice of client referral by Female Traditional Healthcare Givers on enhancing immunization uptake in rural communities of Adamawa State, Nigeria. The state is one of the 36 States of the Federal Republic of Nigeria. It is one of the largest States of Nigeria and occupies about 36,917 square kilometers with a total population of 3,178,950 (Population Report Census 2006). Adamawa State lies on the Latitude: 9.32650 N and Longitude: 12.39840 E. The state is politically subdivided into three Senatorial Districts, namely, the Northern, Central and Southern Senatorial Districts. To this study, three local Government Areas were selected from each of the three Senatorial Districts. The target population for this study were the Female Traditional Healthcare Givers and Mothers (FTHGMs). A sample size of 350 was achieved using Cochran formula and multistage sampling techniques was applied. The entire Adamawa was divided into three based on political classification viz: Central Senatorial District (CSD), Northern Senatorial District (NSD) and Southern Senatorial District (SSD). In each of the districts, three local governments were randomly selected for the study. Based on the population of women in the selected local governments, proportionate sample was determined within a sampling frame (CSD =161, SSD =116 and NSD 73 making a total of 350). Questionnaires was developed by the researchers and data collected by direct administration with the help of trained research assistants. Ethical clearance was obtained from the ethical committee at the State Ministry of Health Yola which has an ethical approval number ADHREC27/08/2021/065 and a letter addressed to the local Government authorities that shows ministerial permission for the research. The collected data was analyzed electronically on SPSS version 25.0.

Results

Knowledge of Female Traditional Health Care Givers and Mothers on Childhood Killer Diseases

Results of FTHCGs and Mothers' knowledge on childhood killer diseases is shown in Fig 1. Result from CSD showed 121(78.6%) of mothers responded to have knowledge on childhood killer diseases while 33(21.4) responded not to have knowledge on childhood killer diseases. Result from the SSD also showed 75(77.3%) of mothers responded to have had knowledge on childhood killer diseases while 22(22.7%) did not. Also resulting from the NSD

showed 42(72.4%) of mothers responded to have knowledge on childhood killer diseases while 16(27.6%) did not. The result indicates that mothers from the CSD are more knowledgeable on childhood killer diseases compare to those mothers of the SSD and NSD, though the disparities are not quite much looking at the percentages. Results of FTHGs' knowledge on childhood killer diseases from the CSD showed 3(42.9%) that have knowledge of childhood killer diseases out of 7 respondents while 4(57.1%) did not. In the SSD, result showed 15(78.9%) responses that have knowledge on childhood killer diseases out of 19 respondents while 4(21.1%) did not. Result from the NSD showed 3(20.0%) of FTHGs respondents that have knowledge on childhood killer diseases out of 15 respondents while 12(80.0%) respondents did not. The result showed that, the FTHGs of the SSD have more knowledge on childhood killer diseases compare to those of the CSD and NSD.

Attitude of FTHGs and Mothers Toward Referral System

Result on attitude of FTHGs and Mothers to referral system in the CSD (Table 1) showed 10(6.5%) of mothers out of 161 were undecided, 31(20.1%) do not agree, 6(3.9%) agree somehow, 77(50.0%) agree that they refer mothers to receive immunization at health centres as well as 30(19.5%) who strongly agree. Result at the SSD showed 14 (14.4%) of mothers out of 116 were undecided on the referral system for immunization, 18(18.6%) do not agree, 5(5.2%) agree somehow, 48(49.5%) agree that they do refer mothers for child immunization on childhood killer diseases as well as 12(12.4%) strongly agree. Also, the results from NSD showed 7(12.1%) of mothers were undecided on referral system for immunization of children on childhood killer diseases, 9(15.5%) do not agree, 4(6.9%) agree somehow, 23(39.7%) agree they do refer mothers for children immunization against childhood killer diseases as well as 15(25.9%) who strongly agree. Result showed that mothers from the CSD received more referral to health centers to receive immunization against childhood killer diseases than those of the SSD and NSD.

However, another result from the CSD showed 6(85.7%) do not agree out of 7 FTHGs that do not refer mothers for child immunization against childhood killer diseases. while 1(14.3%) agree she do refer mothers to receive immunization at health Centre. The result from the SSD showed 4(21.1%) undecided responses of FTHGs out of 19 respondents, 6(31.6%) agree somehow, 7(36.8%) agree that they do refer mothers to receive immunization against childhood killer diseases at health center as well as 2(10.5%) strongly agree. At NSD, result revealed 2(13.3%) undecided out of 15 FTHGs respondents, 8(53.3%) agree somehow, 1(6.7%) agree she do refer mothers to receive immunization at health center against childhood killer diseases as well as 49(26.7%) strongly agree. The above result shows that FTHGs at the NSD refer mothers to receive immunization at health center more than those of the CSD and SSD.

FTHGs and Mothers' Practices on Referral System

Result of practices of FTHGs on educating mothers for children's treatment and immunization at health centers from CSD is

shown in Table 2. Result showed 5(3.2%) out of 154 were undecided on whether they practice referral system or not, 45(29.2%) do not agree, 12(7.8%) agree somehow, 64(41.6%) agree that they do practice referral to hospital for treatment and immunization as well as 28(18.2%) strongly agree. Result from SSD showed 12(12.4%) undecided on practicing referral system out of 97respondents, 22(22.7%) do not agree, 9(9.3%) agree somehow, 35(36.1%) agree they practice referral system, 19(19.6%) strongly agree. The result from NSD showed 7(12.1%) undecided out of 58 respondents on practicing referral system for treatment and immunization against childhood killer diseases, 14(24.1%) do not agree, 1(1.7%) agree somehow, 11(19.0%) agree 25(43.1%) strongly agree. The results showed SSD practice referral system more than the CSD and NSD. Result from FTHGs in CSD showed 6(85.7%) out of 7 respondents who do not agree to have practice referral system for treatment and immunization of children against childhood killer diseases while 1(14.3%) strongly agree. Results from the SSD showed 2(10.5%) out of 116 do not agree, 6(31.6%) agree somehow, 10(52.6%) agree, 1(5.3%) strongly agree. Result from NSD showed 5(33.3%) respondents do not agree, 8(53.3%) agree somehow, 2(13.3%) agree. The above result indicates that FTHGs from the SSD practice referral system more than CSD and NSD.



Figure 1. Mothers and FTHGs Knowledge on Childhood Killer Diseases

Parameter	Response	CSD (N=161	(SSD (N=116	(NSD (N=73)	
		Mothers	FTHGS	Mothers	FTHGS	Mothers	FTHGS
I educate mothers to visit hospital after delivery for children	Undecided	5(3.2%)	0(0.0%)	12(12.4%)	0(0.0%)	7(12.1%)	0(0.0%)
treatment/immunization	Don't agree	45(29.2%)	6(85.7%)	22(22.7%)	2(10.5%)	14(24.1%)	5(33.3%)
	Agree somehow	12(7.8%)	0(0.0%)	9(9.3%)	6(31.6%)	1(1.7%)	8(53.3%)
	Agree	64(41.6%)	0(0.0%)	35(36.1%)	10(52.6%)	11(19.0%)	2(13.3%)
	Strongly agree	28(18.2%)	1(14.3	19(19.6%)	1(5.3%)	25(43.1%)	0(0.0%)
	Total	154	L	26	19	58	15

Table 1. Mothers and FTHGs' Practices on Referral System

Key: CSD - Central District, SSD - Southern District, NSD - Northern District, FTHGs - Female Tradition Health care givers. P value- 0.65333

Table 2. Mothers and FTHGs' Attitude toward Referral of Clients

Parameter	Response	CSD (N=16)	1)	SSD (N=11	(9)	NSD (N=73)	
		Mothers	FTHGS	Mothers	FTHGS	Mothers	FTHGS
I carried/referred mothers to receive immunization at	Undecided	10(6.5%)	0(0.0%)	14(14.4%)	4(21.1%)	7(12.1%)	2(13.3%)
health center	Don't agree	31(20.1%)	6(85.7%)	18(18.6%)	0(0.0%)	9(15.5%)	0(0.0%)
	Agree somehow	6(3.9%)	0(0.0%)	5(5.2%)	6(31.6%)	4(6.9%)	8(53.3%)
	Agree	77(50.0%)	1(14.3%)	48(49.5%)	7(36.8%)	23(39.7%)	1(6.7%)
	Strongly agree	30(19.5%)	0(0.0%)	12(12.4%)	2(10.5%)	15(25.9%)	49(26.7%)
	Total	154	7	97	19	58	15

Key: CSD - Central District, SSD - Southern District, NSD - Northern District, FTHGs - Female Tradition Health care givers

Discussion

The study investigated the impact of knowledge, attitude, and practice of FTHGs and Mothers to referral systems and on childhood killer diseases from three local governments in each of the three Senatorial Districts in Adamawa State, Nigeria. Questionnaires were distributed to each Senatorial District based on the strength of client flow in the facilities (number of mothers and FTHGs). Central Senatorial District (CSD) has 161 questionnaires, Southern Senatorial (SSD) 116 and Northern Senatorial District (NSD) 73. Interviews were conducted based on the clients' inability to read and write using interpreters to obtain needed information.

Studies on knowledge of Mothers and FTHGs on childhood killer diseases, as seen in Figure 1 chart showed that, mothers from CSD have more knowledge on childhood killer diseases with (78.60%) followed by mothers in the SSD (77.30%) compared to those in the NSD (72.40%). Though the disparity is not much but agreed with Al-Ayed [18] and Bello and Daniel [19] reported proper growth of a child has to do with the mothers' educational knowledge while FTHGs at the SSD have more knowledge on childhood killer diseases (78.90%) agreed with Oku et al and Adatara et al [20-22] stated the importance of education, effective communication and house to house visits of FTHGs ensure vaccine coverage against childhood diseases that reduces child mortality in a community followed by those in the CSD (42.90%) compare to those of the NSD where ineffective communication and awareness on immunization against childhood killer diseases tend to exist [20, 21]. The result generally showed SSD mothers and FTHGs' higher knowledge on childhood killer diseases than the Central and Northern Senatorial Districts. The result showed that prevalence of poor knowledge on childhood killer diseases exists in the Northern Senatorial District. In the NSD, the FTHGs motivated with financial were

inducements by the Executive Secretary of Primary Healthcare authority (ESPHCA) to encourage them to refer cases of deliveries and child morbidity to health centers than managing them at their end.

The child's good health and proper growth is dependent on the mother's know-how and education [18]. That is why impacting knowledge on the girl child means educating a nation. Bello and Daniel [19] reported that the educational level of a mother and attitude play a great role in children health condition. Though, Nigeria, among other nations, has poor systemization of immunization programs, efforts could be intensified to ensure good coverage of immunization. When women receive more knowledge on immunization and childhood killer diseases, poor compliance of mothers that results in increase child mortality due to childhood killer diseases is minimized. In addition to the effect of poor educational background, inability of mothers and FTHGs to comply with immunization programmes comes because of religious/cultural practices. [19] In some settings, the traditional and religious practices do not allow women to go out in public. This makes it difficult for them to access immunization or attend health facilities. Oku et al. [20] reported that on many occasions ineffective communication to the populace on immunization and childhood killer diseases could lead to rejection of the programme and vaccines among communities. Some households in a community could state categorically that no hospital attendance is allowed for any member of the family. This comes because of poor knowledge and misunderstanding of the importance of immunization. To improve the knowledge and acceptance of immunization among mothers and FTHGs to ensure vaccine coverage against childhood killer diseases and to reduce child mortality, where possible, more efforts should be intensified on house-to-house campaign/home visits [20, 21].

Knowledge received by mothers during antenatal care, seminars held by

Nongovernmental organizations (NGOs) for FTHGs, awareness in churches and mosques play vital role in health behavioural change toward immunization programmes among the communities. This has led most mothers and FTHGs to embrace vaccination for their children against childhood killer diseases. Adatara, et al. [22] reported that since these FTHGs stay in the communities, their role of care cannot be over emphasized and therefore, need improvement in knowledge and skills for conduct of deliveries at home, care of the newborn after birth, health education to women during pregnancy on nutrition and lactation, provision of natural family planning, counseling, psychological support in pregnancy and childbirth.

Studies on the attitude of FTHGs towards referring clients for immunization against childhood killer diseases in Table 2 showed higher percentage of referral from the Central Senatorial District (50.0%) among mothers compared to the other two Senatorial Districts of the State. This showed that more women were being referred to health facilities in good number to receive immunization for their children against childhood killer diseases. Also women themselves, who understood the importance of immunization do aid in referring their comothers in SSD to receive immunization for the children to reduce the burden of childhood killer diseases on child hood killer diseases. Findings also showed that FTHGs from the Northern Senatorial District (26.7%) refer mothers to health facilities to immunize their children against childhood killer diseases more than the Central and Southern Senatorial Districts. Referral protocols help prevent potential complications from occurrence and minimize unnecessary fatality [22, 23]. Sarmento [24] however had reported non-compliance of some mothers to accept referral and go for preventive services to health centres until conditions get becomes too complicated to handle. This is an attribute of ignorance and poor or lack of knowledge on what prevention means. Referral protocols when properly observed will eliminate such complications and strengthen FTHGs structure as they network with health professionals [25].

Result on FTHG and Mothers practices towards referrals of clients for immunization Figure 2 showed that the highest respondents of FTHGs that refer women for immunization after delivery are from Southern Senatorial District (52.6%) compared to the Northern and Central Senatorial Districts. The inability of many of the FTHGs to refer women for immunization could be as a result of lack of proper knowledge of the mode of transmission and replication of the childhood killer diseases. Furthermore, lack of such referrals can result in a higher rate of contraction of childhood diseases. High referrals reduced mortality and complications as well as improved reduction in incidence of the killer diseases. Low level of childhood immunization schedule among rural FTHGs in addition to other factors such as inadequate training shortages of trained health workers, lack of political will and poor attribute of some health workers are contributory to increase in neonatal, maternal mortalities. infant, and Training specifically improves **FTHGs** attribute, knowledge and approach to antenatal care and delivery [24,26]. Similarly, SSD mothers' responses (36.1%) showed higher practices on referral of each other than those of the CSD and NSD. This is based on proper awareness and education on childhood killer diseases and its impact on a child.

From the studies on nature and level of education given to mothers by FTHGs, results clearly showed that mothers from Central Senatorial District have higher level of education more than the Southern and Northern Senatorial Districts. This could be ascertained based on the intensity of awareness that goes on in the urban centers compared to the rural areas. Most incidences of complicated cases and death rates of childhood killer diseases comes from rural areas where majority of people are less informed on childhood killer diseases and importance of immunization. In addition, unavailability of vaccines in such rural areas and low utilization of immunization programmes and cost of transportation to health facilities aggravate such health complications. Akingbulu [21] reported that if a community is well informed there is great improvement in immunizing their children and where women are always reminded of importance of immunization against childhood diseases, less child mortality rate was recorded. Therefore, knowledge on childhood killer diseases and immunization is power to child survival. Individualized education to parents/ mothers to the level of their understanding where way possible, such as, antenatal care (ANC), home-based/home visits, churches/mosques, friends, yields better acceptance of vaccines against childhood diseases among communities.

In some parts of Nigeria, culture and tradition play vital role in communication among some certain ethnic groups. In such groups, until information is passed in one's language there is inadequate understanding and where there is no understanding such information could not be used. It is important to note that no woman will allow any harm to her child if she knows how to prevent it and this is applicable to most communities around the world. Hence the need to educate the mothers and FTHGs. Harval et al. (2019) reported that, traditional methods of education (home-based strategies) of health education increase knowledge, improves behavioural change, beliefs and self-efficacy of mothers toward motherhood care of their children especially on child immunization against childhood killer diseases.

Conclusion

The study revealed the increased awareness of childhood killer diseases among FTHGs

References

[1] Preedy, V.R. and Watson, R.R. (2010). The Impact of Infectious Diseases on the Development of Africa. Handbook of Disease Burdens and Quality of improved referrals and education to mothers to higher level of healthcare facilities for the treatment and immunization against childhood killer diseases, which has been a public health concern for decades. Some areas like the Northern Senatorial Districts have not received enough knowledge on childhood killer diseases, attributing the conditions to superstitious beliefs. They need more attention from health professionals to give them proper education.

Ethical Approval

Approval was granted by the Ethical Committee of the Adamawa State Ministry of Health with the approval number: ADHREC 27/08/2021/065.

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Conflicts of Interest

There was no conflict of interest from the conceptualization of this manuscript writing to the dissemination of the findings. Communication barrier and lack of grant were the two major conflicts of interest.

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Life Measures. 2010 : 1171–1188. doi: 10.1007/978-0-387-78665-0_66.

[2] Mojoyinola, J.K., and Olaleye, B. A. (2012). Physical and Psychological Factors Influencing Maternal Non-Compliance with Immunization Schedule. Available at http://www.Continental *Journal of Nursing Science*. 4(2): 37-51.

[3] Masten A.S., Cicchetti, D. (2010). Developmental Cascades: Developmental Psychopathology (psychopathol) *Development and Psychopathology*;
22(3) 491 – 495.

[4] Breiner, S. (2016). Parenting Knowledge, Attitudes and Practices. Parenting Matters: Supporting Parents of Children ages 0-8. Hard copy Version at National Academic Press. Available at https://www.ncbi.nlm.nih.govlbookslNBK402020 Retrieved on 7th September 2020.

[5] Jones T.L, Prinz R.J. (2015). Potential roles of Parental self – efficacy in parents and child adjustment. A review. *Clinical Psychology Review*, 25(3): 341–363.

[6] Ajzen, J and Fishbien, k.M. (1980). Understanding Attitudes and predicting social behaviour. Englewood cliffs; N.J: Prentice – Hall. Available at https:// researchgate.net/publication/276847036 Retrieved on 5th June 2020.

[7] Fishbein, M., Triands, H.C., Kanfer, F.H., Becker, M., Stadt, M.E. (2001). Factors influencing behaviours and behaviour change. Evaluation and the Health Professions. Using Intervention Theory to Factors Influencing Behaviour Change. Project Respect. *Sage Journals*, 24(4) 36 – 384.

[8] Struthers, R., Eschiti, V. and Patchell, B. (2004).
Traditiona04indigenous healing: Part I. *Complementary Therapies in Nursing and Midwifery*, 10(3):1419. DOI: 10.1016/j.ctnm.2004.05.001.

[9] Ekor, M. (2013). The growing use of herbal medicines: issues relating to adverse reactions and challenges in monitoring safety. *Frontiers in Pharmacology*. 4:177.

[10] Adatara, P., Strumpher, J. and Ricks, E. (2020). Exploring the reasons why women prefer to give birth at home in rural northern Ghana: a qualitative study. *BMC Pregnancy Childbirth*. 20:500. doi: 10.1186/s12884-020-03198-y.

[11] Imoh, G. (2013). Communication for Social Mobilization. An Evaluative Study of the Immunization Campaign in Nigeria. *Journal of Humanities and Social Sciences* Available at http://(IOSR-JHSS), 13(6): 78-88 Retrieved on 7th April 2022.

[12] Shehu, D., Norizon, A. G. and Bozkurt, V. (2015). A System review on Factors Affecting Community Participation towards Polio Immunization in Nigeria, *Mediterranean Journal of Social Sciences*. 6(2): -408-415 Retrieved on 30th March 2022.

[13] Birhanu, S., Anteneh, A., Kibie, Y., andJejaw, A.
(2016) Knowledge, Attitude and Practice of Mothers towards Immunization of Infants in Health Centres at Addis Ababa Ethiopia. *American Journal of Health Research* 4(1):6 Available at Doi: 10.11648/j.ajhr.20160401.12.

[14] World Bank (2020). Poverty Overview. Available at https://www.worldbank.org Retrieved on 9th June 2020.

[15] UN (2009). Achieving global public health agenda. United Nations Publications. Available at: https://www.un.org/en/ecosoc/docs/pdfs/achieving_global_public_health_agenda.pdf Accessed on September 23rd, 2022.

[16] Omotara, B.A., Okujagu, T.F., Gbodossou, E. (2012). Assessment of Knowledge, Attitude and Practice of Stakeholders towards Immunization in Borno State Nigeria. A Qualitative Approach *Journal of Community Medicine and Health Education*.2:181. Available at http://Doi:10.4172/2161-0711.1000181 Retrieved on 29th March 2022.

[17] Lemeshow, S., Hosmer, D.W., Klar, J. (2003) and WHO, (2005). Determination of Sample Size. *Malaysian Journal of Medical Sciences*. Formula Calculating Population Sample Size. Available at https://apps.who.int/iris/bitstream/handl/10665/4160 7/ Retrieved n 13th July 2020.

[18] Al-Ayed, I.H. (2010). Mothers' knowledge of child health matters: Are we doing enough?

[19] Journal of Family and Community Medecine.17(1): 22–28. doi: 10.4103/13191683.68785.

[20] Bello, K and Daniel, A. D. (2017) Knowledge and Attitude of Mothers towards childhood Immunization in Bauchi Local Government, Bauchi State – Nigeria. Available at http://www.semanticscholar.org/paper/knowledgean dattitude-ofmothers-towards-childhoodBello_Daniel/9eddfc7e5831856952661068dbcfOcO c5097fe#citing-par Retrieved on 6th April 2020.

[21] Oku A., Oyo-Ita, A., Glenton, C., Leoin, S. (2017). Perceptions and experiences of Childhood vaccination communication strategies. *Journal Public health*. 3:222-224.

[22] Akingbulu, O. (2019) United Nation Women, in Partinership with P&G and Afrigrants Trained 250 Women...by UNICEF Communication Officer. Available at Nigeria.un.org Retrieved on 3rd April 2020.

[23] Adatara, P.' Afaya, A.; Baku, E. A.; Salia, S. M. and Asempah A. (2018) Perspective of Traditional Birth Attendants on their Experiences and Roles in Maternal Healthcare in Rural Areas of Northern Ghana. *International Journal of Reproductive Medicine*, 3(1):22-32.

[24] Hernandez, S.; Oliveira, J.B. and Shirazin, T.(2017) How a Training Program is Transforming the Role of Traditional Birth Attendants from cultural Practitioners to Unique Health-care-Providers. A Community Case Study in Rural Guatemala Available at https://doi.org/10.3389/fpubh.2017.oo111 Retrieved on 7th April 2022.

[25] Sarmento D.R. (2014). Traditional Birth Attendance in A Health System: What are Roles, Benefits and Challenges: A Case Study of incorporated TBA in Timor-Leste Available at apfmj.biomedcentral.com>articles Retrieved on 30th March 2022.

[26] World Bank, (2020). Poverty Overview. Available at https://www.worldbank.org Available on 9th June 2020.

[27] Herval, A.M.; Gomes, V.E.; Oliveira, D.P.D.; Vargas, A.M.D. (2019) Health Education Strategies Targeting Maternal and Child Health. https://www.ncbi.nim.nih.gov/pmc/articles/PMC661 6517/ Retrieved on 7th April 2022.