

ASSESSMENT OF INFORMATION DISSEMINATION BY LIBRARIANS TO POST-NATAL MOTHERS ON IMMUNISATION AS A PREVENTIVE MEASURE TO CHILDHOOD KILLER DISEASES IN ABUJA, BIDA AND KEFFI FMCS, NORTH CENTRAL, NIGERIA.

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Abstract

This paper assessed information dissemination by librarians to post-natal mothers on immunisation as a preventive measure to childhood killer diseases in Abuja, Bida and Keffi federal medical centres (FMCs), North Central, Nigeria. Descriptive survey research design was adopted for the study. The population for the study was thirty-four (34) librarians from three federal medical centres. Questionnaire and observation checklist were the instruments for data collection. Statistical tools such as frequency counts and percentages, mean and standard deviation were used to analyse data. The study revealed that majority of the Information resources and services such as Textbooks in medical lines, Professional journals, Newspapers, Current awareness services, Selective dissemination of information, Intra and Inter-library loan services, Manuals and guides on immunisation, Medical standards and guidelines and Library orientation services amongst others were available in the FMC libraries while Posters/handbills, Internet resources, Conference proceedings, Encyclopedias, Immunisation services, Email alerts to patients on health talk hours, Mobile phone alerts and Library website health information services, were all not available in the medical centre libraries studied. The study equally revealed that librarians disseminated information to post-natal mothers mainly through outreach services/programmes, workshops/seminars and radio/television messages. The study, therefore, recommended amongst others that the federal government in conjunction with the management of federal medical centres should as a matter of urgency finance the purchase of information resources in order to carry out effective services particularly on immunisation programmes to post-natal mothers as well as the general public.

Keywords: *Childhood killer diseases; Immunisation; Information dissemination; Post-natal mothers; Preventive measures; Librarians; FMCs.*

Introduction

Prevention as popularly said is better than cure. Good health is indeed the foundation upon which individuals and families build long, healthy lives especially when unburdened by sicknesses and diseases. This occurs mainly when there is proper immunisation. Immunisation is the key to healthier childhood and it is one of the safest and most effective precautions to prevent diseases and early childhood death. According to Global Vaccine Action Plan (2018) immunisation is a central pillar of universal health coverage, providing an infrastructure on which effective and equitable health systems can be constructed; and effective national immunisation system requires ongoing nurturing, political commitment as well as public support. Therefore, there will never come a point at which immunisation is no longer required because every year more than 130 million new babies are born and each of them deserve protection against vaccine-preventable diseases.

Immunisation is simply the process of introducing weakened or killed germs (vaccines) into the body, which increases body immunity to protect one from a particular disease. These weakened or killed germs stimulate the body to produce antibodies that will fight or weaken any disease organism that attempts to enter the body. Immunisation is given against infectious diseases that cause much illness, death and which if not given could make a child to become disabled permanently. Andre (2012) stated that the benefits of immunisation extended beyond prevention of specific diseases in individuals. They enabled a rich, multifaceted harvest for societies and nations. Vaccination makes good economic sense and meets the need to care for the weakest members of societies. Reducing global child mortality by facilitating universal access to safe vaccines of proven efficacy is a moral obligation for the international community as it is a human right for every individual to have the opportunity to live a healthier and fuller life.

The National Programme on Immunisation (NPI) was introduced in Nigeria in 1979. From 1979-1997, the programme was known and called Expanded Programme on Immunisation (EPI). To give a national outlook and show federal government commitment, the federal government established an agency called NPI under Decree 12 in August 1997 (NPI/UNICEF Security Report, 2003). This is to effectively control the occurrence of all vaccine preventable diseases through immunisation and provision of vaccine and other consumables. Focus was on prevention, control and eradication of the following vaccine preventable diseases in Nigeria. The diseases include: tuberculosis, measles, diphtheria, pertussis, neonatal tetanus, cerebrospinal meningitis, yellow fever and polio to mention but a few. These diseases are targeted through immunisation service delivery and this is done by administration of vaccine to susceptible target. NPI aims at the following group of people for immunisation: Children of age ≤ 11 months, all pregnant women and women of reproductive age bracket. Similarly, according to (NPI/UNICEF Security Report, 2003) the National Programme on routine immunisation of children in Nigeria is carried out using the following vaccines:

- i. BCG (Bacilli Calmette Guerin)—at birth or as soon as possible after birth
- ii. OPV (Oral Polio Vaccine)—at birth and at 6, 10, and 14 weeks of age
- iii. DPT (Diphtheria, pertussis, tetanus)—at 6, 10, and 14 weeks of age
- iv. Hepatitis B—at birth, 6 and 14 weeks
- v. Measles—at 9 months of age
- vi. Yellow Fever—at 9 months of age
- vii. Vitamin A—at 9 months and 15 months of age

Ophoriet *al* (2014) explained that immunisation against childhood diseases such as diphtheria, pertussis, tetanus, polio and measles is one of the most important means of preventing childhood morbidity and mortality. Therefore, achieving and maintaining high levels of immunisation of post-natal mothers coverage should be a priority for all health workers including the information professionals. Post-natal mothers are regarded as those women who visit federal medical centres and other health prone institutions (such as hospitals, clinics, maternities which are usually owned by federal and state governments or private individuals) after a child is born for regular check-up. The World Health Organisation (2014) described the post-natal period of a mother as the most critical and yet the most neglected phase in the lives of mothers and babies; most maternal and newborn deaths occur during the post-natal period.

Abdulkarim (2011) stated that immunisation is an important component of primary health care and in routine immunisation programmes, virtually all vaccines, except oral polio vaccine,

is administered parent rally (by injection). Vaccines against six childhood killer diseases are the most important vaccines to public health. Yet, diseases preventable by vaccine account for the deaths of a quarter of the 800,000 child deaths in Nigeria every year. This is a clear indication that post-natal mothers pay little or no attention to immunisation process in the society. For effective immunisation services to be achieved among post-natal mothers, information dissemination needs to be in place. Information dissemination according to Isibor and Fidella (2018) involved strategic efforts to reach out to individuals, organisations and communities with the right information, in the right format, using the right medium and at the right time. Therefore, the role of the library in information dissemination is fundamentally critical in health education and the provision of balanced perspectives on medical issues. They argued further that information dissemination in the context of healthcare provision is the careful collection, analysis, matching and delivery of a message for a desired outcome. The matching process is usually facilitated through a systematic approach, an appropriate media and using the right language. Information disseminated to post-natal mothers particularly on childhood killer diseases helps to clarify the rights and privileges of patients thus promoting self-esteem and dignity of mothers.

Information dissemination is normally one of the services performed in various libraries such as the libraries in federal medical centres in Nigeria. This service is usually provided to medical students, medical practitioners, pregnant and post-natal mothers. This is to enable them to be aware of the existence of medical libraries as well as provide them resources and information services to enhance and better their conditions. This service is necessary in every information centre because "Information" as popularly said is "power". Various ways of disseminating information particularly in information centres exist with each targeting a specific accomplishment to serve clientele in the best possible ways this presupposes the fact that the services be focused to the needs of the customer and federal medical centres (FMC) are not exempted. However, the dissemination of information particularly in this contemporary period has taken a unique dimension which could be either through the use of telecommunication systems or social media platforms such as: Facebook, Instagram, twitter, WhatsApp, telegram, smartphones, laptops, computers and palmtop etcetera. Dissemination of information could also be through interpersonal communication such as: face-to-face communication with persons involved through television, radio programmes, newspapers, magazines and pamphlets and these are all found to be useful by librarians in terms of dissemination of information to post-natal mothers. One of the most effective ways to increase utilisation and to improve on the quality and relevance of health information to post-natal mothers particularly on immunisation is through proactive, regular dissemination of information by the librarians. This is why information dissemination as regards to immunisation becomes paramount to post-natal mothers to guide against childhood killer diseases.

Statement of the Research Problem

Immunisation of children has remained an outstanding preventive measure against vaccine preventable diseases (VPDs) all over the world, Nigeria inclusive. Information on routine immunisation received by post-natal mothers may make or mar its successes. Therefore, proper communication and dissemination of information on immunisation to post-natal mothers cannot be overemphasised. The researchers after some preliminary investigation discovered that even with the recent advancement in technology in terms of information dissemination, some post-natal mothers still have little or no information on immunisation which deprived them the opportunity of exploiting the benefits of immunising children against childhood killer diseases. Furthermore, the researchers through the information

Results and Discussion

Table 1. Information Resources and Services Available in Abuja, Bida and Keffi Federal Medical Centre Libraries Studied

Types of information Resources	Name of Federal Medical Centre					
	FMC, Abuja		FMC, Bida		FMC, Keffi	
	AV	NA	AV	NA	AV	NA
Textbooks on medical line	√		√		√	
Magazines	√		√		√	
Professional journals	√		√		√	
Newspapers	√		√		√	
Posters/handbills		-	-			-
Newsletters	√		√		√	
Dictionaries	√		√		√	
Internet resources		-		-		-
Medical Standards and guidelines	√			-		-
Conference proceedings		-	√			-
Encyclopedias		-	√			-
Manuals and guides on Immunisation		-	√		√	
Library Information services						
Immunisation services		-		-		-
Email alerts to patients on health talk hour		-		-		-
Mobile phone alerts		-		-		-
Library website health information services		-		-		-
Reference Services	√		√			-
Document Delivery Services		-	√			-
Current Awareness Services	√		√			-
Selective Dissemination of Information	√		√			-
Inter and Intra-library Loan	√		√		√	
Short Messages Services (SMS)		-		-		-
Library Orientation Services	√		√		√	
Internet browsing	√			-		-

Key: Available (√) Not available (-)

Table 1 revealed based on observation checklist that Information resources and services such as Textbooks on medical lines, Professional journals, Newspapers, Magazines, Newsletters, Dictionaries, Reference services, Current awareness services, Selective dissemination of information, Intra and Inter-library loan services, Manuals and guides on immunisation

Medical standards and guidelines and Library orientation services were available while, Posters/handbills, Internet resources, Conference proceedings, Encyclopedias, Immunisation services, Email alerts to patients on health talk hours, Mobile phone alerts, Library website health information services, were all not available in the medical centre libraries studied. This is probably because FMC Libraries of today are not adequately funded by the governments of the day. Thus, the libraries are not properly equipped to satisfy the information needs of post-natal mothers particularly on immunisation services/programmes.

Table 2. Ways Librarians Disseminate Information on Immunisation to Post-natal Mothers Studied

S/N	Statements	SA	A	D	SD	N	FX	\bar{x}	SD
		4	3	2	1				
1	Information on Immunisation is disseminated to post-natal mothers through posters/fliers/handbills	5(14%)	4(12%)	10(29%)	8(23%)	34	59	1.76	0.74
2	Information on Immunisation is disseminated to post-natal mothers through weekly health talks	4(11.7%)	5(14%)	12(35%)	6(17.6%)	34	60	1.79	0.71
3	Information on Immunisation is disseminated to post-natal mothers through outreach Services/programmes	18(52.9%)	2(5.8%)	4(11.7%)	3(8.8%)	34	89	2.61	0.11
4	Information on Immunisation is disseminated to post-natal mothers through workshops/seminar	15(44.1%)	7(20.5%)	5(14.7%)	3(8.8%)	34	94	2.76	0.26
5	Information on Immunisation is disseminated to post-natal mothers through yearly conferences organized by the Federal Medical Centre	5(14.7%)	4(11.7%)	13(38.2%)	5(14.4%)	34	62	1.85	0.65
6	Information on Immunisation is disseminated to post-natal mothers through the library websites	3(8.8%)	4(11.7%)	11(32.3%)	10(29.2%)	34	55	1.64	0.86
7	Information on Immunisation is disseminated to post-natal mothers through librarians' health talks hour	3(8.8%)	5(14.7%)	10(29.4%)	9(26.5%)	34	55	1.64	0.86
8	Information on Immunisation is disseminated to post-natal mothers through email alerts/mobile phone SMS	5(14.7%)	3(8.8%)	17(50%)	2(5.8%)	34	64	1.91	0.59
9	Information on immunisation is disseminated to post-natal mothers	3(8.8%)	2(5.8%)	15(44.1%)	7(20.5%)	34	54	1.61	0.89

	through film/video shows								
10	Information on immunisation is disseminated to post-natal mothers through radio/television messages	15(44%)	10(29%)	5(14%)	2(5.8%)	34	102	3.00	0.50

Key: SA-Strongly Agreed, A-Agreed, D-Disagreed, SD-Strongly Disagreed

Table 2 indicated that three out of the ten items listed to find outways librarians disseminate information to post-natal mothers have high mean scores above 2.5 benchmark of adopted 4 point likert's scale. These items include item 3: information is disseminated to post-natal mothers through outreach services/programmes (\bar{x} -2.61; SD=0.11), information on immunisation is disseminated to post-natal mothers through workshops/seminars (\bar{x} -2.76; SD=0.26), information on immunisation is disseminated to post-natal mothers through radio/television messages (\bar{x} -3.00; SD=0.50). On the other hand, six items showed low mean scores below the benchmark of 2.50. These are item 1: information on immunisation is disseminated to post-natal mothers through posters/fliers/handbills (\bar{x} -1.76; SD=0.74), information on immunisation is disseminated to post-natal mothers through weekly health talks (\bar{x} -1.79; SD=0.71), information on immunisation is disseminated to post-natal mothers through yearly conferences organised by the federal medical centre (\bar{x} -1.85; SD=0.65), information on immunisation is disseminated to post-natal mothers through the library websites (\bar{x} -1.64; SD=0.86), information on immunisation is disseminated to post-natal mothers through librarians' health talks hour (\bar{x} -1.64; SD=0.86), information on immunisation is disseminated to post-natal mothers through email alerts/mobile phone SMS (\bar{x} -1.91; SD=0.59), information on immunisation is disseminated to post-natal mothers through film/video shows (\bar{x} -1.61; SD=0.89).

Table 3. Factors Affecting Information Dissemination on Immunisation to Post-natal Mothers

S/N	Statements	SA	A	D	SD	N	FX	\bar{x}	SD
		4	2	3	1				
1	Erratic power supply for effective dissemination of information on immunisation	17(50%)	5(14%)	3(8.8%)	2(5.8%)	34	90	2.67	0.17
2	Inadequate fund to sponsor library immunisation programmes	15(44%)	8(23.5%)	2(5.8%)	2(5.8%)	34	89	2.64	0.14
3	Inadequate fund to acquire the ICT equipment to disseminate the needed information to post-natal mothers	11(32%)	8(23.5%)	5(14%)	3(8.8%)	34	80	2.38	0.12
4	Post-natal mothers lack of interest of seeking information on immunisation	20(58.8%)	2(5.8%)	3(8.8%)	2(5.8%)	34	93	2.76	0.26
5	Lack of government intervention towards the awareness of information on immunisation to post-natal mothers	19(55.8%)	3(8.8%)	3(8.8%)	2(5.8%)	34	92	2.73	0.23

Key: SA-Strongly Agreed, A-Agreed, D-Disagreed, SD-Strongly Disagreed

Table 3 revealed that four out of the five items listed to disclose factors affecting information dissemination on immunisation to post-natal mothers showed high mean scores above the bench mark of 2.50. These include item 4: Post-natal mothers lack of interest of seeking information on immunisation (\bar{x} -2.76; SD=0.26), lack of government intervention towards the awareness of information on immunisation to post-natal mothers (\bar{x} -2.73; SD=0.23), erratic power supply for effective dissemination of information on immunisation (\bar{x} -2.67; SD=0.17) and inadequate fund to sponsor library immunisation programmes (\bar{x} -2.64; SD=0.14) are the major factors affecting information dissemination to post-natal mothers on immunisation in the three medical centres studied, while only one item revealed low mean score less than 2.50 which is item 3 : inadequate fund to acquire the ICT equipment to disseminate the needed information to post-natal mothers (\bar{x} -2.38; SD=0.12), this shows that, it does not constitute much problem in information dissemination on immunisation to post-natal mothers.

Discussion of the Findings

Table 1 revealed that many information resources and services expected to be available in the libraries of FMCs are not existing and this has to a large extent hindered information services provided to the users. Similarly, the mean scores from Table 2 shows clearly that information dissemination on immunisation to post-natal mothers is still low and requires urgent attention of librarians in order to promote immunisation services among post-natal mothers. This is probably because of inadequate funding of FMC by federal government as revealed in item 2 in table 3. If the libraries in FMCs are not well equipped, they would not find it easy to disseminate information to post-natal mothers especially when it comes to using ICT facilities needed for fast and easy dissemination of information to the public in this jet age. The finding is similar to the findings of Ojo (2018) who worked on influence of information resources usage and services on job performance of healthcare practitioners in federal medical centre libraries in North central, Nigeria which revealed that some of the factors militating against optimal and effective utilisation of healthcare information resources and services are lack of adequate information resources, lack of adequate human resources to render some services, low ICT and search skills by both medical librarians and healthcare practitioners, lack of adequate funding from parent institutions, lack of adequate infrastructure to house the information resources and low Information and Communication Technology infrastructure.

Again, 4 out of the 5 factors listed in Table 3 affects the information dissemination on immunisation to post-natal mothers. This shows that state of power supply is poor, inadequate fund to sponsor immunisation programmes to mention but a few needed to be given prime attention. This is contrary to the findings of Njeru, Kabue and Gachau (2019) who researched on utilisation of immunisation services among children under five years of age in Kirinyaga, Kenya that Age, gender, educational level and level of income were significant factors that affected timely information on immunisation. Other factors that were derived as barriers to utilisation were myths and misconception, side effects of immunisation.

Conclusion

This study has confirmed that no library can achieve its aim and objectives satisfactorily without the provision of adequate and relevant information resources and services that are made available and accessible to its target users. In Abuja, Bida and Keffi federal medical centres, libraries were available but not adequately stocked with information resources and services to effectively carry out library services, particularly, the immunisation services. Lack

of government intervention towards the awareness of information on immunisation to post-natal mothers, post-natal mothers lack of interest of seeking information on immunisation, erratic power supply for dissemination of information on immunisation, inadequate fund to sponsor library immunisation programmes were recorded as major factors obstructing information dissemination on immunisation. This however, would definitely have negative effect on the information service delivery of the librarians in these federal medical centres and Nigeria at large.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. The Federal government in conjunction with the management of federal medical centres should as a matter of urgency finance the purchase of information resources in order to carry out effective services particularly on immunisation programmes to post-natal mothers as well the general public.
2. A lot still needs to be done by the management of the federal medical centres on the provision of adequate equipments especially ICT facilities to enable librarians carry out immunisation services effectively to post-natal mothers.
3. The management of federal medical centres should ensure that there is regulatory in power supply and should ask for government intervention in terms of creating awareness on the importance of immunisation and information services provided by librarians to post-natal mothers.

References

- Abdulkarim, A. A (2011). Vaccines and Immunisation: The past, present and future in Nigeria. *Nigerian Journal of Paediatrics* ;38 (4):186 – 194. Available on www.ajol.info/index.php/njp/article/download/72382/61305. 23rd April, 2018.
- Andre, F. E. (2012). *Bulletin of the World Health Organisation Vaccination greatly reduces disease, disability, death and inequity worldwide*.
- Global Vaccine Action Plan. (2018). *Immunisation Today and in the next decade: an Assessment Report of the Global Vaccine Action Plan*. Retrieved from <https://www.who.int/immunization> on 15th May 2019.
- Isibor, A & Fidella, W. (2018). *Effective Dissemination of Health Information as a key to Ensuring and Sustaining a Productive Workforce in Ahmadu Bello University, Zaria* 1-13. Retrieved from <https://www.academia.edu>.
- Njeru, M. W., Kabue, P. N. & Gachau, A.G. (2019). Utilisation of Immunisation Services Among Children Under five years of Age in Kirinyaga County, Kenya. *International Journal of Innovative Research in Information Security (IJIRIS)*. 6(3). www.ijiris.com. doi: 10.26562/IJIRAE.2019.FRIS10081
- NPI/UNICEF March, (2003). *Assuring vaccine security in Nigeria*. Report of NPI/UNICEF Vaccine security mission. Retrieved from <https://www.ncbi.nlm.nih.gov/articles> on 2nd April, 2019.
- Ojewole, F. & Oludipe, Y. O. (2017). Pregnancy-Related Information Need and Information-Seeking Pattern Among Pregnant Women Attending Antenatal Clinic at Ikorodu General Hospital, Lagos State, Nigeria. *European Scientific Journal August 2017*

edition.13(24) Retrieved from doi: 10.19044/esj.2017.v13n24p436
URL:<http://dx.doi.org/10.19044/esj.2017.v13n24p43>.

- Ojo, E. (2018). *Influence of Information Resources Usage and Services on Job Performance by Health Practitioners in federal Medical Centres Libraries in North Central, Nigeria*. (Unpublished Mtech Thesis) submitted to the department of Library and Information Technnology, Minna.
- Ophori, E. A., Tula, M. Y., Aziz, A.V., Okojie, R. &Ikpo, P. E. (2014). Current Trends of Immunisation in Nigeria: Prospects and Challenges. *Tropical Medicine and Health*, 42 (2), 67-75. Retrieved from [https:// www.ncbi .nlm .nih. gov> articles on 10thjan.](https://www.ncbi.nlm.nih.gov/articles/10.4171/tmh.42.2.67),
- WHO.(2014) "*WHO Recommendations on Postnatal Care of the Mother and Newborn*". WHO.Retrieved from [https:who.int/maternal-child-adolescent /documents/post-natal-care recommendations/en/](https://www.who.int/maternal-child-adolescent/documents/post-natal-care-recommendations/en/) on 26th May, 2019.