UTILISATION OF MATERNAL HEALTH INFORMATION AMONG FEMALE FARMERS IN IBARAPA COMMUNITIES OF OYO STATE, NIGERIA

[1]Taiwo, A. O., [2]Ladigbolu, T. A., [1]Adebayo, O. A., and [1]Towoju, Y. T.
[1]Department of Agricultural Technology, Oyo State College of Agriculture and Technology, Igbo-Ora, Nigeria
[2]Department of Agricultural Extension and Rural Development, University of Ibadan, Ibadan, Nigeria
Correspondence author details: adejojutemitope@gmail.com; laniksmak@yahoo.com; 08032305296

ABSTRACT
Health information with its usage intensifies awareness, influences the attitude and knowledge for people's health improvement. It is against this backdrop that this study assessed maternal health information usage among female farmers in some Ibarapa communities of Oyo State. This study employed a multistage sampling procedure to select 116 female farmers of childbearing age. A well-structured interview guide was used to obtain primary data on respondents' socioeconomic characteristics, sources of information, availability and utilization of maternal health information, and challenges faced in seeking maternal health information in the study area. Data were analysed using frequency counts, percentages, and mean score. Results show that respondents' mean age and household size were 35 years and 5 persons respectively. Respondents' sources of information were friend/ family (86.2%) and health officers (83.6%), while couples' blood group match information ($\bar{x}$ =2.53), foetus' development and growth ($\bar{x}$ =2.59) and family planning /birth spacing ($\bar{x}$ =2.85) were the identified available maternal health information during pregnancy, childbirth and postpartum respectively. Similarly, respondents used maternal health information on couple's blood group match information ($\bar{x}$ =2.47), maternal health nutrition information ($\bar{x}$ =2.52) and neo-natal infections ($\bar{x}$ =2.63) during pregnancy, childbirth, and post-partum respectively. However, lack of knowledge regarding disseminated health information ($\bar{x}$ = 2.14) and health facility charges ($\bar{x}$ = 1.97) were the major constraints encountered in using maternal health information. This study therefore recommended that Public-Private Partnership (PPP) and Health Insurance Scheme (HIS) should be promoted to reduce cost of health services.
Keywords: Maternal health information, Female farmers, Postpartum information, Family planning.

INTRODUCTION

Good health is a means of achieving one's desired goals and objectives as an individual, groups, communities, or the nation at large, therefore, access to health services is a major issue in rural area around the world, (Coombs, Campbell, and Caringi, 2022). Worldwide, over half a million young women die every year because of complications associated with pregnancy and childbirth (WHO, 2019) despite their roles in rural community development and that agriculture. This could be due to social factor, cultural background, economic factors, gender inequality, work burdens, food insecurity and dietary restrictions or lack of access to quality medical services, (Griese, *et al* 2020). Patil and Babus (2018) itemize women's roles in agriculture to include carrying out different activities relating to food production, processing, and marketing. Also, the responsibility placed on women in rural areas to meet the daily food needs of most families cannot be overemphasized. This can be explained further to mean that coupled with their roles as farmers, wage earners or entrepreneurs, they are equally responsible for the well-being of the family members as they make their food, care for children and the elderly to mention a few (ILO, 2019). It is not surprising that with all these significances roles performed by women to the immediate physical environment, agriculture and personal household well-being, many rural women are battling with poor health status. This could probably be because of heavy farm work, childbearing and rearing coupled with poor nutrition (Ugwu, 2019). Rural people, particularly the rural women, are faced with various difficulties as regards access to proper healthcare services. The health needs of women in rural areas are often neglected, compared to the needs of those in urban areas, and their access to services is often too low. They encounter numerous constraints in accessing affordable, adequate health services in rural areas (Adefalu, Awoete, Aderinoye-Abdulwahab and Issa, 2017). This is evident as many rural households in Africa still lack access to the information needed to make evidence-based decisions to effective health care (Zadawa and Omran, 2020). One major explanation of these observations is poverty, as rural women do not have adequate resources to access information needed to improve their health status. To make informed choices and navigate the complex health care system, people must have easily available, accurate, and timely information, and they must use it (Griese, Berens, Nowak, Pelikan, Schaeffer, 2020).

Ekoko (2020) in a study in Delta State, Nigeria reported that majority of the women could not read or write and therefore lagged in functional literacy on health. Women tend to be given inadequate information, education, and communication during and after childbirth (Vogels-Broeke, Daemers, Budé, de Vries, and Nieuwenhuijze, 2022). They hardly

access the 'right' kind of information as in most cases, the information is inappropriate to meet their needs, either in content which does not reflect their reality or in the choice of language use for presentation. Seretse, Chukwuere, Lubbe, Klopper, (2018) observed in their study that ignorance resulting from illiteracy, poor infrastructure, unreliable information, inability to locate information and the information brokers who need commission are problems encountered by rural women in accessing and using information. Nigerian rural women in particular needs adequate information sources to guide their health choices (Ekoko, 2020). It is against this backdrop that this study assessed the utilization of maternal health information among female farmers in some Ibarapa communities of Oyo State.

The specific objectives are to:

1. Describe the socioeconomic characteristics of the respondents.
2. Determine to what extent maternal health information is available to the respondents.
3. Identify the sources of maternal health information available to the respondents
4. Assess respondents' use of available maternal health information
5. Identify the constraints encountered while using the available maternal health information.

METHODOLOGY

This study was carried out in Ibarapa area of Oyo State, under Ibadan/Ibarapa Zone of Oyo State Agricultural Development Programme OYSADEP structure. The area is made up of Ibarapa East, Ibarapa Central and Ibarapa North Local Government Areas of Oyo State. The vegetation of the area is largely savannah, thus allowing for the cultivation of a wide array of arable and perennial crops. The rainfall patterns in the study area follows a tropical pattern with an annual rainfall ranging from 1000mm-1430mm and fairly high temperature. The occupation of the people is largely farming, predominantly subsistent farming, with some pockets of commercial farming.

The population of the study was female farmers of childbearing age in the Ibarapa area of Oyo state, Nigeria. A multistage sampling procedure was used to select the respondents. In the Stage 1, twenty percent of blocks in the Ibadan/Ibarapa zone of Oyo State Agricultural Development Programme (OYSADEP) were randomly selected using a random sampling technique. The blocks selected were Ibarapa Central, Aiyete and Eruwa. In the second stage of sample selection, lists of female farmers that are members of the All-Farmers Association of Nigeria (AFAN) were collected from the three selected blocks. Total number of AFAN members in Ibarapa central block was 1,574, 1,252 members from Aiyete block and 1,335 from Eruwa block. The members were stratified using stratified random sampling technique. Therefore, 550 female farmers strata were selected from Ibarapa central block, 370 from Aiyete block and 240 female farmers were selected from Eruwa block., The final stage involved selection of ten percent of the female members population using simple random sampling technique, to have 55, 37 and 24 female farmers from Igboora, Aiyete and Eruwa, respectively. In all, a total sample size of 116 respondents were sampled.

The dependent variable which is utilization of maternal health information was measured by providing respondents with a list of twenty (20) maternal health information under three major thematic areas of maternal health information, information during pregnancy childbirth and postpartum period information needs. Respondents were asked to state how often they use each of the provided maternal health information items from response options of Always, Occasionally, Rarely and Never with scores of 3, 2, 1 and 0 assigned, respectively. Thereafter, individual mean score for utilization index were computed. The individual mean score was used to rank the information items in ascending order while the use index was used to categorize utilization into high and low categories using mean as the benchmark. Data collected were analyzed using frequency count, percentages and mean score.

RESULT AND DISCUSSION

Socioeconomic characteristics

Table 1 reveals that female farmers' mean age, household size, number of children, age interval between the children and household income were 35 years, 5 persons, 3 children, 2 years interval and ₦49,997 monthly, respectively. This implies that female farmers were young within childbearing age, have a relatively large family size with at least three children, observe the standard age interval in between the children or spacing but earn small income per month. Also, majority (84.5%) of the women sampled were married and secondary school leavers (51.7%) while 75.7% had 1- 4 delivery cases. These results are in line with the study of Rao and Shokeen (2022) who discovered that majority of women sampled were school leavers and had between one to four delivery cases.

Table 1: Distribution of female farmers according to their personal characteristics (n = 116)

Characteristics	Frequency	Percentage	Mean/SD
Age (years)			35 years
20 -30	46	39.7	
31 – 40	47	40.5	
41 – 50	19	16.4	
51 – 60	4	3.4	
Marital status			
Single	13	11.2	
Married	98	84.5	
Divorced	3	2.6	
Widowed	2	1.7	
Religion			
Christianity	60	51.7	
Islam	51	44.0	
Traditional	4	3.4	
Worshiper	1	0.9	
Education level			
Primary education	13	11.2	
Secondary education	60	51.7	
Tertiary education	39	33.6	
Adult education	1	0.9	
No formal education	3	2.6	
Livelihood activities			
Farming	24	20.7	
Civil servant	21	18.1	
Artisan	17	14.7	
Trading	48	41.4	
Dependent	6	5.2	
Alternative livelihood			
Artisan	3	2.6	
Trading	13	11.2	
Household income			₦49,919
0 (Dependent)	5	4.3	
5000 – 20000	60	51.7	
21000 – 40000	42	36.2	
41000 – 60000	9	7.6	
61000 – 80000	3	2.6	
81000 and above	2	1.7	
Household size			5 persons
1-4	36	31.0	
5-8	80	69.0	
Cases of delivery			
1 – 4	87	75.0	
5 – 8	27	25.0	
Number of children			3 children
1 – 3	71	61.2	
4 – 6	43	38.8	
Age interval of children			2 years
1-2	72	62.1	
3 years and above	54	37.9	

Field survey, 2019

Source of information of the female farmers on health needs

Table 2 shows that 86.2% of the respondents claimed to have received maternal health information through their friend/family, health officer (83.6%), faith centre (79.3%), paid health consultant (70.7%) and radio (62.1%), while 25.86% of the respondents sourced this information through the internet. The implication is that female farmers sourced for maternal health information mainly from friend/family, health officer, paid health consultant, faith centre and radio. This means that all these sources can be targeted in case of any health campaign by government or donor agencies because it is certain that women will subscribe to any health information from these sources (Ghiasi, 2021).

Table 2: Distribution of female farmers by sources of maternal health information (n = 116)

Information Sources*	Frequency	Percentage
Friend/family	100	86.2
Health officer	97	83.6
Extension agent	45	39.0
Paid health consultant	82	70.7
Women organization	61	52.6
Radio	72	62.1
Television	60	51.7
Newspapers, magazines and publication	38	32.8
Internet	30	25.9
Faith Centre	92	79.3

Field Survey: 2019
*Multiple Responses

Available maternal health information to female farmers

Table 3 reveals that to a larger extent maternal health information available to female farmers during pregnancy were couples' blood group match information ($\bar{x}$ =2.53), pre-natal screening and diagnosis ($\bar{x}$ =2.51), while foetus' development and growth ($\bar{x}$ =2.59), mothers' nutrition ($\bar{x}$ =2.56), labour pain and its relief's method ($\bar{x}$ =2.38) were to a larger extent available during childbirth. Finally, to a larger extent family planning /birth spacing ($\bar{x}$ =2.85), neo-natal infections ($\bar{x}$ =2.69) and dangers signs after birth /postpartum care ($\bar{x}$ =2.56) were available during postpartum. It can be inferred that some maternal health information are readily available in the study area for women to explore during pregnancy, childbirth and postpartum however, this does not connote usage of the information.

Table 3: Distribution of female farmers according to the available of maternal health information

Maternal health information during pregnancy	Larger extent	Lesser extent	Rarely	Not at all	Mean	Rank
Couples blood group match information	14.7	47.4	14.7	23.28	2.53	1st
Pre-natal screening and diagnosis	16.4	43.1	15.5	25	2.51	2nd
Mating information	4.3	51.7	18.1	25.86	2.34	3rd
Pre-natal nutrition	12.9	36.2	10.3	40.5	2.22	4th
Symptoms of pregnancy / marital physiological changes	9.5	37.1	14.7	38.7	2.17	5th
Maternal health information during childbirth						
Foetus' development and growth	19.8	44.8	6.9	28.4	2.59	1st
Mothers' nutrition	31.0	26.7	9.5	32.7	2.56	2nd
Labour pain and its relief's method	8.6	43.1	26.7	21.5	2.38	3rd
Vaccination/test during pregnancy	19.8	29.3	12.9	37.9	2.31	4th
Sexual activities in pregnancy	9.48	26.7	41.4	22.4	2.23	5th
Personal hygiene	27.6	18.1	3.4	50.8	2.22	6th
Method of delivery/ childbirth	11.2	35.3	6.9	46.5	2.11	7th
Pregnancy complication/miscarriage	12.1	27.6	15.5	44.8	2.07	8th

Maternal health information during pregnancy	Larger extent	Lesser extent	Rarely	Not at all	Mean	Rank
Maternal health information during postpartum						
Family planning /birth spacing	37.9	31.9	7.8	22.4	2.85	1st
Neo-natal infections	11.2	54.3	21.6	12.9	2.69	2nd
Dangers signs after birth /postpartum care	11.2	53.4	16.4	18.9	2.56	3rd
Infant feeding/ child nutrition	23.3	24.1	6.9	45.6	2.25	4th
Personal hygiene	26.7	13.8	4.3	55.1	2.12	5th
Child immunization	22.4	21.6	6.0	50	2.10	6th
When to resume sexual relation	5.2	25.0	41.4	28.4	2.07	7th

Field Survey: 2019

Female farmers' use of maternal health information

Table 4 shows that female farmers frequently use maternal health information like couples' blood group match information ($\bar{x}$ =2.47), mating information ($\bar{x}$ =2.40) and pre-natal nutrition ($\bar{x}$ =2.32) during pregnancy stage. Meanwhile, during childbirth they often use mothers' nutrition information ($\bar{x}$ =2.52), foetus' development ($\bar{x}$ =2.47) and labour pain with relief method ($\bar{x}$ =2.31). Lastly, neo-natal infections ($\bar{x}$ =2.63), dangers signs after birth /postpartum care ($\bar{x}$ =2.24) and personal hygiene ($\bar{x}$ =2.21) were the maternal health information used during post-partum.

This implies that female farmers used maternal health information as identified to be available in Table 3 during pregnancy, childbirth and postpartum. The health information used by the respondents are couples' blood-group-match information, mating information, foetus' development information, labour pain with relief method information, neo-natal infections information, and information on dangers signs after birth. The usage of maternal health information among the respondents is not surprising because according to Marabele *et al*, 2020, there is possibility that the clients will use them especially if such maternal health information to be readily available, accessible and affordable then.

Table 4: Distribution of female farmers according to their usage of maternal health information

Maternal health information during pregnancy	Always	Occasionally	Rarely	Never	Mean	Rank
Couples blood group match information	9.5	50.9	17.2	22.4	2.47	1st
Pre-natal screening and diagnosis	12.9	40.5	26.7	19.82	2.47	1st
Mating information	7.8	49.1	19.0	24.13	2.40	2nd
Pre-natal nutrition	19.0	31.9	12.1	37.06	2.32	3rd
Symptoms of pregnancy / marital physiological changes	9.5	33.6	12.9	45.68	2.10	4th
Maternal health information during childbirth						
Mothers' nutrition	26.7	30.2	12.1	31.03	2.52	1st
Foetus' development and growth	14.7	48.3	6.9	30.17	2.47	2nd
Labour pain and its relief's method	6.0	47.4	18.1	28.44	2.31	3rd
Personal hygiene	32.8	12.1	6.0	49.13	2.28	4th
Vaccination/test during pregnancy	15.5	31.9	8.6	43.96	2.18	5th
Method of delivery/ childbirth	9.5	33.6	9.5	47.41	2.05	6th
Sexual activities in pregnancy	13.8	18.1	24.1	43.96	2.01	7th
Pregnancy complication/miscarriage	6.89	34.5	10.3	48.27	2.00	8th
Maternal health information during postpartum						
Neo-natal infections	14.7	50.9	18.1	16.37	2.63	1st
Dangers signs after birth /postpartum care	19.8	50.9	14.7	14.7	2.24	2nd
Personal hygiene	31.0	11.2	6.0	51.72	2.21	3rd
Family planning /birth spacing	10.3	36.2	15.5	37.93	2.18	4th
Infant feeding/ child nutrition	22.4	21.6	6.0	50.0	2.16	5th
Child immunization	19.8	19.0	10.3	50.86	2.07	6th
When to resume sexual relation	4.3	25.0	43.1	27.58	2.06	7th

Constraints faced by female farmers in using maternal health information

Table 5 reveals that lack of knowledge regarding disseminated health information ($\overline{x} = 2.14$), health facility charges ($\overline{x} = 1.97$), lack of awareness/information on prevailing health issues ($\overline{x} = 1.95$) were the constraints identified by the female farmers in using maternal health information in the study area. This result is in agreement with the findings of Taiwo, Yekinni, and Thomas, (2017); Mulauzi, and Daka, (2018), they all agree that most rural women lack information, funds, or access to health services that might help them prevent and treat disease. The implication is that lack of knowledge regarding disseminated health information, health facility charges, lack of information on prevailing health issues as well as religion/cultural barrier were the challenges encountered that hindered respondents use of maternal health information in the study area. Therefore, all the identified constraints especially religious barrier and health facility charges should be taken into consideration in case of future health campaign.

Table 5: Distribution of respondents based on constraints encountered in the use of maternal health information

Constraints	SC	MC	NC	Mean	Rank
Lack of knowledge/ ignorance regarding disseminated health information	32.8	49.1	18.1	2.14	1st
Health facility charges	14.7	68.1	17.2	1.97	2nd
Lack of awareness/information on prevailing health issues.	19.0	56.9	24.1	1.95	3rd
Inadequate social/ information amenities	5.2	80.2	14.7	1.91	4th
Religion/cultural barrier	9.5	68.1	22.4	1.87	5th
Financial constraint	10.3	50.0	39.7	1.70	6th
Literacy/language barrier	4.3	49.1	46.6	1.58	7th
Location	9.5	27.6	62.9	1.46	8th

Field Survey: 2019

SC = Serious Constraint; MC = Mild Constraint; NC = Never a constraint

CONCLUSION AND RECOMMENDATIONS

The study concludes that female farmers frequently use couples' blood-group-match information, mating information, foetus' development information, labour pain with relief method information, neo-natal infections information as well as dangers signs after birth maternal health information during pregnancy, childbirth and postpartum. However, lack of knowledge regarding disseminated health information and prevailing health issues, health facility charges, and religion/cultural barrier were hindered usage of maternal health information. Therefore, health campaign by government or donor agencies should endeavor to make maternal health information during pregnancy, childbirth and postpartum readily available, accessible and affordable to female farmers for easy usage. Also identified sources from friend/family, health officer, paid health consultant, faith center and radio should be targeted in case of any health campaign since the respondents are certain of them, while health facility charges should be taken into consideration in case of future health campaign. This could be achieved by engaging in Public-Private Partnership (PPP) and Health Insurance Scheme (HIS).

REFERENCES

Adefalu, L. L., Awoete, O. M., Aderinoye-Abdulwahab, S. A., and Issa, B. A. (2017). Perception of community health extension services among women in a rural community in Ilorin East, Kwara State, Nigeria. *Journal of Community Medicine and Primary Health Care*, *29*(2), 74-83.

Coombs, N. C., Campbell, D. G., and Caringi, J. (2022). A qualitative study of rural healthcare providers' views of social, cultural, and programmatic barriers to healthcare access. *BMC Health Services Research*, *22*(1), 1-16.

Ekoko, O.N. (2020). An assessment of health information literacy among rural women in Delta State, Nigeria. *Library Philosophy and Practice*, 1-14.

Ghiasi, A. (2021). Health information needs, sources of information, and barriers to accessing health information among pregnant women: a systematic review of research. *The journal of maternal-fetal and neonatal medicine*, 34(8), 1320-1330.

Griese, L., Berens, E. M., Nowak, P., Pelikan, J. M., Schaeffer, D. (2020). Challenges in navigating the health care system: development of an instrument measuring navigation health literacy. *International Journal of environmental research and Public Health*, *17*(16), 5731.

International Labour Organization, ILO (2019). empowering women in the rural economy In: Decent Work in the Rural Economy Policy Guidance Notes. Accessed April 23, 2023. https://www.ilo.org/global/topics/economic-and-social-development/rural-development/WCMS_436223/lang--en/index.htm

Marabele, P. M., Maputle, M. S., Ramathuba, D. U., and Netshikweta, L. (2020). Cultural factors contributing to maternal mortality rate in rural villages of Limpopo Province, South Africa. *International Journal of Women's Health*, 691-699.

Mulauzi, F., and Daka, K. L. (2018). Maternal health information needs of women: A survey of literature. *Journal of Lexicography and Terminology*, 2(1), 57-82.

Patil, B., Babus, V. S. (2018). Role of women in agriculture. *International Journal of Applied Research*, 4(12), 109-114.

Rao, A., and Shokeen, A. (2022). Health Information Literacy among the Rural Women: a study of Kurukshetra District of Haryana. *Journal of Indian Library Association*, *57*(2), 181-196.

Seretse, M., Chukwuere, J., Lubbe, S., and Klopper, R. (2018). Problems around accessing information in rural communities. *Alternation Journal*, *25*(1), 214-244.Ugwu, P. (2019). Women in agriculture: Challenges facing women in African farming. *Project report of African women in agriculture*.

Taheri, S., Tavousi, M., Momenimovahed, Z., Direkvand-Moghadam, A., Rezaei, N., Sharifi, N., and Taghizadeh, Z. (2021). Explaining the concept of maternal health information verification and assessment during pregnancy: a qualitative study. *BMC Pregnancy and Childbirth*, *21*, 1-11.

Taiwo, A. O., Yekinni, O. T., and Thomas, K. A. (2017). Perceptions of use of maternal healthcare services in rural communities of Osun state. The Nigerian Journal of Rural Extension and Development, 11(1), 7-10.

Vogels-Broeke, M., Daemers, D., Budé, L., de Vries, R., and Nieuwenhuijze, M. (2022). Sources of information used by women during pregnancy and the perceived quality. *BMC Pregnancy and Childbirth*, *22*(1), 109.

World Health Organization (WHO), (2019). More women and children survive today than ever before–UN report. *WHO: Geneva, Switzerland*.

Zadawa, A. N., and Omran, A. (2020). Rural development in Africa: Challenges and opportunities. *Sustaining our Environment for Better Future: Challenges and Opportunities*, 33-4