

Maternal Attitude and Practice of Self-Medication in Amassoma Community of Bayelsa State, Nigeria

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Abstract: The practice of self-medication has long been in existence worldwide, and the situation continues to increase particularly in developing countries especially, in Sub Saharan Africa. Self-medication involves acquiring medicines without a prescription, re-presenting old prescriptions to buy medicines, sharing medicines with relatives or members of one's social circle This study examined the attitude of mother towards self-medication among the people of Amassoma in Bayelsa State, Nigeria.

The study adopted descriptive design to explore the attitude of mothers towards self-medication in Amassoma Community. The target population comprises of pregnant women and mothers of childbearing age with age 13-40 years irrespectively of their level of education. A total of fourteen (14) compounds were randomly selected out of 22 compounds of which forty (40) persons per compound were selected at random. The sample size was five hundred and sixty (560) pregnant women and mothers within the childbearing age that were randomly selected from the 14 compounds and were given questionnaires. Random samplings were used to select both the compounds and the women by the casting of lots. Data collected were analysed using chi-square, numbers, and percentages.

Findings reveal that a reasonable proportion of the respondents were aware of the malformation that occur due to self-medication during pregnancy, the commonest reasons given for not consulting a qualified personnel for prescription was that of illness not serious enough to require consultation, peer influence and ignorance about the problem resulting from self-medication. Similarly, levels of income, convectional education and health education were associated with the attitude of the mothers. Majority of the mothers had a significant knowledge of factors that influence self-medication. Finally, the implications of this study are the needs for health education and awareness programmes on the hazards, the risks and harmful effects as well as malformation that are associated with self-medication.

The paper suggests that government and non-governmental organization should see to the unnecessary media advertisement of drugs and ensures that only qualified pharmacist are allowed the sale and dispense of drugs. Future studies should compare the effects of self-medication on pregnant women and breastfeeding mothers.

Keywords: Attitude, Mother, Alcohol, Self-Medication.

I. INTRODUCTION

Self-medication is the use of drug(s) as a means of procuring treatment for a health condition without proper diagnosis or prescription by competent medical personnel [1]. Drugs are defined as therapeutic agents, substance or even chemicals other than food, used or employed in the prevention, relief, treatment or cure of disease both in man (humans) and animals [2] and as such, they need to be ordered (prescribed) for a qualified health giver for administration. Thus, drugs generally can be classed as either prescribed or un-prescribed, hence when they are ordered to be administered either orally (verbally) or written in the treatment of diseases conditions, they are referred to as prescribed or prescription drugs.

The act of indulging in self-medication has long been in existence worldwide, and the situation continues to increase particularly in developing countries [3], [4], [5] especially in Sub Saharan Africa [5], [6]. Self-medication involves acquiring medicines without a prescription, representing old prescriptions to buy medicines, sharing medicines with relatives or members of one's social circle [1], [7]. The irrational use of drugs is a cause of public, medical professional [2], [7] and government concern especially in Nigeria where safe prescription is a serious challenge [7].

There is higher prevalence of self-medication among women [8], [9], [10], [11] especially among women who live alone and it is predominant among the lower socio-economic class [5]. There is increasing indication that self-medications among pregnant women are common and the situation in developing countries is worrisome, where there is poor medical services and lack of professional control of medicinal products [5]. This therefore forces people to self-medicate and various forms of substances and herbs are often used for different medical illnesses [11]. Despite the adverse effect on pregnancy, there are few programs available for their control [4].

It is notable that self-medication is a health-seeking behavior among the women within the child bearing age [5] that is associated with apparently minor diseases that are usually self-diagnosed and treated with medicines acquired at pharmacies or other medicines outlets [11], or the intermittent or continuous use of a medication prescribed by a physician for chronic or recurring diseases or symptoms [1], [13]. This is because pregnant women are known to suffer varieties of minor sicknesses such as back pain, headache, heartburn, nausea, vomiting, and haemorrhoids which may be cured appropriately with self-medication [11]. The practice of self-medication among pregnant women is on the increase in Nigeria [4]. The increase in the quantities and varieties of medicines worldwide eases the accessibility of medicine by users, thereby giving options for its misuse [2]. Poorly guided self-medication with prescription, over-the-counter and herbal medicines is persistent and significantly associated with gestational age and occupational pattern among pregnant women in Nigeria [11] and other developing countries [14]. However, non-pharmacists lack the essential professional expertise required to guide appropriate and safe self-medication especially in pregnancy [11]. Majority of these women lacked the appropriate knowledge of potential adverse outcomes associated with the use of certain medicines, and the potentially harmful medicines to avoid during pregnancy [11].

However, there is scarcity of documented data to back the claim [5] and there is knowledge gap on the importance of appropriate intervention targeted towards empowering pregnant women in Nigeria with comprehensive information about possible adverse effects inherent in indiscriminate and unauthorized use of medicines [11]. However, a comprehensive study of the practice and attitude of women of child bearing age towards self-medication, will help reduce these challenges caused by this scourge in Amassoma community in particular, and Africa as a whole.

II. OBJECTIVES OF THE STUDY

The objectives of the study are to:

1. Ascertain the attitude of mothers towards self-medication.
2. Determine the self-medicated drugs and additives commonly used by mothers.
3. Find out the type of drugs used and symptoms treated.
4. Document the effects of self-medication on mothers.

III. SIGNIFICANCE

There are a lot of medical hazards of self-medication and many of those who practice it are not aware of these hazards. Therefore, this study will look into the pattern, knowledge and socio-demographic variables that influence mothers' attitude in relation to self-medication and other way of improving on the existing health education facilities within the community to minimize the increasing wave of self-medication practices.

IV. HYPOTHESES

1. The attitude of majority of mothers towards self-medication will vary with level of income.
2. The majority of mothers in Amassoma would have a significant knowledge of factors that influence self-medication.

V. THE CONCEPTUAL FRAME WORK: THEORY OF ILLNESS BEHAVIOUR

David mechanic, medical sociologist, introduced in 1962 an approach to illness using attachment theory to recognize illness behaviour. Illness behaviour is a well-known term often used by health professionals in clinical settings to define specific traits and irregular observed behavior among patient. The limitations and consequences are discussed through a representation of the development of the concept. This understanding provides the concept with another direction and a broader empirical foundation such as accounting for social illness behaviour as well as health seeking behavior [16, [17].

Mechanic [17] defined illness “behaviour that is triggered by such cues as pains, discomfort, signs, of malformation and / or by confirmation by word of mouth individual although presently asymptotic, is experiencing illness. The individual can no longer, at least rationally deny this susceptibility or avoid facing the consequence of the illness. Illness behaviour include any behaviour triggered by the above cues, regardless of the stage, phase or length of illness, the purpose of which to define one’s state of health and to seek of suitable remedy. As long as any individual in searching for a better cue seeking a diagnosis for his present condition, he is engaging in “illness bahaviour.”

According to mechanic [18] in response to the cue of illness, the individual may engage in one or more of the following behaviours.

- i) Take action to relief the symptoms
- ii) Take no action
- iii) Remain in a state of flux in which he validates between taking action.
- iv) Take counteraction in opposition to the cue.

This study will be based on the frame work of taking action to relief the symptoms. Taking action to relief the symptoms and to restore one’s previous state of health may be viewed as healthy and constructive or unhealthy and even harmful to the individual. In response to the signal of illness, the individual may first rest to see if the symptoms will go, if this fails, he may seek help from a qualified practitioner or he may go a quack. He may involve in self-diagnosis, self-treatment or self-medication and home remedies before seeking professional help. The outcome of self-treatment frequently determines the next action to be taken.

VI. METHODOLOGY

The setting of the study: The research was conducted in Amassoma community in Bayelsa State Nigeria where Niger Delta University is situated. The community is made up of 22 compounds commonly called ‘Pele’ or ‘Ama’. It is assessable by land from yenagoa the state capital city. The major languages are Izon (Ijaw) and pidgin English. Like every Izon town, people of Amassoma are characterized by similar cultural system, norms and values with a population of over 36,454 persons (male 19,335 and female 17,119 respectively) (National population commission, **1991**) [19].

In Amassoma, there is only one existing general hospital with a non-functional health centre. Culturally taking of un-prescribed drugs and herbs are normal among the women, while dissolution of drugs by alcohol is widely condoned and encouraged. There is an annual cultural festival called ‘se-igben’ featuring drinking and wrestling competition, boat regattas, and fishing contest among others. This festival gives room for loosed conducts, illicit and indiscriminate taking of drugs and herbs that have been soaked in alcohol for days among the women given way to increased rate of self-medication.

Research design and participants: The study adopted descriptive design to explore the attitude of mothers towards self-medication in Amassoma Community. The target population comprises of pregnant women and mothers of childbearing age with age 13-40 years irrespectively of their level of education. A total of fourteen (14) compounds were randomly selected out of 22 compounds of which forty (40) persons per compound were selected at random. The sample size was five hundred and sixty (560) pregnant women and mothers within the childbearing age that were randomly selected from the 14 compounds and were given questionnaires. Random samplings were used to select both the compounds and the women by the casting of lots. About 18 (21.1%) were single parents, 54.6% were married, 58 (10.366%) were divorced, 78 (13.93%) were widows. 290 (51.79%) had secondary education 162 (28.92%) of the respondents had only primary education, full house wife 144 (25.71%), 46 (8.21%) engage in farming and 68 (12.14%) engage in fishing, 90 (16.08%) were traders, 161 (28.75%) of the respondents sourced their income through self-employment. 256 (45.71%) were from polygamous family while 304 (54.29%) were from monogamous family.

Instrument: A 42 items structured questionnaire was developed which consists of three sections designed to explore the socio-demographic characteristic of the respondents, getting the most precise information on the mothers' attitude towards self-medication and the influence of social factors, poverty, health education as well as effectiveness of nursing services available for mothers. The content validity and reliability of the instrument was established by the use of SPSS, reliability and validity programmes by the use of test and retest method at two weeks interval using 36 respondents and test and retest coefficient of 0.84 was established.

Procedure: Permission was obtained from the chiefs of the community, community development committee, and heads of household. The questionnaires were made anonymous to retain respondent's privacy and confidentiality, consent was obtained verbally from the individual respondents before data collection. The questionnaires were given to the respondents to fill and collected back. The field work lasted for 12 weeks. In analyzing the data, simple percentage was implored to determine the response category. Also, Pearson's chi-square was used to test the significant differences between variables.

VII. RESULTS

Table 1: Frequency table showing the different drugs used without prescription by the respondents when pregnant

S/N	Responses	Frequency	Percentage
1	Routine drugs	157	14.37
2	Analgesics	130	11.91
3	Herbs/Snuff	105	9.62
4	Antimalaria drugs	173	15.84
	Cough mixture	102	9.34
6	Blood tonic	124	11.36
7	Drugs to induce sleep	83	7.60
8	Antibiotics	140	12.82
	Others	71	6.50
	Do not indulge in self-medication	7	0.64
	Total	1092	100.0

Respondent selected more than one drug.

Table 1 revealed that 173 (15.84%) of the respondents take Antimalarial such as chloroquine, fancidar and Quinine. About 157 (14.37%) of them claimed they normally take normal routine drugs such as vitamin B complex and folic acid. About 140 (12.82%) respondents take Antibiotics like Ampiclox, flaggy and ciprofloxacin while 130 (11.91%) take Analgesics, only few uses snuffs and other herbs like tobacco as well as herbs soaked in alcohol when pregnant.

About 391 (69.82%) of the respondents claimed that due to some conditions they normally take drugs when pregnant while 162 (28.93%) of them claimed they take these drugs without any condition or rational for it. It was also revealed that, 369 (65.89%) of the respondents admitted taking drugs without prescription.

Table 2: Distribution of respondents based on reasons for not going for prescription

S/N	Reasons	Frequency	Percentage
1	Long delays in Hospital	128	17.02
2	Distance between hospital and home is too much	103	13.70
3	The illness was not serious enough	98	13.03
4	Doctor has seen me for the problem before	111	14.76
5	The hospital bills is too high	133	17.69
6	Behaviour of hospital personnel towards me.	92	12.23
7	Widespread use/Product availability	87	11.58
	Total	752	100.0

Respondents selected more than one reason.

From table 2, it was shown that about 133 (17.69%) claimed that the hospital bill was too high, 128 (17.02%) gave the reason of long delays in hospital, 111 (14.76%) gave the reason of having been treated before by the Doctor for the same illness before. About 98 (13.03%) claimed the illness not being serious enough to require special attention of qualified personnel.

Table 3: Frequency table showing which either alcohol or drug the respondents feel is the biggest problem in Amassoma

S/N	Responses	Frequency	Percentage
1	Alcohol much more than drugs	114	20.36
2	Alcohol more than drugs	81	14.46
3	Both are similar	90	16.07
4	Drugs much more than alcohol	101	18.03
5	Drugs more than alcohol	31	5.54
6	I do not know	143	25.54
	Total	560	100.0

From table 3 it was found that, about 114 (20.36%) of the respondents believed that alcohol causes much more problems than drugs 101 (18.03%) of the respondents believed that drugs causes much more problems than alcohol, while 90 (16.07%) claimed both alcohol and drugs had similar damaging effects.

Two-fifth of the respondents 234 (41.79%) do not drink alcohol during pregnancy while majority 326 (58.21%) of the respondents take and about 444 (79.29%) of the respondents do not smoke, 38 (6.79%) of the respondents smoke once a week, while 34 (6.07%) smoke occasionally.

Table 4: Showing how often the respondents who take alcohol drinks.

S/N	Responses	Frequency	Percentage
1	Seldomly	141	43.25
2	2 – 3 times a month	76	23.31
3	1 – 2 times a week	60	18.41
4	Everyday	49	15.03
	Total	326	100.0

About 141 (43.25%) of the respondents take alcohol seldomly, 76 (23.31%) take alcohol 2 – 3 times a month, 60 (18.41%) take alcohol 1 – 2 times a week while 49 (15.03%) of the respondents take alcohol every day.

Table 5: Showing the side effects respondents have experienced after indulging in self-medication for treatment.

S/N	Side effects	Frequency	Percentage
1	Hotness of the body	29	4.15
2	Vomiting	82	11.73
3	Loss of appetite	51	7.30
4	Headache	24	3.43
5	Frequent stooling	66	9.44
6	Passing of blood in the urine	8	1.14
7	Passing of yellow urine	77	11.02
8	Dizziness	182	26.04
9	Convulsion	31	4.43
10	Itching	149	21.32
	Total	699	100.0

The side effects experienced by the respondents that indulged in self-medication include dizziness 182 (26.04%), Itching 149 (21.32%), vomiting 82 (11.73%), passing of yellow urine 77 911.02%), frequent stooling 66 (9.44%) and loss of appetite 51 (7.30%).

Table 6: Summary of chi-square showing the influence of economic status on the attitude of mothers towards self-medication

Categories	f	%	df	X ²	P
Poor economic status/seldomly indulged in self-medication	52	9.28			
Poor economic status/occasionally indulged in self-medication	71	12.68			
Poor economic status/regularly indulged in self-medication	317	56.61	2	57.89	<0.001
Good economic status/seldomly indulged in self-medication	42	7.50			
Good economic status/occasionally indulged in self-medication	35	6.25			
Good economic status/regularly indulged in self-medication	43	7.68			

From table 6, it was revealed that, about 317 (56.61%) of the mothers that earned low income regularly indulged on self-medication while only 43 (7.68%) of the respondents with good economic status regularly indulged on self-medication [$\chi^2(2) = 57.89, P < 0.001$].

A Pearson chi-square test was used in table 12, the result indicated that 68.22% that were unknowledgeable (very unknowledgeable and unknowledgeable) about the factor that influence self-medication were significantly more than 31.78% that were knowledgeable (knowledgeable and very knowledgeable). [$\chi^2(3) = 199.98, P < 0.001$], thus the null hypothesis is accepted.

VIII. DISCUSSION

The high percentage of secondary and tertiary education helps the respondents to be fully aware of the effects of drugs on the fetus and the mothers; it was deduced that majority of the mothers were aware and informed about the risks of self-medication. Majority of the respondents agreed to have heard of the malformations (deformations) resulting from self-medication. Majority of them realized that traditional drugs use can result to harmful effects and can cause damage at specific stages of pregnancy such as foetal malformation, congenital abnormalities and miscarriages especially those drugs that they soaked in alcohol that they take orally. It was deduced that mothers-in-law and relatives are the main sources of advice by pregnant women during self-medication. This important traditional role of mothers-in-law during self-medication in pregnancy appears related to their culturally-entrenched role in the decision-making concerning prenatal, intra-natal and postnatal cares of their daughter-in-law. It was also found that respondents source of knowledge about the drugs purchase were mostly from friends or relatives, this may be due to the fact that the respondents are part of a culture where prescription are shared between people (neighbours, friends, co-workers and so on) to show affection. This supported the report of Ogunremi and Sogunro [20] that most of the drugs that are self-medicated are from friends and relatives. This was also collaborated by Nsimba [21] as well as Yusuff and Omarusehe [11] findings that the health hazards associated with self-medication are enormous, as they affect the overall health of individuals and community. Umar and his colleague [5] findings also supported this in their study.

Analysis of the most commonly used drugs showed that routine drugs, Anti-malaria drugs, blood tonic as well as pains relieving drugs are the most commonly used drugs and dangerous drugs like antibiotics and hormones can also be bought without a valid prescription. This was supported by Lawan et al., [5] and Gaillard et al., [22] findings that proprietary drugs which are sold over-the-counter include pain relievers, cough remedies, anti-allergies, laxatives, vitamins, tonics, antacids, and many others. This may be due to high rate of malaria attack, anaemia and ready availability of the various blood tonic and un-curtailed series of advertisement of pain relieving drugs on the media, inside public buses and along the streets.

Reasons given by respondents for indulging in self-medication were mostly that of illness not being too serious, other reasons are previous medical prescription for related symptoms, advice from friends, siblings and mate as well as that of long delays in the hospital and that pregnant women and mothers within the reproductive age indulged in self-medication because they could not afford to wait for long hours in hospital. This was in agreement with Afolabi et al., [23] findings that women attributed the reasons for self-medication to their perception that they know what to do and that it saves time and money. This was also supported by Loyola et al., [7] that previous prescription for the same illness. This was similar to the findings of Kayalvizhi and Senapathi [24] and that of Verma et al., [25].

The pattern of self-medications varies from one region to another and with individual characteristics with different types of drugs commonly used. As it was revealed that self-medication with analgesics and drugs diluted in Alcohol were more common among respondents involved in farming, manual works and boat driving.

Cigarette smoking and alcohol are other drugs that these pregnant women indulged on that are also dangerous and that can pose hazards to them. This was supported by Wikipedia [26] that smoking during pregnancy seem to increase the risk of miscarriage or premature labour, but the primary danger is that it slowed down fetal growth. Alcohol mixed with drug is one of the most dangerous drugs for pregnant women mainly in the early weeks. In the mother's body, alcohol breaks down chemically to a cell-damaging compound that is readily absorbed by the fetus.

Several antibiotics may pose hazards ranging from mild to serious to the mothers themselves, the foetus as well as to the newborn baby. Many medications have side effect that are potentially harmful during pregnancy but their benefits may outweigh their risks [26], [27], [28]. This was supported by Sapkota et al., [29] women reported using antibiotics to reduce cramps and prevent infections and this is an important factor contributing to the development of bacterial antibiotic resistance. Nigeria practiced self-medication with antibiotics to treat a variety of obstetrics symptoms. Ampicillin,

tetracycline, ciprofloxacin and metronidazole were used to treat symptoms, and the drugs were most often obtained from local chemists or pharmacists.

It was deduced that more than average of the women afford their drugs without consulting medical experts and one could strongly believe that self-medication is being practiced among the women of Amassoma, this is also applicable and common in developing countries. This was supported by [3], [4], [5], [30] that self-medication and non-doctor's prescription of drug is common in developing countries.

Women indulged in self-medication not because there is no enough hospital but because of high bill price for treatment given by the medical experts and also the respondents poor financial status (level of poverty) is another reason, It was also gathered that pregnant women indulged in self-medication because it provides cheap alternative to people who cannot afford to pay medical practitioners, thus self-medication is often the first response to illness among the people with low income. This was supported by Afolabi et al., [23] and Lawan et al., [5] findings that long queues in the hospitals and doctors not being readily available were their main reasons for their self-medication. The above finding was also corroborated by results from Bamgboye et al., [14] that inaccessibility to health facility was reported among the leading causes of self-medication.

The common illnesses among the women that lead them to indulge in self-medication are headache, diarrhea, pains, vomiting, malaria and infection. This confirmed Solomon's position [30] that the commonest illnesses that led to self-medication are: headache, fever, cough and diarrhea.

It was also revealed from this study that women whenever they are sick usually purchase drugs that are not prescribed from pharmaceuticals, this is in line with Makonnen [32]; Lawan et al., [5] as well as Yusuff and Omarusehe [11] findings that the availability of drugs at informal section, in open market, in village kiosks and also the way retail drugs are obtained contribute largely for rampant practices of self-medication.

The respondent revealed that drugs can cause problems throughout pregnancy, and that the effects of drugs on pregnant women include sleeplessness, susceptibility to infection. It was also revealed that drugs can affect the unborn baby in the following ways, heart problems, defects, death, stunted growth, low birth weight, early delivery and fetal alcohol effect. This was supported by National organization on Fetal Alcohol syndrome [33] that drinking alcohol during pregnancy can cause physical and mental birth defects. Also centre for diseases control and prevention [34] reported that drinking at any stage of pregnancy can affect the brain as well as growth.

Finally, it was deduced that level of income, conventional education and health education were associated with the attitude of self-medication. Majority of the mothers had a significant knowledge of factors that influence self-medication but this was not in line with Lawan et al., [5] findings that the situation is more disturbing as the concept of self-medication seems unclear to many people to the extent that some do not even regard their practices as form of self-medication; this might be due to different cultural background.

Nursing and psychosocial implication

Despite the fact that self-medication is harmful and dangerous, majority of mothers still take drugs without prescription which result to congenital abnormalities and pre-mature labour. If drug is misuse and abuse by women, It is dangerous because of the crucial roles they play in the family as a mother and as a wife, so women must be taught the potential benefits and risk that are involved, when and where to seek professional health care before taking therapy, the practitioners has a responsibility to gather data by taken a thorough history and performing physical examination to make diagnosis and to establish treatment plans.

Furthermore, the most frequently use treatment modality is drug therapy, and the nurse should consider seriously the class of medication that is most appropriate for the patient, the decision is reached based on thorough knowledge of diagnosis and treatment. Therefore, public health care nurse through their interaction with the mothers should health educate them on the risk and harmful effects of using prescribed drugs making them aware of the dangers involved and avoiding complication that may arise due to non-compliance.

IX. CONCLUSION

This research is on the attitude of mothers towards self-medication in Amassoma community Bayelsa state, Nigeria. A larger proportion of the respondents were found to be indulging in self-medication. The commonest agents involved in self-medication were: blood tonic, analgesics, anti-malaria and antibiotics. It was also concluded that long delays in the hospitals, having been seen by a doctor for the same problem before, ignorance and lack of understanding about the dangers of self-medication were the common reasons reported for indulging in self-medication by the respondents.

Furthermore, there is need for health education of the mothers and the public on the risks, problems, effects and complications that may arise due to self-medication. Levels of income, convectional education and health education were associated with the attitude of the mothers. Majority of the mothers had a significant knowledge of factors that influence self-medication. Future studies should compare the effects of self-medication on pregnant women and breastfeeding mothers.

X. RECOMMENDATIONS

The following recommendations were made; the health workers in partnership with the community leaders should know the risk and the problems of harmful drugs use and ensure they inform the mothers. There should be proper health education at every ante-natal clinic programme and within the community. Mothers are encouraged to always seek counsel and take only drugs prescribed by physicians during pregnancy. The government and non-governmental organization should embark on campaign and enlighten programmes in the rural areas. Effort should be made by hospital authorities to minimize delay in obtaining services.

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