



## Research Article

# Self-Medication among Pregnant Women Attending Manhyia Government Hospital

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## Abstract

**Background:** A major determinant to achieving the Sustainable Development Goal (3) is by reducing maternal mortality. Self-medication is one of the many health seeking behaviour that endangers the life of the pregnant woman and impedes maternal health. **Methods:** The study was conducted to determine the knowledge and practices of self-medication among pregnant women attending Manhyia Government Hospital. The study was a descriptive cross-sectional study. A structured questionnaire was used and 70 pregnant women were selected using the convenience sampling technique. **Results:** The findings revealed that: treating minor illness (25%) lack of time to consult health professional (15%) and emergency use and cultural belief in efficacy of traditional methods (14%) were some of the main factors that influenced respondents to self-medicate. Even though most respondents (59%) were aware of the effects of self-medication, 41% of the respondents indicated that self-medication could not cause any effect to both mother and fetus. **Conclusion:** The study suggests that the main factors informing the practice of self-medication were to treat minor illness in pregnancy, to avoid long hours spent in the health facility, for emergency use. Drugs mostly used for such purposes included analgesics and herbal drugs. The study recommends nurses and midwives to enforce health education on the effects of self-medication during antenatal.

**Keywords:** Self-medication; Knowledge; Pregnant woman

## Introduction

Self-medication is defined as the use of drugs to treat self-diagnosed disorders and symptoms, or the intermittent or continued use of a prescribed drug for chronic or recurrent disease or symptoms [1]. As a phenomenon, self-medication is manifested when people use over the counter medications to resolve usually perceived minor health challenges [2]. Self-medication with no knowledge about adverse effects of medications and contraindications may lead to many complications for pregnant women and their foetuses [3]. It can also cause resistance to antibiotics, drug allergy and delayed diagnosis [3]. It is estimated that 10% or more of congenital effect are because of previous exposure of the mother to drugs [4].

Self-medication by pregnant women especially in the first trimester of pregnancy can cause some serious effects to the unborn baby and the mother [5]. These effects may include probable miscarriage, easy infection, malformation of children, or hindrance in normal growth of the baby, defects in the development of the reproductive organs, urinary retention, undescended testis and other problems with the urethra [5].

The prevalence of self-medication is informed by a variety of factors that may differ from country to country. Having access to various types of medication and indiscriminate use of drugs before or during pregnancy and after childbirth has become a threat to the health of pregnant women and their foetus [6]. Usually, this is done when the woman is seeking relieve for symptoms caused by physiological changes that occur during this period [6].

Globally, self-medication is a common phenomenon and has been reported to be on increase. In developing countries, Africa and Asia, self-medication, including the use of herbal remedies as a primary form of health care is very common among the population [7]. Arikpo et al. [8], indicate that self-medication, especially in rural Africa is so high that they describe it as being in a “crisis state of affairs”. In sub-Saharan Africa, the incidence of self-medication is particularly high because of widespread poverty and inadequate health care systems and facilities [8]. Salisu and Prinz [9] argue that it is common for Ghanaians, when ill, to self-medicate first instead of seeking professional medical support from health personnel and health centres. This behaviour is common among the general Ghanaian populace and is mainly to reduce cost of consultation and transportation to and from the hospitals or clinic especially, in the rural areas where residents have to travel a considerable distances to access health care.

The Ghana Maternal Health Survey (GMHS) and the Ghana Statistical Service (GSS) both reveal that when faced with an ailment [10], some pregnant women prefer to self-medicate first and only seek professional health services when the situation worsens [10,19]. This, according to the Ministry of Health (MOH) has led to poor health seeking behavior among some pregnant women in Ghana, resulting in delays in, and late presentation of health problems (MOH, 2008) [19]. The study was conducted to assess self-medication among pregnant women at Manhyia District Hospital. Although other studies have been done on self-medication, no known research has been conducted among pregnant women in Manhyia.

## Methods

### Study Setting

The study was carried out at Manhyia District Hospital located in Kumasi, Ashanti region of Ghana, which is a suburb of Kumasi Metropolitan Assembly. Manhyia sub-metro is further divided into smaller communities to make up 59 communities in the sub-metro. Currently, it serves as a district hospital for Manhyia Sub-metro and serves estimated population of 304,092, which forms 22.3% of the metro population.

The hospital is noted as one of the health instituting championing antenatal health services in Kumasi with an OPD (Out Patient Department) attendance of 450 clients per day and antenatal attendance of about 40 pregnant women per day, the services providers are guided by the core value of the Ghana Health Service in the service of delivery processes at all times. About thousand (1000) pregnant women seek health services at this clinic per year including admissions at the clinic, but patients are referred to the nearby by teaching hospital if need be. The clinic was chosen because it gives a representation of the entire population of the city and is located in the city centre.

### Study Design

Descriptive cross-sectional design was used in the research as it determines and reports issues the way they are. It involves collecting data to answer research questions on the status of the subject of study. The design helped in identifying reasons why pregnant women self-medicate as well determined their knowledge on the effects of self-medication.

### Study Population

The study population comprised of pregnant women who sought for medical care at the Manhyia Government Hospital.

### Sample size and Sampling technique

Using the average monthly attendance of pregnant women for two previous months (November 2016 and December 2016), a total study population of 80 was generated for the study duration. Using the Raosoft online sample size calculator (<http://www.raosoft.com/samplesize.html>), [20] the recommended minimum sample of 70 participants was calculated at 95% confidence level, 5% margin of error, and a response distribution of 50%.

A systematic sampling method was employed where by numbers were assigned on the daily patient register from 1 to 10; then all 1st, 3<sup>rd</sup> and 7<sup>th</sup> numbers were picked randomly. Pregnant women who were represented by these numbers were included in the study regardless of their gestation age until when the sample size was reached. The picked women were interviewed on the same date of their visit to the clinic.

### Data Collection

A structured questionnaire using open and closed ended questions was used in obtaining information from respondents. The questionnaire was developed in English and translated into the local language (Twi) and then administered through face-to-face interviews after consent from the respondents were obtained. Pre-testing of the questionnaire was done at a different clinic two weeks prior to the main data collection to assess practicability and respondent understands of the questionnaire. The questionnaire captured the information on the socio-demographic characteristics, self-medication and predictors for the practice.

### Statistical Analysis

Data was analysed using Statistical Package for Social Sciences (SPSS) version 20. Data obtained was subjected to quantitative analysis using simple tables and charts to display the findings of this research.

### Ethics Considerations

Administrative and ethical clearance was sought from the Manhyia District Hospital. The purpose of the study was explained to the respondents. Privacy and confidentiality were ensured,

as respondents remained anonymous in their response to the questionnaire. Participation was voluntary and optional.

## Results

### Demographic Characteristics

Seventy (70) pregnant women were used for the study. 10(14%) were within the ages of 15-19 years, 32(46%) were 20-29years, 25(36%) were 30-39 years, and 3(4%) were 40 years and above.

In the quest to know the educational background of respondents, 37(53%) indicated they had completed basic school, 16(23%) completed senior high school, 12(17%) stated they had not been to school and 5(7%) had attained tertiary education.

Categories	Frequency (n)	Percent
First trimester	16	23
Second trimester	28	40
Third trimester	25	36
None of the trimester	1	1
Total	70	100

**Table 1:** Duration of Pregnancy.

On duration of pregnancy, 16(23%) of respondents were in their first trimester, 28(40%) were also in their second trimester and 25(36%) were in their third trimester. One person (1%) however did not know her trimester.

### Self-Medication

To determine whether respondents knew what self-medication was, respondents were asked to define self-medication. 29(41 %) of respondents were able to define self-medication correctly and while 41 (59%) were unable to define self-medication.

Categories	Frequency	Percent
Friend	5	7
Media	38	54
Pharmacy	2	3
health facility	20	29
Others	5	7
Total	70	100

**Table 2:** Sources of Knowledge on Self-Medication.

Out of the 70 respondents, 38 (54%) had their source of information on self-medication from the media, 20 (29%) got their source of knowledge from the health facility, 5 (7%) respondents got their information from friends and other sources such as the internet and family and 2 of the respondents (3%) had their information from the pharmacy.

Findings from the study further revealed that 29 (41 %) declared that self-medication could cause effect to both mother and the fetus while 41 (59 %) said self-medication has no effect on the mother and fetus.

Categories	Frequency (N)	Percent
a. Damage to body organs of fetus	34	30
b. Terminate pregnancy	52	46
c. Lead to drug resistance	14	13
d. Can complicate illness	12	11
Total responses from 70 respondents	112	100

**Table 3:** Effects of Self Medication on the Mother and Fetus.

On effects of self-medication on the mother and fetus, 52 (46%) said self-medication can terminate pregnancy, 34 (30%) said self-medication can cause damage to body organs of the fetus while 13 (14%) indicated that self-medication can lead to drug resistance and finally, 11(12%) indicated that self-medication can complicate illness.

Categories	Frequency (n)	Percent
First trimester	17	24
Second trimester	3	4
Third trimester	10	14
All the trimesters	35	50
None of the trimesters	5	7
Total	70	100

**Table 4:** Trimester Mostly Affected by Self-Medication.

The table above shows that out the 70 respondents chosen for the study, majority of the 35 (50%) said that all the trimesters in pregnancy was mostly affected by self-medication, 17 (24%) said that first trimester is mostly affected by the practice of self-medication, 10 (14%) also said that the third trimester is the most affected while 5 (7%) indicated none of the trimesters and a lesser part of the respondents, 3 (4%) said self-medication mostly affect the second trimester of pregnancy.

Out of the 70 respondents, 40 of the respondents said they have self-medicated whiles pregnant whiles 30 of them said they have never self-medicated whiles pregnant and only take prescribed drugs. This is better, should have followed with when they self-medicated.

### Drugs Commonly Used

Findings from the study revealed that the drug commonly used for self-medication was Analgesics (47%, n=47). This was followed by the use of Herbal drugs (22%, n=22), Antacids (12%, n=12), Antibiotics (11%, n=11) and others (7%, n=7) which comprised of Haematinics and Anthelmintics.

Categories	Frequency(n)	Percent(%)
a. To treat minor illness in pregnancy	58	25
b. Due to prior experience with the drug	26	11
c. For Emergency use	33	14
d. Long hours spent in health facility	35	15
e. Cultural beliefs in the efficacy of traditional methods	33	14
f. Due to the availability of drugs	31	13
g. Due to the affordability of drugs	19	8
Total responses of respondents	235	100

**Table 5:** Factors That Inform the Practice of Self-Medication.

From the table above, the study showed that the main factors informing the practice of self-medication were; To treat minor illness in pregnancy 25%(n=58), Long hours spent in the health facility 15%(n=35), For Emergency use and Cultural beliefs in the efficacy of traditional methods which was 14% (n=33) due to the availability of drugs which was 13%(n=31) and then due to prior experience with the drug which was 11%(n=26) and the least was due to the affordability of drugs which was 8%(n=19).

Drugs that were mostly self-medicated were; Analgesics (47%, n=47) and Herbal preparations (22%, n=22), followed by Antacids (12%, n=12), then Antibiotics (11%, n=11) and others (7%, n=7) which comprises of Haematinics and Anthelmintics.

From the table above, the major indications that prompt the practice of self-medication were; Body pains (43%, n=55), Headache (36%, n=46), (17%, n=21) and lastly, infections (4%, n=5)

### Discussion

The results of this study found out that majority (57%) of the respondents have ever self-medicated while many (47%) of the respondents have never self-medicated. This finding is similar to a study conducted on pregnant women by Emmanuel et al. (2014) [11] which indicates 85% of the pregnant women practice self-medication. This could have been due to the low level of education as majority of the respondents (53%) had only attained basic education.

From this study, majorities (40%) of respondents were in their second trimester and this may explain the high incidence of self-medication. This study corroborates a study by Fakeye et al., (2009) [12], which reported that for specific groups like pregnant women, the effects of self-medication are diverse and may depend on the type of drug self-medicated and the stage of the pregnancy. The study revealed that body pains (43%), headache (36%) and abdominal pains (17%) were some of the indications for self-medication. These indications are more likely to be some of the common ailments associated with pregnancy. This gives credence to a study by (Yussuf and Omarusehe, 2011) which revealed that pregnancy is usually accompanied by nausea, vomiting, back and waist pain and thus pregnant women often self-medicate to treat these ailments as well.

In this study, majority (47%) of respondents revealed that drugs that are mostly self-medicated include analgesics and herbal (22%), antacids (12%), then antibiotics (11%) and few of the respondents (7%) indicated that other drugs such as heamatinics and anthelmintics are self-medicated. This finding is in congruence with a research conducted by Beza S.W (2018) [13] which states that analgesics, antibiotics, and anthelmintics were the most commonly used classes of medicine for self-medication by the pregnant women. These drugs are probably taken to relieve them from symptoms of common ailments associated with pregnancy.

Various factors that informed the practice of self-medication were to treat minor illness in pregnancy, long hours spent at the health facility, for emergency use and cultural beliefs in the efficacy of traditional methods, availability of drugs, due to prior experience with the drug and due to the affordability of drugs. This finding is in congruence with a research conducted by Marwa K.J et al., (2018) [14] which states that the reasons why pregnant women practiced self-medication were easy access to medicines from pharmacies or drug shops without prescription followed by time saving, long waiting time for provision of health services, feeling that illness was not serious, and self-medication is cheaper.

Majority (53 %) of the respondents in this study indicated that the practice of self-medication has no effect on both mother and



fetus. This is not different from a study conducted by Marwa K.J et al., (2018) [14] which states that some pregnant women believed that self-medication during pregnancy saved lives of many unborn babies than harm; it is better for the fetus that the mother uses medicines by herself and get well than to have an untreated illness during pregnancy; self-medication during pregnancy do more good than harm.

The effect of self- medication cited in this study includes: damage to body organs of fetus, terminating pregnancy, lead to drug resistance and can complicate illness. This finding supports a research conducted by Olufunmilola et al., (2014) [18] which states unless necessary care is provided by responsible health professionals, self-medication may lead to high risk, including maternal and neonatal mortality and morbidity hence the need to take pre-cautionary measures before taking any medications as some drugs are contraindicated in pregnancy and lactation or they are given with caution.

In finding out sources of information on self -medication, majority of the respondents indicated media and others such as health facility, family, pharmacy friends and other sources. This is contrary to a research conducted by Alonso- Castro et al.,(2018) [15] which states that the main source of information on self-medication is from a relative/friend.

The study recommends nurses and midwives to enforce health education on the effects of self-medication during antenatal. In addition, since family members have been revealed as source of self-medicated drugs, they should as well be involved in the health education and promotion program. In addition, Ghana pharmaceutical council, Food, and Drugs board should enforce laws governing distribution of drugs.

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