

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Prevalence Of Self-Medication Practices Among Pregnant Mothers In Urban Area Of Thoothukudi District, Tamil Nadu, India.

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ABSTRACT

Pregnancy is a period of great physiological changes to the mother and foetus. Self-medication habits during this phase is very delicate and may sometimes endangerer both mother and foetus. Globally, self-medication practice during pregnancy has been increasing and found to be high in many regions of the world, especially in developing countries. The type, extent, and reasons for its practice however vary. Studies showed that both modern and herbal medicines are commonly used for self-medication in developing countries. To identify the prevalence and distribution of self-medication among pregnant women in urban area. 200 pregnant mothers based on convenient sampling were involved in the current study. The questionnaire was prepared based on previous literature study and administered through face-to-face interview method. The data collected was coded and entered in Microsoft office excel worksheet and analysed using trial version SPSS. Descriptive statistics was done and the results were 79% were practising selfmedication. 80% followed Herbal medicine as a mode of self medication. 82% followedselfmedication for indigestion and merely 4.5% for cough and cold, 4% headache, 2.5% morning sickness and 2.5% for vomiting.92.5% of them knew this is a dangerous habit, 77.5% of them gained knowledge regarding the habit from friends, parents, relatives. 78% of them revealed the reason for self-medication as easy availability of medicine.94% were not aware regarding the hazardous effect of self-medication. 94.5% suggested awareness campaign to educate regarding cessation of self-medication habit. Self-medication among pregnant women urban field practicing area found to be high and the reasons behind is lack of awareness, easy availability of drugs and difficulty in access to health services. There is a need to impervious awareness among the public regarding the danger's of self medication habit looming in community.

Keywords: Pregnant mothers, self -medication, knowledge, practice.

<https://doi.org/10.33887/rjpbcs/2022.13.2.20>

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INTRODUCTION

Self-medication is defined as the act of using medications by patients or individuals to treat self-diagnosed disorders or symptoms on their own initiative. It is a behavior in which the individual attempts to solve his/her health problem without professional knowledge or advice [1]. Pregnancy is a period of great physiological changes to the mother and fetus [2]. During this period, a pregnant woman may take medication to alleviate pregnancy-related symptoms [3]. Medication use during pregnancy has been a concern both for the mother and fetus since the discovery of birth defects resulting from the thalidomide crisis in early pregnancy in the 1960s and teratogenic effects discovered related to use of diethylstilboestrol in 1971 [4-7]. Globally, self-medication practice during pregnancy has been increasing and found to be high in many regions of the world, especially in developing countries. The type, extent, and reasons for its practice however vary. Studies showed that both modern and herbal medicines are commonly used for self-medication in developing countries. This is due to easy access to medicines. Herbal medicine use poses potential risks to the mother and fetus due to the fact that the composition and safety parameters of these products are unknown [1].

Justification

Self-medication has a number of potential risks not only in normal individuals but also in pregnant women. In particular, the ordinary user will usually have no specialized knowledge of the principles of pharmacology or therapy, or of the specific characteristics of the medicinal product used. This results in certain potential risks for both the pregnant woman and the fetus. It is estimated that 10% or more than 10% of birth defects are caused due to the exposure of pregnant women to drugs. Many studies have shown that drug use and self-medication during pregnancy may affect fetal health [8].

Self-medication may cause serious structural and functional adverse effects on the fetus including fetal toxicity, malformations, teratogen effects, and other potential harms. Furthermore, it may cause low birth weight, premature birth, feeding problems; and respiratory problems in the fetus and affect the health of mother. For many commonly used medicines, evidences of safe use in pregnant women have not been established. This is because medication safety information for pregnant women is limited due to the fact that pregnant women are often excluded from clinical trials of medicines. The limited medicine information has considerable contribution to maternal and neonatal mortality and morbidity, and fetal death. Despite this, studies showed that there is a high level of self-medication use among pregnant women [1].

Due to the increasingly widespread phenomenon of self-medication and one's direct role in selection and use of drugs, it is necessary to determine affecting factors on changing the behavior of individuals to access appropriate health behavior, so the researcher intended to study the prevalence and causes of pregnancy-related problems of self-medication to take a step towards improving the drug consumption culture and the health of mothers and women [9].

Objectives

To identify the prevalence and distribution of self-medication among pregnant women in urban area.

MATERIALS AND METHOD

Type of study: Community based descriptive study.

Study design: Cross sectional study in urban field practicing area.

Study Population: Pregnant females consenting to participate in the study.

Sample size: Convenient sampling.

Informed Consent

An Informed Consent in the local language (Tamil) obtained from the study participant before administering the questionnaire.

Tool for data collection

A structured questionnaire prepared based on the literature review.

Inclusion Criteria

All pregnant mothers residing in urban field practicing area attached to the medical college at the time of survey.

Exclusion Criteria

Those who are not willing to participate in the study were excluded.

Data collection Method

Data will be collected from pregnant women attending antenatal clinic. The purpose of the study will be explained to the study participants. After getting the informed consent, a structural questionnaire regarding self medication practice will be obtained by face-to-face interview method.

Duration of the study: 2 months.

RESULTS

Majority of study participants (39%) belonged to 26-30 years of age. Almost 81% of study participant were homemaker, 90.5% were Hindu by religion, 66% belonged to Nuclear family and 26% belonged to joint family. 48.5% belonged to lower middle class of Kuppasamy classification. 51.5% belonged to 2nd trimester, 51.5% belonged to primiparous. 60% of study participant have adequate knowledge regarding self medication practices and 79% were practising self medication. 80% followed Herbal medicine as a mode of self medication. 82% followed self medication for indigestion and merely 4.5% for cough and cold, 4% headache, 2.5% morning sickness and 2.5% for vomiting. 92.5% of them knew this is a dangerous habit, 77.5% of them gained knowledge regarding the habit from friends, parents, relatives. 78% of them revealed the reason for self-medication as easy availability of medicine. 94% were not aware regarding the hazardous effect of self-medication. 94.5% suggested awareness campaign to educate regarding cessation of self-medication habit.

Table 1: Age distribution of study participant

AGE GROUP	FREQUENCY N=200	PERCENTAGE%
18-19	6	3
20-25	71	35.5
26-30	118	59
30-35	5	2.5

Table 2: Occupation of study participant

OCCUPATION	FREQUENCY (N=200)	PERCENTAGE%
Unemployed	162	81
Professional	5	2.5
Agriculture	8	4
Elementary-occupation	1	0.5
Clerk	2	1
Skilled -workers	12	6
Craft	6	3
Shop workers	3	1.5
Technician	1	0.5

Table : 3 Religion of the study participant

RELIGION	FREQUENCY (n=200)	PERCENTAGE%
HINDU	181	90.5
MUSLIM	7	3.5
CHRISTIAN	12	6

Table 4: Type of Family of study participant

TYPE OF FAMILY	FREQUENCY (n=200)	PERCENTAGE%
JOINT FAMILY	52	26
NUCLEAR FAMILY	132	66
Three GENERATION FAMILY	16	8

Table 5 : Spouse education status

HUSBAND'S EDUCATION	FREQUENCY (n=200)	PERCENTAGE%
Illiterate	73	36.5
Middle school	52	26
Intermediate	46	23
Graduate	16	8
Primary school	8	3.5
High school	3	1.5
Post graduate	2	1

Table 6 : Spouse occupation status

OCCUPATION	FREQUENCY (n=200)	PERCENTAGE%
Plant and machine operators and assemblies	36	18
Skilled workers, shop, market sales	14	7
Professionals	26	13
Agriculture	21	10.5
Sales	79	39.5
Clerk	10	5
Technicians	11	5.5
Manager	3	1.5

Table 7: Total Famil income

FAMILY INCOME	FREQUENCY (n=200)	PERCENTAGE%
<6323	3	1.5
6327-18949	107	53.5
18953-31589	75	37.5
31591-47262	12	6
47266-63178	3	1.5

Table 8 : Kuppusamy socio economic classification

SOCIO-ECONOMIC SCALE	FREQUENCY (n=200)	PERCENTAGE
Lower middle	97	48.5
Upper lower	59	29.5
Upper middle	41	20.5
Lower	2	1
Upper	1	0.5

Table 9 : Current Gestational Age

TRIMESTER	FREQUENCY (n=200)	PERCENTAGE%
1 st trimester	39	19.5
2 nd trimester	103	51.5
3 rd trimester	58	29

Table 10 : Parity of Study participant

PRIMI/MULTI	FREQUENCY (n=200)	PERCENTAGE%
Primiparous	103	51.5
Multiparous	97	48.5

Table 11: Knowledge of Self medication.

DO YOU KNOW WHAT IS SELF-MEDICATION	FREQUENCY (n=200)	PERCENTAGE%
Yes	120	60
No	80	40

Table 12: Self-Medication Practice During Pregnancy

SELF-MEDICATION PRACTICE DURING PREGNANCY	FREQUENCY (n=200)	PERCENTAGE%
yes	42	21
No	158	79

Table 13: Choice of medicine during pregnancy.

Choices	FREQUENCY (n=200)	PERCENTAGE%
Allopathy and Herbal Medicine	7	3.5
Allopathic	33	16.5
Herbal	160	80

Table 14: Illness treated with selfmedication

SYMPTOMS	FREQUENCY(n=200)	PERCENTAGE%
Indigestion	164	82
Cough and cold	9	4.5
Headache	8	4
Fungal infection	7	3.5
Morning sickness	5	2.5
vomiting	5	2.5
UTI	2	1

Table 15: Selfmedication is danger to health

DANGEROUS	FREQUENCY (n=200)	PERCENTAGE%
Yes	185	92.5
No	13	6.5

Table 16: sources of Self medication

SOURCES	FREQUENCY (n=200)	PERCENTAGE%
Friends, parents, relatives	155	77.5
Previous prescription	39	19.5
Newspaper	3	1.5
Radio, TV, Other media	2	1
Pharmacist	1	0.5

Table 17: Reasons for Self medication

REASON	FREQUENCY (n=200)	PERCENTAGE%
Easy availability of medicine	156	78
Time saving	30	15
Difficulty in access to health service	8	4
Previous medication	6	3

Table 18: Sources of Herbal Medicine

SOURCES	FREQUENCY (n=200)	PERCENTAGE%
Family members	159	77.9
Shop	22	11.1
Market	10	5
Traditional seller	9	4.5

Table 20: Awareness of hazardness of self medication

HARMFUL	FREQUENCY (n=200)	PERCENTAGE%
Yes	12	6
No	188	94

Table 21: Suggestion to cease self-medication

STEPS OF PREVENTION	FREQUENCY(n=200)	PERCENTAGE%
Creating awareness through health education	189	94.5
Making health facility available all the time	7	3.5
Rules and regulations against the pharmacy must be strict	4	2

DISCUSSION

The present cross-sectional study conducted among 200 pregnant women in urban area to find the prevalence of self-medication among them similar to a study Gabriela Pereira et al [10]. In this study majority of pregnant women were found to be taking self-medication similar to a study done by [1]. *Kidanemariam G.* The current study only included pregnant women for whom self-medication can be more hazardous. Among the study population 40 did not have knowledge about self-medication. Most of

them (82%) preferred herbal medication during their pregnancy [10]. The illness which made them to self-medicate are headache(4%) ,cough & cold (4.5%), morning sickness (2.5%), hypertension & diarrhoea (0.5%), constipation and others(82%).Previous medication for the illness made the pregnant women self-medicate during the subsequent similar illness. The pregnant women got information from various sources like family, neighbours, media, tv, magazines, ads. policies and laws regarding self-medication must be strengthened.

Limitation

The limitation of the study is the limited sample size and difficult to generalise.

Strength

Study participant is a much vulnerable group and the need to do further investigation among them is yet to explore.

CONCLUSION

Self-medication among pregnant women urban field practicing area found to be high and the reasons behind is lack of awareness, easy availability of drugs and difficulty in access to health services. There is a need to impervious awareness among the public regarding the dangers of self-medication habit looming in community.

ACKNOWLEDGEMENT

Gratitude to the participants who solely made this mile stone possible and the interns who enrolled as volunteer's to successfully communicate and collect the details from the study participants.

REFERENCES

- [1] Kidanemariam G, Michael Beyene, Solomon Worku Beza. Trop Med Health 2018 46:10
- [2] Asfaw F, Bekele M, Temam S, Kelel M. International Journal of Scientific Reports 2016;2(8):201-6.
- [3] Mbarambara P, Songa P, Wansubi L, Mututa P, Minga B, Bisangamo C. Int J Innov Appl Stud 2016; 16(1):38.
- [4] Gebreegiabher T, Berhe D, Gutema G, Kabtyimer B. Int J Pharm Sci Res 2012;3(5):1371.
- [5] Yang T, Walker M, Krewski D, Yang Q, Nimrod C, Garner P, et al. Pharmacoepidemiol Drug Saf 2008; 17(3):270-7.
- [6] Kennedy D. Aust Prescr 2014;37:38-40.
- [7] Wondesen A, Satessa G, Gelaw B. International Journal Of Pharma Sciences 2016;6(2):1426-35.
- [8] Hossein Ebrahimi, Giti Atashsokhan, Farzaneh Amanpour, Azam Hamidzadeh. Pan African Medical Journal 2017; 27:183.
- [9] Pranav V,Prakash Narayanan,Vasudeva Guddattu. International journal of pharmacy and pharmaceutical sciences 2013;9(6).
- [10] Pereira G, Surita FG, Ferracini AC, Madeira CdeS, Oliveira LS and Mazzola PG. Front Pharmacol 2021;12:659503.