

**EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON KNOWLEDGE AND
PRACTICE OF MANAGING COMMON DISCOMFORTS DURING PREGNANCY
AMONG PRIMIGRAVIDA MOTHERS**

Reg. No. 301420451

**A DISSERTATION SUBMITTED TO THE TAMILNADU
Dr. M. G. R. MEDICAL UNIVERSITY, CHENNAI, IN
PARTIAL FULFILLMENT OF REQUIREMENT
FOR THE DEGREE OF MASTER OF
SCIENCE IN NURSING
APRIL 2016**

CERTIFICATE

This is to certify that the Dissertation entitled “**EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON KNOWLEDGE AND PRACTICE OF MANAGING COMMON DISCOMFORTS DURING PREGNANCY AMONG PRIMIGRAVIDA MOTHERS**”.is submitted to the faculty of nursing, **THE TAMILNADU Dr. M. G. R. MEDICAL UNIVERSITY, CHENNAI** by **Reg. No. 301420451** in partial fulfillment of requirement for the degree of Master of Science in Nursing. It is the bonafide work done by her and the conclusions are her own. It is further certified that this dissertation or any part thereof has not formed the basis for award of any degree, diploma or similar titles.

Prof. DR. S. Madhavi, M.Sc. (N), Ph.D.,

Principal,

KMCH College of Nursing,

Coimbatore – 641014

Tamil Nadu.

**EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON KNOWLEDGE
AND PRACTICE OF MANAGING COMMON DISCOMFORTS DURING
PREGNANCY AMONG PRIMIGRAVIDA MOTHERS**

APPROVED BY DISSERTATION COMMITTEE ON SEPTEMBER 2015

1. RESEARCH GUIDE: _____

Prof. DR. S. Madhavi, M.Sc. (N), Ph.D.,
Principal,
KMCH College of Nursing,
Coimbatore – 641014

2. CLINICAL GUIDE : _____

Prof. R. Indumathi, M.Sc. (N)
Associate Professor
Department of Obstetrics and Gynaecological Nursing
KMCH College of Nursing
Coimbatore- 641014

3. MEDICAL GUIDE : _____

Dr. Atima Pathak M.S. (OBS &GYN)
Consultant Obstetrician and Gynecologist
Kovai Medical Centre and Hospital
Coimbatore- 641014

**A DISSERTATION SUBMITTED TO THE TAMILNADU
Dr. M. G. R. MEDICAL UNIVERSITY, CHENNAI, IN
PARTIAL FULFILLMENT OF REQUIREMENT
FOR THE DEGREE OF MASTER OF
SCIENCE IN NURSING
APRIL 2016**

ACKNOWLEDGEMENT

I would like to offer a deepest sense of everlasting gratitude to **God Almighty** who has given strength, good health and wisdom to make this thesis a reality.

I am immensely thankful to **Dr. Nalla.G. Palaniswamy, M.D.,AB (USA), Chairman and Managing Director**, Kovai Medical Centre and Hospital and to **Dr. Thavamani D Palaniswamy M.D.,AB (USA), Managing trustee**, Kovai Medical Centre and Educational Trust for granting me the opportunity to undertake this study in their esteemed institution.

I owe my gratitude from bottom of my heart to **Prof. DR. S. Madhavi, M.Sc (N), Ph.D., Principal, KMCH College of Nursing**, who was my research guide for her valuable suggestions, timely support and constant moral support, which contributed to enrich the strength to complete this study successfully. Under her guidance I successfully overcome many difficulties and learned a lot. I can't forget her hard times. I thank her for helping me to complete my analysis in the timeframe available. I am grateful to her contributions & suggestions to complete this study and make this a successful one.

I am exceedingly thankful to my medical guide, **Dr. Atima Pathak M.S.(OBS &GYN), Consultant Obstetrician and Gynecologist, Kovai Medical Centre and Hospital** for her advocacy, generosity, guidance and readiness to spend her time even in her engaged schedule. It is a matter of fact that without her permission, constant observation and proper attention, this work could not have been achieved successfully.

I am indebted to my clinical guide, **Prof. R. Indumathi, M.Sc (N), Associate Professor, Department of Obstetrics &Gynaecological Nursing**, for her unconditional support, guidance, valuable suggestions, untiring efforts, unwavering faith and cooperation which motivated me for the successful completion of this dissertation. Despite of her busy schedule, she used to review my thesis progress, gave her valuable suggestions and made corrections. Her interest, endless patience and continuous encouragement have enabled me to complete this study.

I convey my special thanks to our class coordinator **Prof. Sivagami. R. M.Sc (N),Vice Principal, KMCH College of Nursing** for her generous support, encouragement and timely advice to fulfill this work.

I would like to acknowledge the support and guidance from a very special individual, **Dr.M.S.Tamizharasi, M.D., D.G.O., P.G.Psychology, Professor in Obstetrics and Gynaecology** for devoting her attention, time and support which gave me an impetus to complete this study.

I extend my sincere thanks to **Dr.P.R.Muthusamy, Principal, Dr.N.G.P. Arts & Science College and all other members of the Ethical Committee** for granting me the Ethical clearance to conduct my study.

My grateful thanks to **Prof.S.Renuka, M.Sc (N), HOD, Department of Obstetrics &Gynaecological Nursing**, for her enthusiasm and interest that provided me with strength and encouragement to complete the study. I express my sincere thanks for her valuable guidance and timely suggestions throughout my study.

I am very grateful for the support, help and motivation of especially **Mrs Padma, MSc(N) Assistant Professor, Mrs Manavalam MSc(N), Mrs M. Dhannya MSc(N) Lecturers of Department of Obstetrics and Gynaecological Nursing** for providing content validity, extensive guidance, criticisms, continuous support and encouragement throughout the study.

I am exceedingly thankful to **Mr. Pradeep Kumar., Statistician, KMCH College of Pharmacy**, for his guidance in statistical analysis and interpretation of data during the study.

I shall always be grateful to **all the mothers** who have given consent and actively participated and for their co-operation in making my study possible.

I express my sincere thanks to our chief librarian **Mr. Dhamodharan and all assistant librarians** for permitting and facilitating me to make use of the reservoir of knowledge.

My special thanks to my **seniors especially Mrs. Asha, Mrs. Jyothi, Mrs. Rani, Ms. Umamahaeswari and my classmates Ms. Chinnu, Mr. Chandiran, Mrs. Benita, Ms. Sharoon, Ms. Anusha, Ms. Jesslin, Ms. Sowmya** who directly and indirectly encouraged and helped me throughout this study.

The analogy will not be complete if I don't mention the loving support extended by **my parents Mr Anthrayose N.T. and Leeja Chacko and my dear sister Ms. Minnu Anthrayose** for their constant prayer, sacrifice, encouragement, support, unconditional love and cooperation throughout my study without which my dream would never have come true.

Last but not least, my sincere gratitude and thankfulness to all well-wishers, friends and relatives for their help and best wishes which helped me to carry out my study. My hearty thanks to one and all.

TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE NO.
I	INTRODUCTION	1
	NEED FOR THE STUDY	3
	STATEMENT OF THE PROBLEM	5
	OBJECTIVES OF THE STUDY	5
	OPERATIONAL DEFINITIONS	5
	HYPOTHESIS	6
	ASSUMPTIONS	6
	CONCEPTUAL FRAMEWORK	7
II	REVIEW OF LITERATURE	10
III	METHODOLOGY	19
	RESEARCH DESIGN	19
	VARIABLES UNDER THE STUDY	19
	SETTING OF THE STUDY	20
	POPULATION OF THE STUDY	20
	SAMPLE SIZE	20
	SAMPLING TECHNIQUE	20
	CRITERIA FOR SAMPLE SELECTION	20
	DEVELOPMENT AND DESCRIPTION OF THE TOOL	21
	CONTENT VALIDITY AND RELIABILITY	22
	PILOT STUDY	22
	PROCEDURE FOR DATA COLLECTION	23
	STATISTICAL ANALYSIS	23
IV	DATA ANALYSIS AND INTERPRETATION	24
V	DISCUSSION, SUMMARY, CONCLUSION, IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS	41
	ABSTRACT	47
	REFERENCES	49
	APPENDICES	

LIST OF TABLES

TABLE NO	TITLE	PAGE NO
1.	Distribution of Demographic characteristics of mothers.	25
2.	Distribution of Pretest Knowledge Scores of mothers regarding managing common discomforts during pregnancy	30
3.	Distribution of Posttest Knowledge Scores of mothers regarding managing common discomforts during pregnancy	30
4.	Distribution of Pretest Practice Scores of mothers regarding managing common discomforts during pregnancy	33
5.	Distribution of Posttest Practice Scores of mothers regarding managing common discomforts during pregnancy	33
6.	Comparison of the mean pretest and posttest knowledge scores of the mothers on managing common discomforts during pregnancy	35
7.	Comparison of the mean pretest and posttest practice scores of the mothers on managing common discomforts during pregnancy	37
8.	Association of demographic characteristics of mothers with their post test knowledge regarding managing common discomforts	39
9.	Association of demographic characteristics of mothers with their post test practice regarding managing common discomforts	40

LIST OF FIGURES

FIGURE NO	FIGURES	PAGE NO
1.	Conceptual framework based on Modified Ludwig von Bertalanffy's General System Theory(1968)	9
2.	Distribution of Mothers according to their Age	26
3.	Distribution of Mothers according to their Month of current pregnancy.	26
4.	Distribution of Mothers according to their Religion.	27
5.	Distribution of Mothers according to their Educational status.	27
6.	Distribution of Mothers according to their Occupation	28
7.	Distribution of Mothers according to their Type of family.	28
8.	Distribution of Mothers according to their Previous knowledge.	29
9.	Distribution of Mothers according to their Source of information.	29
10.	Distribution of mothers according to Pretest and Posttest Knowledge Scores regarding managing common discomforts during pregnancy	32
11.	Distribution of mothers according to Pretest and Posttest Practice Scores regarding managing common discomforts during pregnancy	34
12.	Comparison of the mean per-test and post-test knowledge scores of Mothers regarding the managing of common discomforts	36
13.	Comparison of the mean per-test and post-test practice scores of Mothers regarding the managing of common discomforts	38

LIST OF APPENDICES

APPENDIX	TITLE
A	Data Collection Tool
B	Copy of permission letter to conduct study
C	Copy of Letter Issued By Ethical Committee
D	Copy of Letter Seeking Content Validity
E	Certificate of Content Validity
F	List of experts

APPENDIX-H
LIST OF EXPERTS

- 1. Dr. Atima Pathak M.S.(OBS &GYN)**
Consultant Obstetrician and Gynecologist
Kovai Medical Centre and Hospital
Coimbatore- 641014
- 2. Prof. DR. S. Madhavi, M.Sc. (N), Ph.D.,**
Principal,
KMCH College of Nursing,
Coimbatore – 641014
- 3. Prof. S. Renuka M.Sc. (N)**
Professor
Department of Obstetrics and Gynaecological Nursing
KMCH College of Nursing
Coimbatore- 641014
- 4. Mrs R. Indumathi M.Sc. (N)**
Associate Professor
Department of Obstetrics and Gynaecological Nursing
KMCH College of Nursing
Coimbatore- 641014
- 5. Mrs Padma, MSc(N)**
Assistant Professor
Department of Obstetrics and Gynaecological Nursing
KMCH College of Nursing
Coimbatore- 641014
- 6. Mrs Manavalam MSc(N)**
Assistant Professor
Department of Obstetrics and Gynaecological Nursing
KMCH College of Nursing
Coimbatore- 641014

CHAPTER - I

INTRODUCTION

Pregnancy is a creative and productive period in the life of a woman. It is one of the vital events, which needs special care from conception to postnatal period. Every mother wants to enjoy the nine months period with the baby inside her; the joyful experience of the pregnancy is not always joyful. Sometimes it is associated with problems of varying severity. Minor disorders are one among those problems, which causes discomfort to the mothers during pregnancy. Although such disorders are often termed as minor disorders they are far from minor for women who experience it.

Every pregnancy is a unique experience for the women and each pregnancy that the women experience will be new and uniquely different. Pregnancy is a long and very special journey for the woman. It is a journey of dramatic physical, psychological and social change of becoming a mother for the newborn child. The majority of discomforts experienced during pregnancy can be related to either hormonal changes or the physical changes related to growing fetus. **(Fraser, 2009)**

The anatomical, physiological and biochemical adaptations to pregnancy are profound. These changes that the female body undergoes during pregnancy begin soon after fertilization and continue throughout gestation. These changes occur in response to physiological stimuli provided by the fetus and placenta. These changes may be unpleasant as well as worrying but they are rarely a cause for alarm as most of these changes are usually normal. These so-called minor disorders or ailments of pregnancy can be troublesome on a day-to-day basis. Nevertheless, these minor ailments are considerably improved by offering a proper explanation and with simple treatments **(Padubidri, 2007)**

Studies on minor acute illness during pregnancy suggest that despite being non-life threatening, the high prevalence of these conditions has a major effect on productivity and may have profound impact on the lives of pregnant women and their families. Yet, surveillance of so-called "minor ailments" during pregnancy is virtually non-existent in developing countries; this lack of reliable data impedes proper

assessment of the disease burden and is a barrier to effective planning of control and preventive activities. **(Mudaliar, 2005)**

Many women experience minor ailments during pregnancy. These ailments should be treated properly as they may escalate and become life threatening. Minor ailments may occur due to hormonal changes & accommodation changes of every system of the body. The mother needs knowledge to cope with the experience of pregnancy. **(Varney, 2005)**

An important nursing responsibility during the prenatal period is educating the client regarding the discomforts, that occur during pregnancy and the remedies to these will make them more comfortable. Another important aspect is counselling on the discomforts of pregnancy will help the pregnant women distinguish between a normal discomfort and a real problem in the pregnancy. **(Littleton, 2009)**

Providing empathetic and sound advice about measures to relieve these discomforts helps promote overall health and well-being. Although these symptoms are classified as minor, they are not minor to a woman experiencing it. Each of these symptoms has a potential to lead to problems that are more serious and need caring of the mother during her pregnancy period. **(Pillitteri, 2010)**

After providing anticipatory guidance, the midwife should remember to evaluate the effectiveness of interventions used to assist with the discomforts of pregnancy. If implemented measures are ineffective, the nurse may need to investigate further to ensure there is not an alternative reason of the present symptoms. These may need appropriate treatment measures. **(Orshan, 2008)**

NEED FOR THE STUDY

Pregnancy is a biological function and an integral part of the social and environmental activity, bringing joy to the mother and family. Most women are healthy during pregnancy and do not have serious health concerns. Mother may have minor physical symptoms throughout their pregnancy that are considered normal pregnancy changes. It is important for mother to be aware of symptoms.

An explorative descriptive study was conducted on maternal awareness of pregnancy normal and abnormal signs in two maternity centres in Jordan. The study revealed that the commonest complaints of the studied group during their pregnancy were nausea and vomiting, fatigue, back pain, heartburn and vaginal discharge. Out of 340 women, the most common complaints during the current pregnancy is leg cramps (75 women), followed by nausea and vomiting (56 women), only 3 women complained breast problems during current pregnancy As regards management of the current complaints relatively high percentages of mothers used home remedies to manage low back pain, nausea and vomiting, breast problems, and constipation (73.7%, 73.2%, 66.7% & 65.4%) respectively. The use of home remedies for these signs was high. The study recommended the need to include information about abnormal signs of pregnancy by health care providers, particularly the maternity nurses and midwives as a routine care during antenatal visits. **(Amasha & Heeba, 2013)**

There has been a plenty of studies regarding the epidemiology of pregnancy-related low back pain. Rates range from 25% to 90%, with most studies estimating that 50% of pregnant women will suffer from low back pain. One third of them will suffer from severe pain, which will reduce their quality of life. The majority of women are affected in their first pregnancy. 80% of women suffering from low back pain claim that it affects their daily routine and 10% of them report that they are unable to work. Pregnancy related low back pain usually begins between the 20th and the 28th week of gestation, however it may have an earlier onset. The duration varies. A study about low back pain in Netherlands shows that 38% of women still have symptoms at 3 months postpartum and 13.8% at 12 months. low back pain during pregnancy is considered to be the most important risk factor for postpartum low back

pain and the existing literature supports low back pain as the leading reason for sick leave, as far as pregnant working women are concerned. **(Katonis et. al, 2011)**

One hundred three women were enrolled with mean (+/-standard deviation) age of 28 (+/-5) years; 54% were nulliparous and 92% white. Constipation prevalence rates were 24% (95% confidence interval [CI] 16-33%), 26% (95% CI 17-38%), 16% (95% CI 8-26%), and 24% (95% CI 13-36%) in the first, second, and third trimesters and 3 months postpartum, respectively. Additionally, irritable bowel syndrome (by Rome II criteria) prevalence rates were 19% (95% CI 12-28%), 13% (95% CI 6-23%), 13% (95% CI 6-23%) and 5% (95% CI 1-13%) in the first, second, and third trimesters and 3 months postpartum, respectively. **(Bradley et.al, 2007)**

Constipation, heartburn, and haemorrhoids are common gastrointestinal complaints during pregnancy. Constipation occurs in 11-38% of pregnant women. Although the exact prevalence of haemorrhoids during pregnancy is unknown, the condition is common, and the prevalence of symptomatic haemorrhoids in pregnant women is higher than in non-pregnant women. The incidence of heartburn in pregnancy is reported to be 17-45%. **(Vazquez, 2008)**

Among the musculoskeletal dysfunctions reported by the pregnant women, 64.6% reported calf muscle cramps, 37.1% reported foot pain, and 33.7% experienced low back pain in their third trimester. In the second trimester, common musculoskeletal dysfunctions experienced by the women were that of calf pain (47.8%), low back pain (42%), and pelvic girdle pain (37%). Musculoskeletal dysfunctions and general discomforts very commonly affect the activities of daily living of pregnant women. Understanding the common discomforts during various trimesters of pregnancy will help to develop a comprehensive program for prevention and cure. **(Ramachandra et. al, 2015)**

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of self-instructional module on knowledge and practice of managing common discomforts during pregnancy among primigravida mothers attending antenatal OPD's at KMCH Coimbatore.

OBJECTIVES

- To assess the pre-test and post-test knowledge level of primigravida mothers on managing common discomforts during pregnancy
- To assess the pre-test and post-test practice of primigravida mothers on managing common discomforts during pregnancy
- To associate the level of knowledge and practice on managing common discomforts among primigravida mothers with their selected demographic characteristics.

OPERATIONAL DEFINITIONS

Effectiveness

Effectiveness refers to determine the extent to which the self-instructional module has achieved the desired effect as expressed by gain in Post-test knowledge and practice scores.

Self- instructional module

It refers to the systematically structured booklet designed to provide information regarding managing common discomforts during pregnancy it includes introduction about management of common discomforts during pregnancy i.e. fatigue, faintness and dizziness, breast tenderness, urinary frequency, excessive white discharge, constipation, pica, backache, leg cramps, varicosities, gas formation, tingling and numbness of hands, difficulty in breathing, difficulty in sleeping, heartburn and ankle edema.

Common discomforts of pregnancy:

These are the discomforts experienced by the primigravida mothers due to the physiological and hormonal changes during pregnancy like fatigue, faintness and

dizziness, breast tenderness, urinary frequency, excessive white discharge, constipation, pica, backache, leg cramps, varicosities, gas formation, tingling and numbness of hands, difficulty in breathing, difficulty in sleeping, heartburn and ankle edema.

Primigravida mother:

Mother who has been pregnant for first time from 26 weeks to 32 weeks of gestation.

HYPOTHESIS OF THE STUDY

H₁: There is a significant difference between pre-test and post-test knowledge and practice of primigravida mothers on managing common discomforts of pregnancy.

ASSUMPTIONS

- Education will help to enhance the knowledge and practice of primigravida mothers regarding managing common discomforts of pregnancy.
- Primi mothers have lack of knowledge on managing common discomforts of pregnancy.

CONCEPTUAL FRAMEWORK

Conceptual framework refers to interrelated concepts or abstract those are assembled together in same rational scheme by virtue of their relevance to a common theme (Polit & Hungler, 1999).

The conceptual framework adopted for this study was developed on the basis of Ludwig von Bertalanffy's (1968) general system theory. According to general theory a system consists of a set of interaction components. There are two types of general system i.e. closed and open.

A closed system does not exchange every, matter or information with its environment. It receives no input from the environment and gives no output to the environment. In an open system, energy, matter or information move into and out of the system.

All living system such as plants, animals, people, families and communities are open system. Open system consists of the input, throughput and output process. According to theorist view the information, matter and energy that the system receives, transforms the input in a process called as throughput and releases information, matter and energy as output in the environment output that returns to the system as input is called feedback which may be positive, negative and neutral.

In this present study the investigator considered the primigravida mother as open system which possesses input, throughput, output and feedback.

INPUT

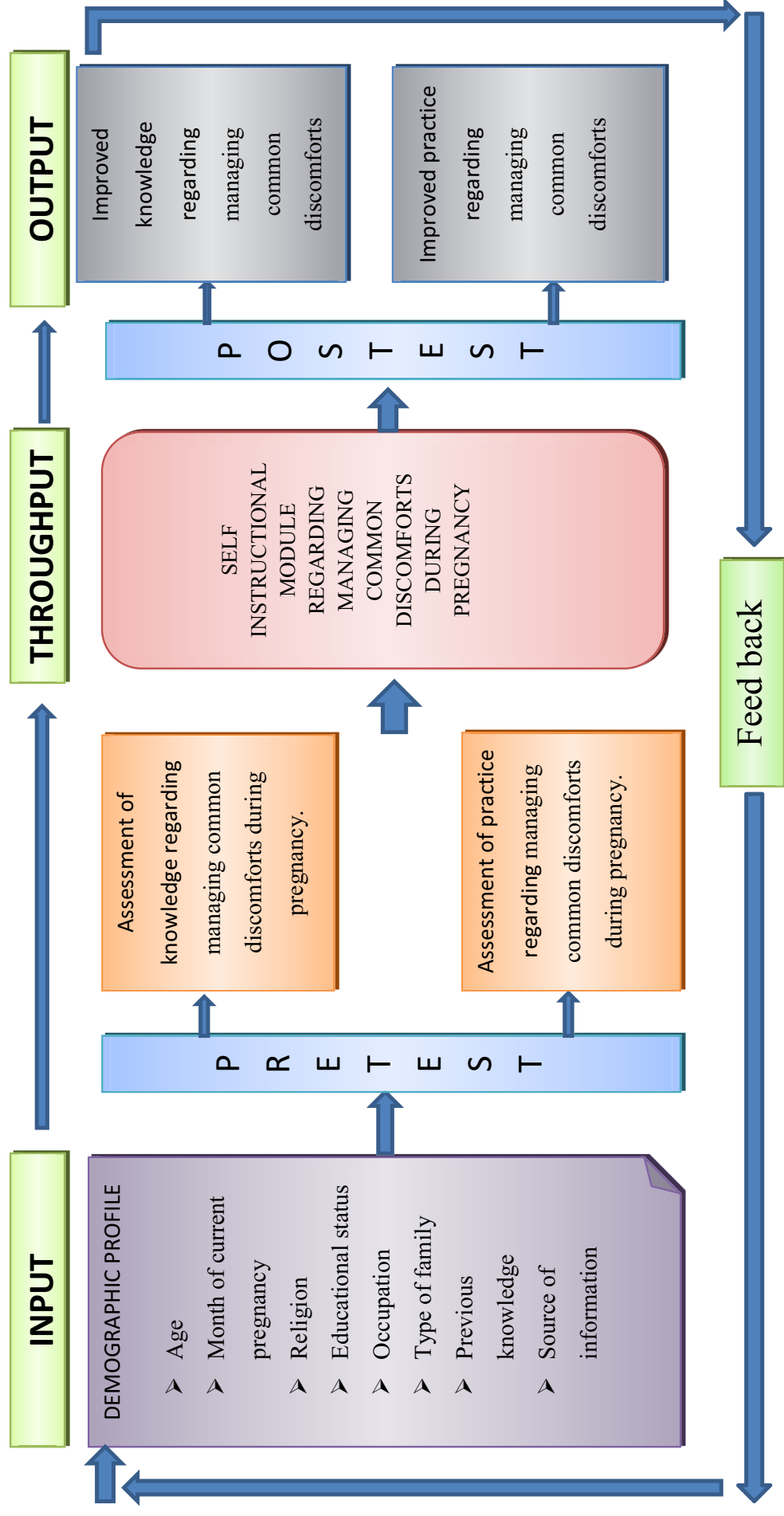
In this study the investigator considered that the input is the assessment of mothers' demographic variables such as Age, Month of current pregnancy, Religion, Educational status, Occupation, Type of family, Previous knowledge, Source of information. Also assess the knowledge and practice regarding managing common discomforts during pregnancy.

THROUGHPUT

Regards with throughput the investigator gave SIM regarding managing common discomforts such as fatigue, faintness and dizziness, breast tenderness, urinary frequency, excessive white discharge, constipation, pica, backache, leg cramps, varicosities, gas formation, tingling and numbness of hands, difficulty in breathing, difficulty in sleeping, heartburn and ankle edema.

OUTPUT

Considering the output the investigator assess the knowledge and practice after 4 weeks of educational intervention. By creating such awareness through education will help the mothers to manage common discomforts during pregnancy.



MODIFIED LUDWIG VON BERTALANFFY'S GENERAL SYSTEM THEORY (1968)

CHAPTER II

REVIEW OF LITERATURE

A review of literature on the research topic helps the researcher to know about existing studies and provides information which helps in focusing on particular problems and enhances the knowledge.

The researcher undertakes a literature review to familiarize themselves with the knowledge base which is an important step in research with a background for understanding current knowledge on topic and illuminates the significance of the new study

The related literature is reviewed for the present study in order to determine the knowledge and practice regarding managing common discomforts during pregnancy among primigravida mothers attending antenatal OPD's of Kovai Medical Centre and Hospital in Coimbatore.

Review of literature of present study was presented in the following headings

- Literature related to common discomforts during pregnancy
- Literature related to effectiveness of structured teaching program regarding common discomforts during pregnancy
- Literature related to constipation
- Literature related to back pain

Literature related to common discomforts during pregnancy

Sangeetha, et al., (2015) conducted a descriptive research study to assess the level of knowledge on minor ailments in pregnancy among antenatal mothers in selected tertiary hospital, kanchipuram, Tamilnadu. The objectives of the study were to assess the knowledge regarding minor ailments among antenatal mother and to associate knowledge level on minor ailments during pregnancy with demographic variables like age, education, trimester of pregnancy & parity. The study was conducted at Obstetrics & Gynaecology outpatient department with 30 as sample size using convenience sampling technique. The populations for the present study were the antenatal mothers who are fulfilling the inclusion criteria. The researcher had

distributed the structured self-instructing questionnaire to the selected samples. The samples were given and data collected later. The results suggests that most of antenatal mothers i.e. 43% had average knowledge, 40% had good knowledge, 10 % of them had poor knowledge, 6% of were with excellent knowledge on minor ailments during pregnancy. The findings showed that there was a significant association between age of mothers with their knowledge on minor ailments during pregnancy, but on the variables like educational status, parity, and trimester of pregnancy had no association.

Vincent, et al., (2015) conducted a descriptive study on knowledge of primi mothers on self-management of minor discomfort of pregnancy with a view to develop information' was carried out in Mangalore on 100 primigravida mothers by using purposive sampling technique. The findings revealed that most i.e. 59% of the Primigravida mothers had poor knowledge, 29% had average knowledge, and 12% had good knowledge regarding minor discomforts of pregnancy and its self-management. Area wise knowledge of Primigravida mothers reveals deficiency in most of the areas, but the lowest mean percentage of score is 28.25% with a standard deviation of 1.74 in the area of knowledge related to Circulatory and Nervous system, which indicated that the maximum knowledge deficit is in this area. There was significant association between knowledge of Primigravida mothers and age, educational qualification. The calculated values were 3.953 and 12.603 respectively which are more than the table value 3.84 and 7.82 at 0.05% level of significance. The result of the study proved that Primigravida mothers had poor knowledge regarding minor discomforts of pregnancy and its self-management. The findings of the study showed that there was a need to educate all women on preparation towards motherhood. Providing an information booklet on minor discomforts of pregnancy and its management, an uneventful antenatal period can be expected from the mother.

Marie, (2014) conducted a descriptive survey to assess the knowledge and practice regarding minor disorders of pregnancy and the incidence among the antenatal mothers. The objectives of the study were to assess the existing level of knowledge of antenatal mothers regarding minor disorders of pregnancy, to assess the practice on antenatal mothers regarding the minor disorders of pregnancy, to find the

association between the level of knowledge and practice with their demographic variables, to determine the relationship between the knowledge and practice regarding minor disorders of pregnancy and to find the incidence in terms of relative frequency of minor disorders of pregnancy. Non - experimental research approach was adopted. 100 antenatal mothers were chosen by using non probability purposive sampling technique. A structured interview schedule was used for collecting the tool such as demographic variables, level of knowledge and practice aspects of minor disorders of pregnancy. A check list was used to find the incidence in terms of relative frequency of minor disorders of pregnancy. A major finding indicated that 87% of antenatal mothers have inadequate level of knowledge and 65% of them had inadequate practice regarding minor disorders of pregnancy. The mean percentage of knowledge scores is 49.2%. There was a significant association between knowledge scores of participants with occupation and income. There was a high correlation between knowledge and practice scores of minor disorders of pregnancy at 0.05 levels. The incidence in terms of relative frequency i.e., nausea and vomiting is 0.05; frequency of micturation and fatigue is 0.04.

Agampodi, et al., (2013) conducted a cross sectional study, on minor ailments in pregnancy by using morbidity assessment survey in rural Sri Lanka. Pregnant women residing in the Anuradhapura district with a gestational age more than 24 weeks through 36 weeks were recruited to the study using a two-stage cluster sampling technique. All pregnant women who consented participated in a detailed interview using a structured questionnaire. Self-reported episodes of acute illness during pregnancy were the main outcome measures. Secondary outcomes were utilization of medical services and frequency of hospitalizations. Nausea and vomiting during pregnancy (NVP) was experienced by 325 (69.7%) of the 466 pregnant women studied. Other common symptoms were backache (152, 32.6%), dizziness (112, 24.0%) and heartburn/regurgitation (107, 23.0%). Of the 421 pregnant women who reported ill health conditions 260 (61.8%) women sought medical treatment for these illnesses. Total number of episodes that needed treatment seeking was 373. Hospitalizations were reported by 83 (17.8%) pregnant women and the total number of hospitalizations was 109. The leading cause of hospitalization was NVP which accounted for 43.1% of total admissions and 49.1% of total days spent in hospitals. Minor maternal ill health conditions affecting day-to-day life have a major burden on

pregnancy period. Evidence based management guidelines and health promotion strategies are needed to control and prevent these conditions, in order to provide comprehensive, good quality maternal health care.

Sangsawang (2014) conducted a systematic review for estimating the prevalence and treatment of stress urinary incontinence during pregnancy that included studies that used a randomized controlled trial (RCT) design or studies comparing a treatment intervention to no treatment. The mean prevalence of stress urinary incontinence during pregnancy was 41 % and increased with gestational age. It can affect the quality of life (QoL) of approximately 54.3% of all pregnant women in four domains including physical activity, travel, social relationships and emotional health. The increasing pressure of the growing uterus and fetal weight on pelvic-floor muscles (PFM) throughout pregnancy, together with pregnancy-related hormonal changes, may lead to reduced PFM strength as well as their supportive and sphincteric function. These cause mobility of the bladder neck and urethra, leading to urethral sphincter incompetence. Pelvic floor muscle exercise (PFME) is a safe and effective treatment for stress urinary incontinence during pregnancy, without significant adverse effects. So, then study suggested that understanding these issues can be useful for health-care professionals when informing and counselling pregnant women to help prevent stress urinary incontinence during pregnancy and the postpartum period.

Aage, et al., (1995) conducted an epidemiological study to know the prevalence of well-being, heartburn, nausea and vomiting related to gestational week, parity and age. 180 women participated in the study. The weekly prevalence of heartburn, nausea and vomiting was found to be 60%, 16% and 7% respectively. Well – being was inversely related to parity ($p = 0.006$), heartburn positively related to age ($p = .003$) and ($p = .044$). The study concluded that discomforts are common in third trimester and need appropriate interventions.

Literature related to effectiveness of structured teaching program regarding common discomforts during pregnancy

Gururani, et al., (2016) conducted a quasi-experimental study to find out the effectiveness of a structured teaching program on the minor disorders for pregnancy and their home management. A total of 100 antenatal mothers were consecutively

recruited from a selected setting. Before the implementation of a planned teaching program, the antenatal mothers showed a poor knowledge of the common minor disorders (19.56 ± 12.73), whereas after the implementation, the knowledge significantly improved with the difference of 18.02 ± 0.742 revealing the effectiveness of the planned teaching program. Teaching about minor disorders of pregnancy and its home management helps the mothers to manage their minor disorders at home itself and continue their pregnancy more comfortably and securely. Therefore, it is important that a mother should possess an adequate knowledge of the common minor disorders and their management.

Patil & Salunkhe (2015) conducted a pre – experimental study to assess knowledge on minor ailments of pregnancy and home remedies with 120 primi mothers in Maharashtra. The study concluded that knowledge regarding minor ailments in 1st trimester, majority of mothers 40 (66.67%) had average knowledge and 15(25%) had good knowledge and 5(8.33%) had poor knowledge. During 2nd trimester, majority of mothers 30 (50 %) had average knowledge. 22(36.67%) had good knowledge and 8 (13.33%) had poor knowledge and in 3rd trimester majority of mothers 47 (78.33%) had average knowledge. 11 (18.33%) had good knowledge. 2 (3.33%) had poor knowledge. Also, they required teaching to promote their knowledge and skills during their pregnancy

Kumar (2014) conducted a pre- experimental study to assess the effectiveness of “Self instruction module” (SIM) on the Knowledge of antenatal Mothers regarding minor ailments and their remedial measures in community health centre in Uttarakhand. Total 60 antenatal mothers were selected by simple random sampling technique. The pre-test was taken by using structured knowledge questionnaire designed by researcher and validated by the various experts in the specific field followed by self-Instructional module. After 7 days post-test was taken. The overall mean pre-test knowledge score of antenatal mothers was (18.16 ± 4.8) which reveals that mothers had good level of knowledge and mean post-test knowledge score of antenatal mothers was (25.3 ± 4.3) which revealed that mothers had very good level of knowledge and t value for total pretest and posttest was (8.6). Area wise post-test highest mean percentage was (74.3%) in the area of remedial measures for nausea & vomiting, backache and leg cramps and the lowest mean percentage was (0.7%) in the area of minor ailments. No significant association was found between pretest

knowledge scores with their demographic variables except educational status and type of family. The findings of the study concluded that Self Instructional module (SIM) was effective to increase the knowledge of postnatal mothers regarding minor ailments and their remedial measures.

Literature related to constipation

Buss, et al., (2009) conducted a Cross-sectional analyses of a pregnancy cohort study (ECCAGE-Study of Food Intake and Eating Behaviour in Pregnancy) conducted in eighteen general practices in southern Brazil, from June 2006 to April 2007. Five hundred and seventy-eight pregnant women with mean (SD) age of 24.9 (6.5) years and mean gestational age of 24.5 (5.8) weeks were taken for the study. The mean energy intake was 11 615 kJ/d (2776 kcal/d). The mean total fibre intake (30.2 g/d) was slightly above the recommended value of 28 g/d ($P < 0.001$), yet 50% of the women failed to meet the recommendation. Whole-grain fibre constituted only 1% of total fibre intake in the cereal group. In adjusted Poisson regression analyses, not meeting the recommendation for fibre intake was associated with alcohol intake (prevalence ratio 1.29) and absence of nutritional guidance (prevalence ratio 1.22) during pregnancy. About half of the pregnant women failed to meet the recommended fibre intake, especially those not reporting nutritional guidance during pregnancy. For most women, whole-grain cereal intake was absent or trivial. This study recommends for greater nutritional education in prenatal care.

Ponce, et al., (2008) conducted a prospective study was undertaken to evaluate the prevalence of constipation during pregnancy and puerperium, to investigate possible associations with eating habits and lifestyle, and to evaluate the frequency of laxative use. A structured questionnaire was developed addressing demographics, obstetric characteristics, lifestyle, eating habits, variables required for the diagnosis of constipation, and laxative use to evaluate the prevalence of constipation during pregnancy and puerperium. The questionnaire was administered in the obstetric clinic in the first trimester of pregnancy, and by telephone in the second and third trimesters, and in the puerperal period. The prevalence of self-reported constipation in these time periods was 45.4, 37.1, 39.4, and 41.8%, respectively. Prevalence defined by the Rome II criteria for the same time periods was 29.6, 19, 21.8, and 24.7%. No factor was associated with variations in the prevalence

of constipation during pregnancy, though an increase was recorded in the consumption of fruit, vegetables, fibre, and water.

Derbyshire, et al., (2006) conducted a systematic review to investigate the prevalence of constipation for all three trimesters of the gestative period, or indeed after birth. Using a prospective 4- to 7-day weighed food diary, International Physical Activity Questionnaire and 7-day bowel habit diary, dietary factors, physical activity levels and bowel habit parameters were assessed and examined concurrently at weeks 13, 25, 35 of pregnancy and 6 weeks post-partum. Ninety-four primiparous pregnant women were initially recruited, and 72, 59, 62 and 55 completed the first, second, third trimester and post-partum study stages, respectively. Key dietary factors and physical activity levels were compared between the constipated and non-constipated groups from each of the three trimesters and after parturition. Compared with non-constipated mothers-to-be, constipated participants consumed statistically significantly less water in the first trimester ($P = 0.04$), more food in the second trimester ($P = 0.04$), and less iron ($P = 0.02$) and food ($P = 0.04$) in the third trimester and after birth, respectively. This study demonstrates that dietary factors may play a role in terms of preventing, or alleviating, bowel habit perturbations both throughout and after pregnancy.

Jewell & Young (2001) conducted a study to assess the effects of different methods for treating constipation in pregnancy. Trial quality assessments and data extraction were done independently by two reviewers. Two suitable trials were identified. Fibre supplements increased the frequency of defecation (odds ratio 0.18, 95% confidence interval 0.05 to 0.67), and lead to softer stools. Stimulant laxatives are more effective than bulk-forming laxatives (odds ratio 0.30, 95% confidence interval 0.14 to 0.61), but may cause more side effects. The study concluded that dietary supplements of fibre in the form of bran or wheat fibre are likely to help women experiencing constipation in pregnancy.

Literature Related To Back Pain

Ayanniyi, et al., (2006) conducted a survey to examine the prevalence and pattern of back pain (BP) in pregnancy in which 2,187 pregnant women selected, attending ante-natal clinics in selected Medical facilities in Ibadan and Ogbomosho,

Nigeria was carried out using pre-tested close-ended questionnaire. Information on prevalence, pattern and characteristics of back pain in pregnancy were obtained. Data obtained was analysed using both descriptive and inferential statistics of mean, standard deviation, and inferential statistics of independent t-tests and chi-square tests. One thousand and eight (52.5%) of the 1919 included subjects had back pain in pregnancy. The mean age of those with and without back pain was 26.8 ± 5.3 and 27.1 ± 5.4 years respectively. Mean number of pregnancy was higher in subjects with back pain than those without back pain. The pain site among the 1008 subjects with back pain was low back in 669 subjects (66.4%), posterior pelvic in 242 subjects (24.0%) and high back in 97 subjects (9.6%). Among the subjects with back pain, 315 (31.3%) and 53 (5.3%) were in their first and sixth pregnancies respectively. Postural modification relieved the back pain in about 50% of the subjects across the three back pain groups during pregnancy. It was concluded that back pain is a common and real complaint in pregnancy and back pain in pregnancy should be attended to as part of ante-natal care.

Mogren (2006) conducted a study to investigate determinants and the prevalence of persistent LBPP after pregnancy in a Swedish cohort. In a previous study 891 women had responded to a questionnaire on risk factors and prevalence of LBPP during pregnancy. Altogether 72% ($n=639$) of the women had reported LBPP during pregnancy. These respondents were sent a second questionnaire at approximately 6 months after delivery. The response rate was 72.6% ($n=464$). Independent *t*-test and Pearson's chi-squared test were used to test the difference between the two groups. In response to the questionnaire, 43.1% of the women reported persistent LBPP 6 months after delivery. Women with persistent LBPP after pregnancy had had significantly earlier onset of pain during pregnancy, higher maternal age, higher body mass index (BMI), and assessed a higher level of pain due to LBPP during pregnancy and after pregnancy, and included a higher proportion of women with joint hyper-mobility. In summary, recurrent or continuous LBPP is prevalent after pregnancy. BMI as well as hyper-mobility are prominent determinants of persistent LBPP after pregnancy. Level and onset of pain during pregnancy were strong predictors of persistent LBPP.

Garshasbi & Faghih (2005) conducted a prospective randomized study to investigate the effect of exercise during pregnancy on the intensity of low back pain and kinematics of spine. 107 women participated in an exercise program three times a week during second half of pregnancy for 12 weeks and 105 as control group. All filled a questionnaire between 17-22 weeks of gestation and 12 weeks later for assessment of their back pain intensity. Lordosis and flexibility of spine were measured by Flexible ruler and Side bending test, respectively, at the same times. Weight gain during pregnancy, Pregnancy length and neonatal weight were recorded. Low back pain intensity was increased in the control group. The exercise group showed significant reduction in the intensity of low back pain after exercise ($p < 0.0001$). Flexibility of spine decreased more in the exercise group ($p < 0.0001$). Weight gain during pregnancy, pregnancy length and neonatal weight were not different between the two groups. Exercise during second half of the pregnancy significantly reduced the intensity of low back pain, had no detectable effect on lordosis and had significant effect on flexibility of spine.

Wang, et al., (2004) conducted a prospective study to estimate the severity of the low back pain (LBP) during pregnancy including its prevalence. An anonymous survey consisting of 36 questions was distributed to pregnant women participating in various prenatal care clinics and educational classes Connecticut. A total of 950 surveys was returned from May 2002 through October 2003. Six hundred forty-five (68.5%) respondents reported experiencing LBP during their current pregnancy. The prevalence was not affected by gestational age ($P = .56$). Low back pain during the current pregnancy was predicted by age (younger women were more likely to develop it; $P = .004$), history of LBP without pregnancy ($P = .002$), during menstruation ($P = .01$), and during a previous pregnancy ($P = .002$). The majority of respondents reported that LBP during pregnancy caused sleep disturbances (58%) and impaired daily living (57%; 95%). Average pain was moderate in severity. Nearly 30% of respondents stopped performing at least one daily activity because of pain and reported that pain also impaired the performance of other routine tasks. Only 32% of the respondents with LBP during pregnancy informed their prenatal care providers of this problem, and only 25% of prenatal care providers recommended a treatment. So, low back pain during pregnancy is a common problem that causes hardship in pregnant population that requires immediate intervention.

CHAPTER –III

METHODOLOGY

Methodology gives the blue print of the study. This chapter explains the methodology adopted by the researcher to determine the methodology adopted by the researcher to determine the effectiveness of self-instructional module on managing common discomforts during pregnancy among primi mothers in KMCH, Coimbatore. This chapter deals with the research design, setting of the study, population, sample size, sampling technique, criteria for sample selection, variables, description of the intervention, development and description of the tool, testing of the tool, procedure for data collection and statistical analysis.

RESEARCH DESIGN

The research design applied for this study was One Group Pre-test Post-test design

E: 01X02

01: Pre-test assessment

X: Intervention (self-instructional module)

02: Post-test assessment

VARIABLES OF THE STUDY

Independent Variable:

Self-instructional module regarding managing common discomforts during pregnancy

Dependent Variable:

Knowledge and practice regarding managing common discomforts during pregnancy

SETTING OF THE STUDY

The study was conducted at maternity OPD's of Kovai Medical Center and Hospital, Coimbatore. It is a 800 bedded NABH accredited super speciality hospital with excellent health care delivery system for the patients, with different specialities like Cardiology, Neurology, Orthopaedics, Interventional Radiology, Paediatrics, Obstetrics and Gynaecology, Oncology, etc. out of these 800 beds, 60 beds are allotted for obstetrics cases that include antenatal ward, postnatal ward and labour room separately. Approximately 150 primi mothers visit Maternity OPD's every day for regular check-ups.

POPULATION

The population included in this study were all primigravida mothers who attended the antenatal OPD's of KMCH.

SAMPLE SIZE

Sample size of the study was 60 primigravida mothers who attending outpatient department.

SAMPLING TECHNIQUE

Non probability purposive sampling technique was adopted to select the samples for this study.

SAMPLING CRITERIA

INCLUSION CRITERIA

1. Women who are from 26 weeks to 32 weeks of gestation.
2. Women who are all available at the time of data collection.

EXCLUSION CRITERIA

1. Primigravida women diagnosed as medical, surgical or obstetrical condition like gestational diabetes mellitus, pregnancy induced hypertension, etc.
2. Primigravida mothers who are aged below 15 years or above 35 years.

DEVELOPMENT AND DESCRIPTION OF TOOL FOR DATA COLLECTION

It consists of three parts

PART I: Deals with demographic variables of the mother.

PART II: Questionnaire on knowledge of mother regarding managing common discomforts during pregnancy.

PART III: Practice questionnaire regarding managing common discomforts during pregnancy.

Section I: Socio demographic variables

The socio- demographic characteristics of the mothers includes age, month of current pregnancy, religion, educational status, occupation, type of family, previous knowledge about managing common discomforts and the source of information.

Section II: Structured self-administered questionnaire to assess the knowledge of the nurses regarding managing common discomforts during pregnancy.

It consists of questionnaire regarding knowledge on managing common discomforts during pregnancy prepared by the investigator after reviewing literatures and various books. A total of 24 questions were prepared to assess the knowledge level of mothers. Each question was given with 4 options, with one right answer. The subjects had to record their answer by putting tick mark on the choice of answer. Using the scoring key prepared by the investigator, the correct answers were given as 1 score and wrong answers were scored as 0. The total score earned by the subject reflect their knowledge about managing common discomforts. The minimum score was 0 and the maximum score was 24. The total score was classified into poor, average and good.

Score – upto 8 – Poor knowledge

9 – 16 – Average knowledge

17 – 24 – Good knowledge

Section III: Structured self-administered questionnaire to assess the practice of mothers regarding managing common discomforts during pregnancy.

It consists of questions regarding practice on managing common discomforts during pregnancy prepared by investigator after reviewing literatures and various books. A total of 35 questions were prepared to assess the practice of mothers managing common discomforts during pregnancy. Each question was given with 3 options i.e. always, sometimes and rarely. The subjects had to record their answer by putting tick mark on the column which corresponds to their practice. Using the scoring key prepared by the investigator, their practice was given score 2, 1 and 0 respectively according to the positive and negative statements. Out of 35 questions, 18 questions are positive and 17 questions are negative. The total score earned by the subject reflect their practice on managing common discomforts during pregnancy.

Score – upto 12 – Poor practice

13 – 24 – Average practice

25 – 36 – Good practice

CONTENT VALIDITY

Content validity of the tool was ascertained by submitting the tool to five experts in the field of nursing and medicine. Based on their suggestions and recommendation, the tool was modified for the main study.

RELIABILITY

The reliability of the tool was tested with split half method. The reliability for Knowledge of mothers regarding managing common discomforts was 0.8 and for Practice score was 0.9.

PILOT STUDY

The pilot study was conducted for a period of one week among 10 mothers regarding managing common discomforts during pregnancy at KMCH, Coimbatore. The result of the pilot study revealed the feasibility of the study. The sample used for the pilot study was exempted for the main study.

PROCEDURE FOR DATA COLLECTION

A formal permission obtained from the chairman of KMCH and the Ethical Committee. The investigator selected mothers who fulfilled the inclusion criteria. The detailed explanation regarding the purpose of the study was given and oral consent was obtained from the mothers. The investigator established good rapport with the mothers. Each day 6 to 8 mothers were enrolled for the study. During data collection procedure, the structured questionnaire was administered to the subjects to assess the pre test knowledge and practice scores. With the help of the information booklet, instructions were given for managing common discomforts during pregnancy. The post test was conducted after one month interval when these mothers come for their next check-up.

STATISTICAL ANALYSIS

Collected data were analysed by descriptive and inferential statistics. The descriptive statistics included mean, and percentage. Inferential statistics included paired t - test, used to analyse the effectiveness of module. Chi Square was used to associate the knowledge and attitude level with demographic variables.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of data collected to determine the effectiveness of self-instructional module regarding managing common discomforts during pregnancy among primi mothers in KMCH, Coimbatore.

ORGANIZATION OF FINDINGS

The collected data regarding knowledge and practice of primi mothers regarding managing common discomforts during pregnancy were organized, analysed & interpreted as follows:

SECTION A: Distribution of mothers according to demographic variables.

SECTION B: Distribution of mothers according to their pre-test and post-test level of knowledge and practice

SECTION C: Comparison of mean pre and post-test knowledge and practice scores of mothers regarding managing common discomforts during pregnancy.

SECTION D: Association of demographic characteristics with pre and post-test knowledge regarding the managing common discomforts during pregnancy.

SECTION E: Association of demographic characteristics with pre and post-test knowledge regarding the managing common discomforts during pregnancy.

SECTION –A

DESCRIPTION OF DEMOGRAPHIC CHARACTERISTICS OF MOTHERS

Table-1: Distribution of demographic characteristics of mothers

(N=60)

S.N	Characteristics	Frequency(f)	Percentage (%)
1.	AGE		
	18 – 22	8	13
	23 – 27	37	62
	28 – 32	10	17
	33 and above	5	8
2.	MONTH OF CURRENT PREGNANCY		
	4 – 6 month	39	65
	7 – 9 month	21	35
3.	RELIGION		
	Hindu	47	78
	Christian	10	17
	Muslim	3	5
4.	EDUCATIONAL STATUS		
	Primary education	0	0
	Higher secondary	8	13
	Graduate and above	52	87
5.	OCCUPATION		
	Private employee	16	27
	Government employee	5	8
	Housewife	39	65
6.	TYPE OF FAMILY		
	Joint family	52	87
	Nuclear family	8	13
7.	PREVIOUS KNOWLEDGE		
	Yes	13	22
	No	47	78
8.	SOURCE OF INFORMATION		
	Mass media	2	3
	Health personnel	16	27
	Others	42	70

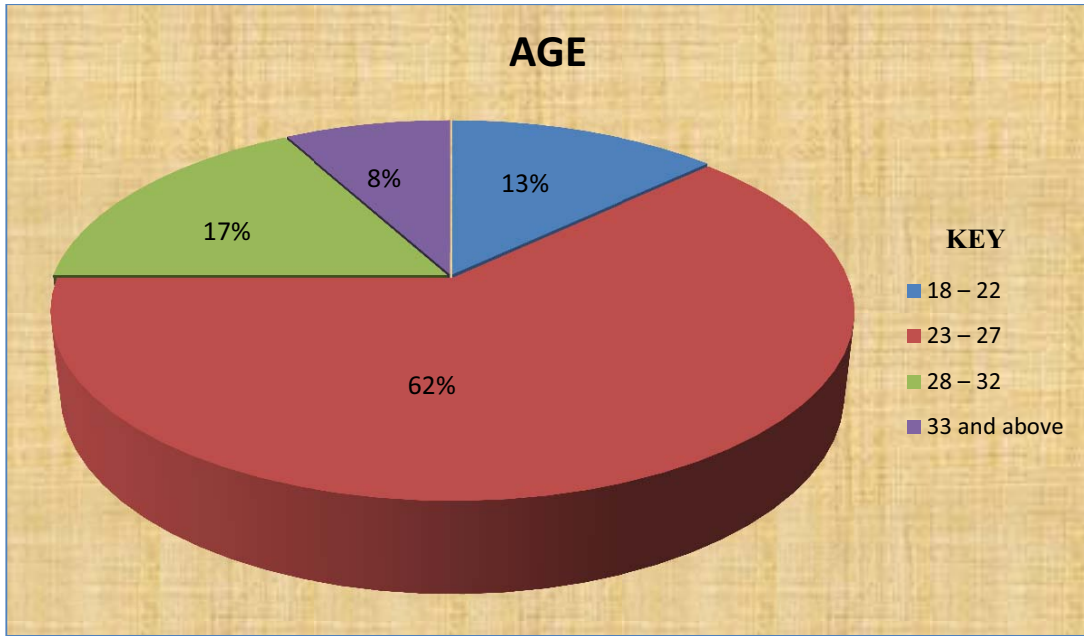


Fig 2: Distribution of mothers according to their age

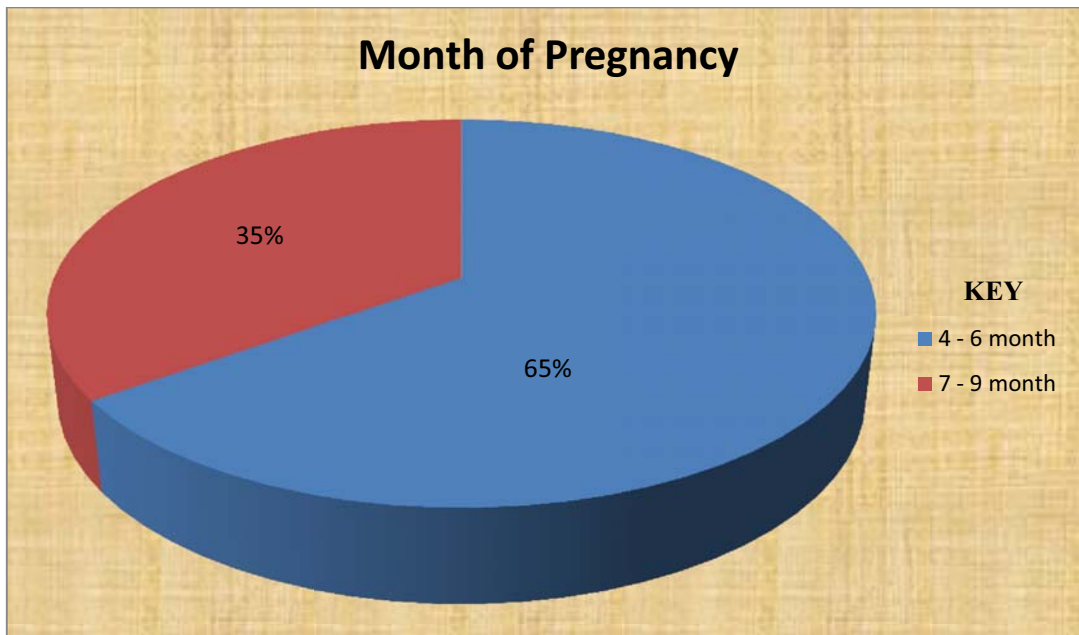


Fig 3: Distribution of mothers according to their month of pregnancy

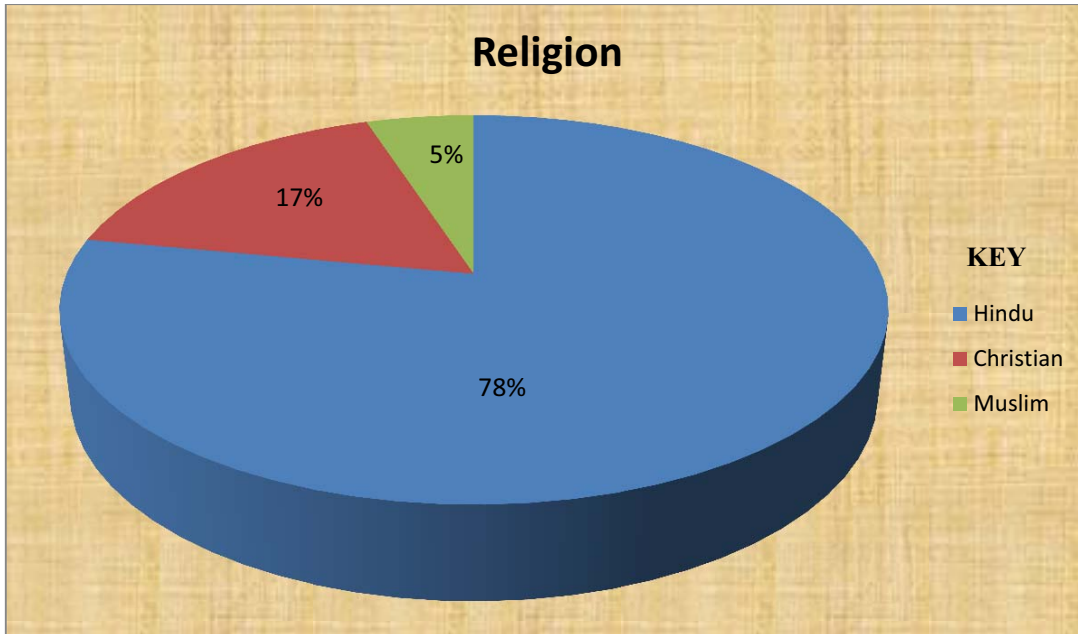


Fig 4: Distribution of mothers according to their religion

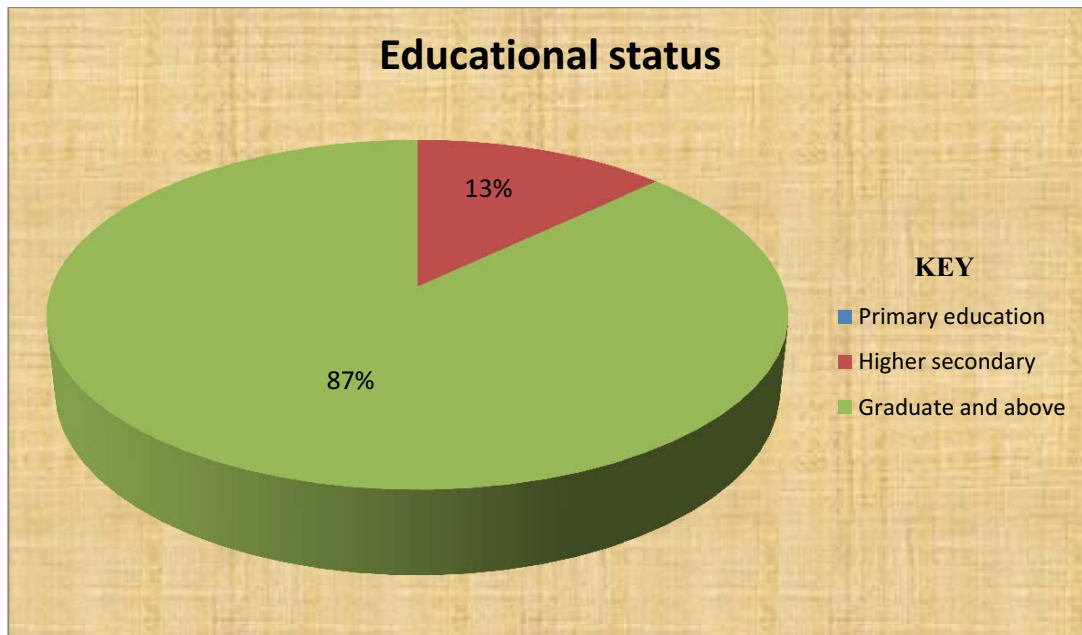


Fig 5: Distribution of mothers according to their educational status

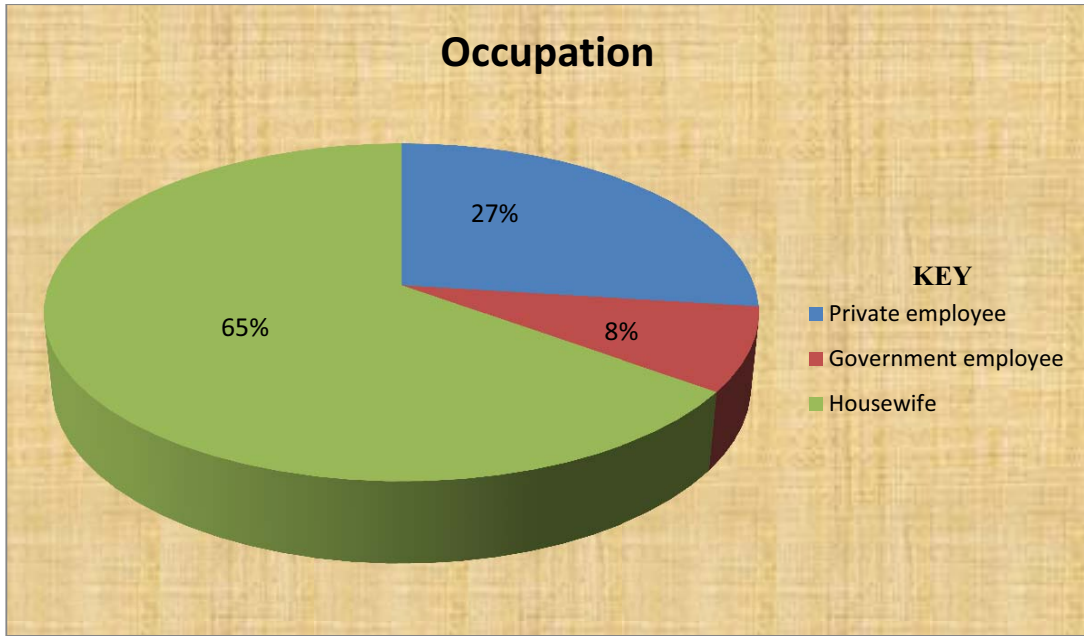


Fig 6: Distribution of mothers according to their occupation

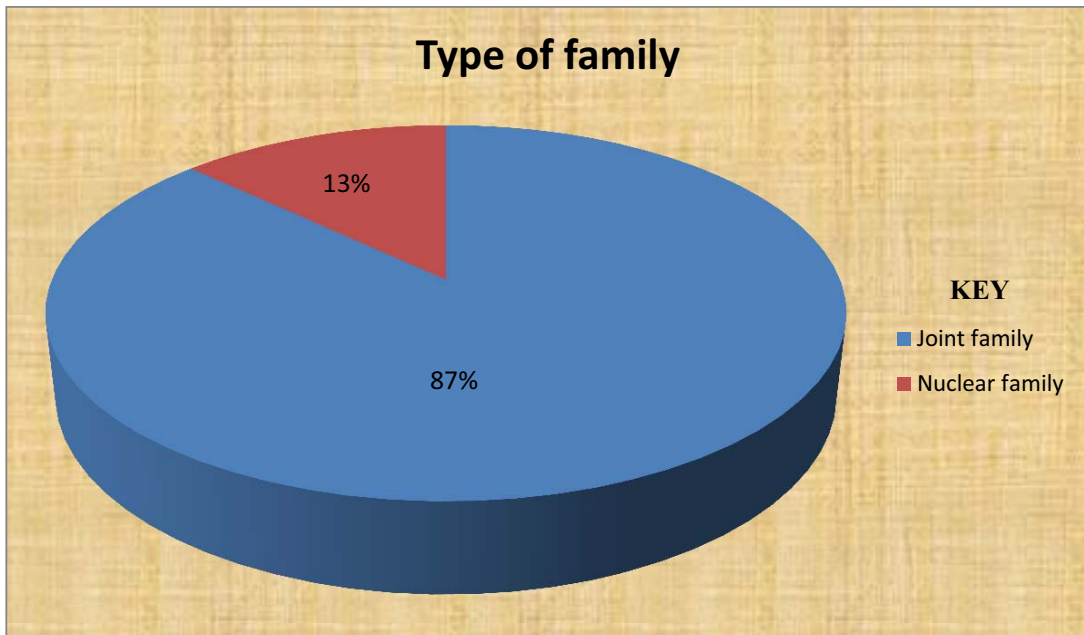


Fig 7: Distribution of mothers according to their type of family

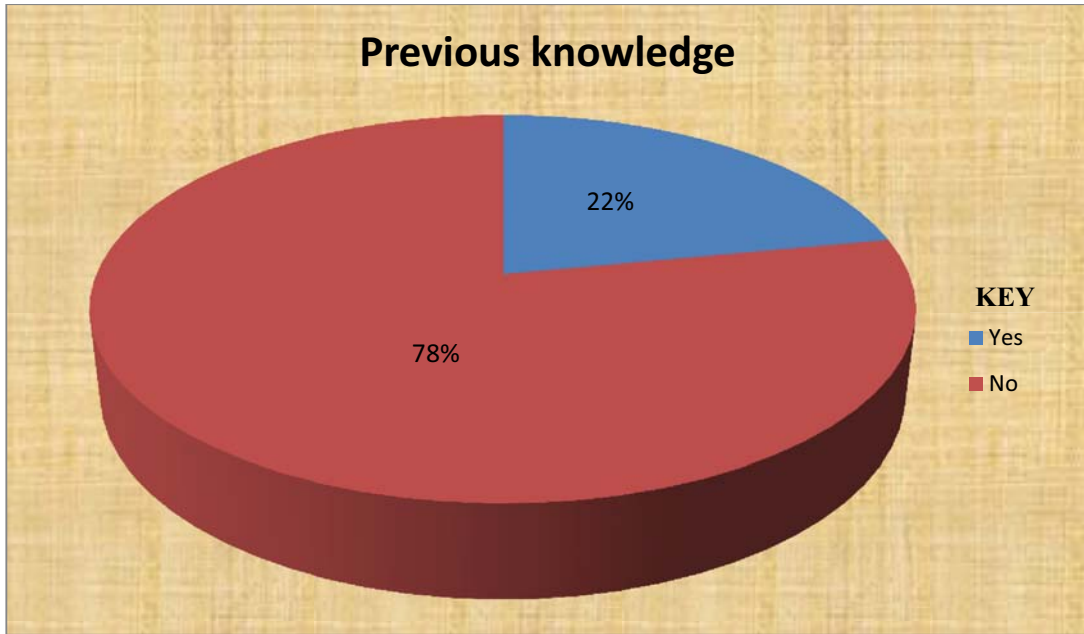


Fig 8: Distribution of mothers according to their previous knowledge

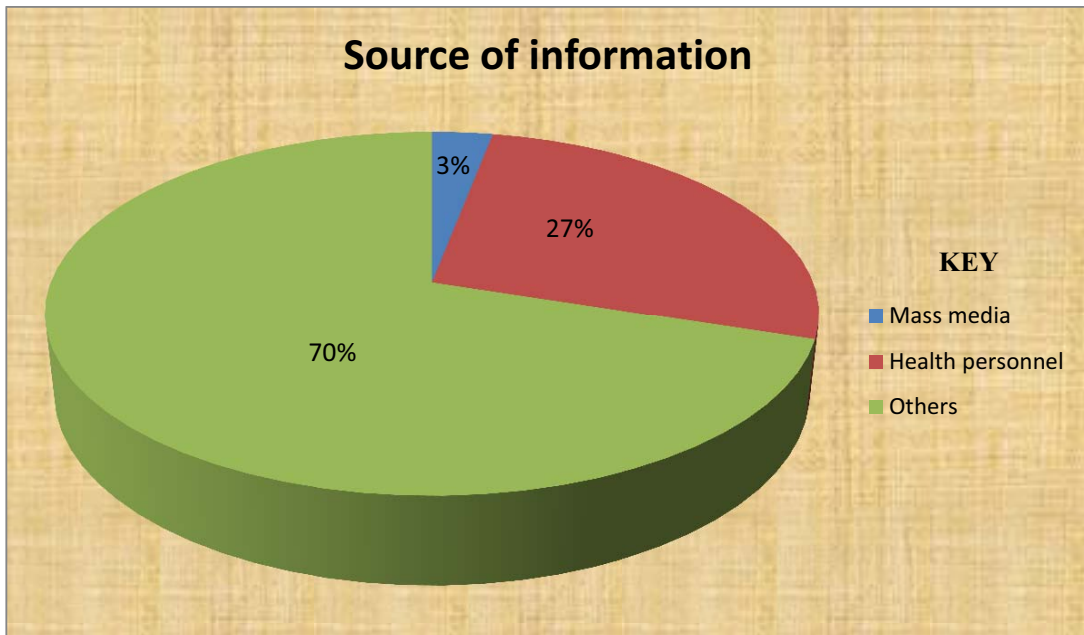


Fig 9: Distribution of mothers according to their source of information

SECTION –B

DESCRIPTION OF KNOWLEDGE AND PRACTICE OF MOTHERS REGARDING MANAGING COMMON DISCOMFORTS

Table-2: Distribution of Pretest Knowledge Scores of mothers regarding managing common discomforts during pregnancy

(N=60)

S.N	Knowledge	Pretest	
		Frequency (f)	Percentage (%)
1	Poor	12	20
2	Average	38	63
3	Good	10	17

The table 2 showed that assessment of the mothers' pretest knowledge scores regarding managing common discomforts during pregnancy. In that among 60 samples, 12 (20%) of them scored upto 8. 38 (63%) of them scored between 9 – 16 and 10 (17%) of them scored between 17 – 24.

Table-3: Distribution of Posttest Knowledge Scores of mothers regarding managing common discomforts during pregnancy

(N=60)

S.N	Knowledge	Posttest	
		Frequency (f)	Percentage (%)
1	Poor	6	10
2	Average	33	55
3	Good	21	35

The table 3 showed that assessment of the mothers' posttest knowledge scores regarding managing common discomforts during pregnancy. In that among 60 samples, 6 (10%) of them scored upto 8, 33 (55%) of them scored between 9 – 16 and 21 (35%) of them scored between 17 – 24.

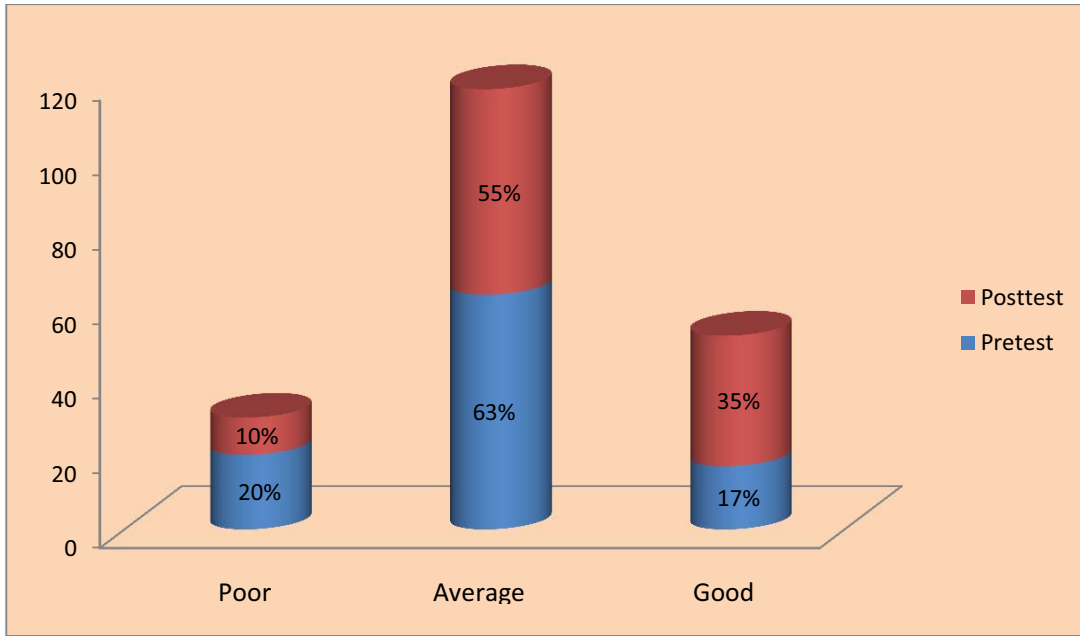


Fig.10: Distribution of mothers according to Pretest and Posttest Knowledge Scores regarding managing common discomforts during pregnancy

Table-4: Distribution of Pretest Practice Scores of mothers regarding managing common discomforts during pregnancy (N=60)

S.N	Practice	Pretest	
		Frequency (f)	Percentage (%)
1	Poor	15	25
2	Average	35	58
3	Good	17	28

The table 4 showed that assessment of the mothers' pretest practice scores regarding managing common discomforts during pregnancy. In that among 60 samples, 15 (25%) of them scored upto 12, 35 (58%) of them scored between 13 – 24 and 17 (28%) of them scored between 25–36.

Table-5: Distribution of Posttest Practice Scores of mothers regarding managing common discomforts during pregnancy (N= 60)

S.N	Practice	Posttest	
		Frequency (f)	Percentage (%)
1	Poor	8	13
2	Average	30	50
3	Good	22	37

The table 5 showed that assessment of the mothers' posttest practice scores regarding managing common discomforts during pregnancy. In that among 60 samples, 8 (13%) of them scored upto 12, 30 (50%) of them scored between 13 – 24 and 22 (37%) Of them scored between 25–36.

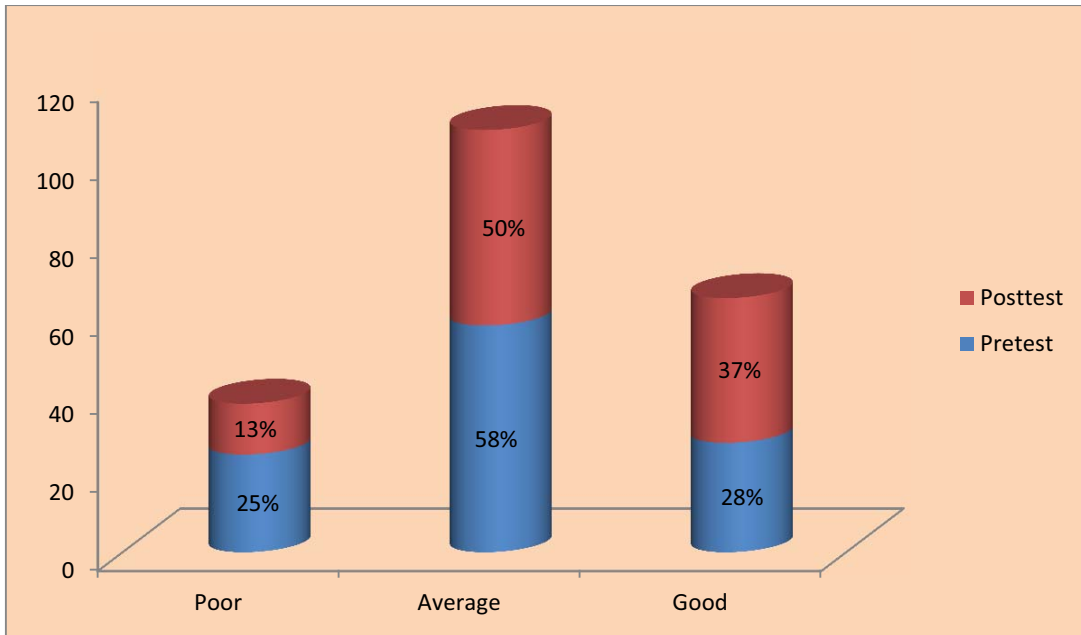


Fig.11: Distribution of mothers according to Pretest and Posttest Practice Scores regarding managing common discomforts during pregnancy

Section C

Table 6: Comparison of the mean pre test and post test knowledge scores of the mothers on managing common discomforts during pregnancy

Sl. No.	Knowledge test	Mean	SD	't' value
1.	Pre test	12.81	3.49	12.768*
2.	Post test	16.08	3.75	

*P<0.05 level

The paired 't' value 12.768 for the mean difference between the pre-test and post-test knowledge scores of the respondents on the management of common discomforts during pregnancy is significant at 0.05 level of significance at (df 59). This means there is a significant improvement in the knowledge of primi mothers in management of common discomforts during pregnancy.

It shows that the mean pre-test value increased from 12.81 to post-test value 16.08 which shows the effectiveness of the self-instructional module.

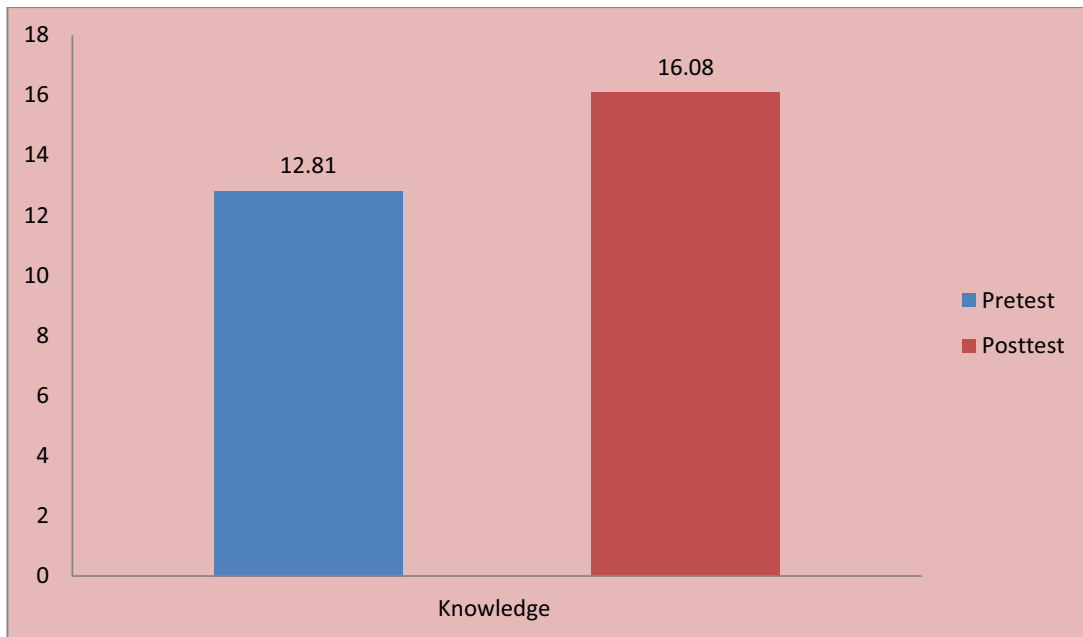


Figure 12: Comparison of the mean pre-test and post-test knowledge scores of mothers regarding the managing common discomforts

Table 7: Comparison of the mean pretest and posttest practice scores of the mothers on managing common discomforts during pregnancy

Sl. No.	Practice test	Mean	SD	't' value
1.	Pretest	19.78	6.07	12.579*
2.	Posttest	23.81	6.11	

*P< 0.05 level

The paired 't' value 12.579 for the mean difference between the pre-test and post-test practice scores of the respondents on the management of common discomforts during pregnancy is significant at 0.05 level of significance at (df 59). This means there is a significant improvement in the practice of primi mothers in management of common discomforts during pregnancy.

It shows that the mean pre-test value increased from 19.78 to post-test value 23.81 which shows the effectiveness of the self-instructional module.

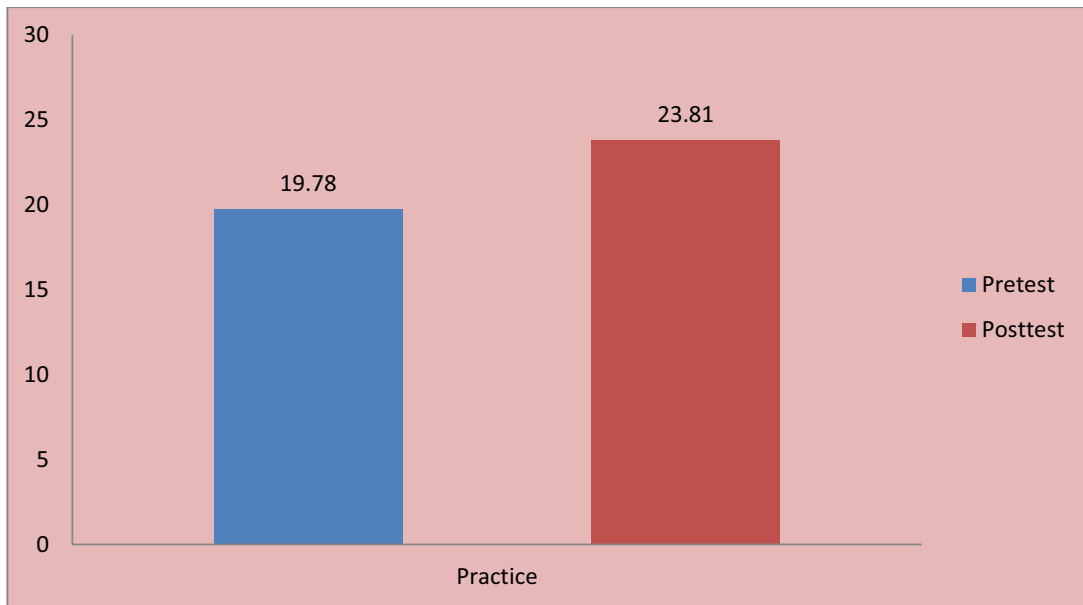


Figure 13: Comparison of the mean pre-test and post-test practice scores of mothers regarding the managing common discomforts

SECTION D

ASSOCIATION OF DEMOGRAPHIC CHARACTERISTICS OF MOTHERS WITH THEIR POST TEST KNOWLEDGE REGARDING MANAGING COMMON DISCOMFORTS

S.N	Characteristics	F	df	χ^2
1.	AGE			
	18 – 22	8	3	0.353 (NS)
	23 – 27	37		
	28 – 32	10		
33 and above	5			
2.	MONTH OF CURRENT PREGNANCY			
	4 – 6 month	39	1	0.316 (NS)
7 – 9 month	21			
3.	RELIGION			
	Hindu	47	2	0.144 (NS)
	Christian	10		
Muslim	3			
4.	EDUCATIONAL STATUS			
	Primary education	0	1	1.741 (NS)
	Higher secondary	8		
Graduate and above	52			
5.	OCCUPATION			
	Private employee	16	2	0.988 (NS)
	Government employee	5		
Housewife	39			
6.	TYPE OF FAMILY			
	Joint family	52	1	0.304 (NS)
Nuclear family	8			
7.	PREVIOUS KNOWLEDGE			
	Yes	13	1	0,152 (NS)
No	47			
8.	SOURCE OF INFORMATION			
	Mass media	2	2	0.451 (NS)
	Health personnel	16		
Others	42			

P<0.05 S = significant NS = not significant

**Table 8: clearly shows that the post-test knowledge of the mothers do not have an
association with the demographic characteristics**

SECTION E

ASSOCIATION OF DEMOGRAPHIC CHARACTERISTICS OF MOTHERS WITH THEIR POST TEST PRACTICE REGARDING MANAGING COMMON DISCOMFORTS

S.N	Characteristics	F	Df	χ^2
1.	AGE			
	18 – 22	8	3	0.411 (NS)
	23 – 27	37		
	28 – 32	10		
33 and above	5			
2.	MONTH OF CURRENT PREGNANCY			
	4 – 6 month	39	1	0.623 (NS)
7 – 9 month	21			
3.	RELIGION			
	Hindu	47	2	0.686 (NS)
	Christian	10		
Muslim	3			
4.	EDUCATIONAL STATUS			
	Primary education	0	1	0.839 (NS)
	Higher secondary	8		
Graduate and above	52			
5.	OCCUPATION			
	Private employee	16	2	0.893 (NS)
	Government employee	5		
Housewife	39			
6.	TYPE OF FAMILY			
	Joint family	52	1	0.240 (NS)
Nuclear family	8			
7.	PREVIOUS KNOWLEDGE			
	Yes	13	1	0.653 (NS)
No	47			
8.	SOURCE OF INFORMATION			
	Mass media	2	2	0.477 (NS)
	Health personnel	16		
Others	42			

P<0.05 S = significant NS = not significant

Table 8: clearly shows that the post-test practice of the mothers do not have an association with the demographic characteristics

CHAPTER V

DISCUSSION, SUMMARY, CONCLUSION, IMPLICATIONS, LIMITATIONS AND RECOMMENDATION

This chapter deals with the discussion, summary and conclusion. It also clarifies the limitations of the study, implication and recommendations given for the different areas of nursing practice, nursing education, nursing administration and nursing research.

DISCUSSION

The present study was designed to assess the effectiveness of self-instructional module on knowledge and practice regarding managing common discomforts during pregnancy among primigravida mothers. The research design adopted for the study was One Group Pre-test Post-test design. Non probability purposive sampling technique was used to select 60 mothers for the study. The data collected for the study were analysed statistically and discussed based on the objectives.

Demographic characteristics of mothers participated in the study

According to age group most (62%) of the primi mothers were in the age group of 23-27 years, 17% of them in 28-32 years, 13% in 18-22 years and only 8% was having age group of above 33 years. Regarding month of pregnancy majority (65%) of mothers were in 4-6 month and minority (35%) of them in 7-9 month of pregnancy. Based on religion most (78%) of them were hindu, (17%) of them were Christian and only 5% were muslim. Regarding education level, majority (87%) of them had higher secondary schooling and 13% were graduate. Most (65%) of mothers were housewife, 27% of them were private employee and only 8% of them were government employee. Among 60 primi mothers of them were living in joint family and of them having nuclear family. About 78% of them had no previous knowledge on managing minor disorders in pregnancy and 22% of them had knowledge in the same. The source of information for most (70%) of the mothers was others, 27% of them by health personnel and 3% of them by mass media.

The first objective of the study was to assess the pre-test and post-test knowledge level of primigravida mothers on managing common discomforts.

The present study findings revealed that the mean pre-test score of the respondents is 12.81 and the mean post-test score obtained was 16.08. The 't' value is 12.768 for the mean difference in pre-test and post-test knowledge of the multipurpose health workers. It is significant at 0.05 level of significance. The findings substantiate that the self-instructional module is effective for knowledge gain.

The findings are consistent with the study done by **Laxmi Kumar (2014)** conducted to study the effectiveness of "Self instruction module" (SIM) on the Knowledge of antenatal Mothers regarding minor ailments and their remedial measures in community health centre in Uttarakhand. The pre-test was taken by using self - structured knowledge questionnaire followed by self-Instructional module. After 7 days post-test was taken. The overall mean pre-test knowledge score of antenatal mothers was (18.16±4.8) which reveals that mothers had good level of knowledge and mean post-test knowledge score of antenatal mothers was (25.3±4.3) which revealed that mothers had very good level of knowledge and "t" value for total pretest and posttest was (8.6).The findings of the study concluded that "Self Instructional module" (SIM) was effective to increase the knowledge of postnatal mothers regarding minor ailments and their remedial measures.

The second objective of the study was to assess the pre-test and post-test practice of primigravida mothers on managing common discomforts.

The present study findings revealed that the mean pre-test score of the respondents is 19.78 and the mean post-test score obtained was 23.81.The't' value is 12.579 for the mean difference in pre-test and post-test knowledge of the multipurpose health workers. It is significant at 0.05 level of significance. The findings substantiate that the self-instructional module is effective for practice gain.

The third objective of the study was to associate the knowledge and practice regarding managing common discomforts with demographic characteristics of primi mothers.

The chi-square was used to associate the post-test knowledge and practice with age, experience, education and in-service education. The study revealed that P value of demographic variables was more than 0.05 level when associated with pre-test and post-test knowledge and practice. Hence it is concluded that there is no significant association between post-test knowledge and practice with the demographic characteristics.

SUMMARY

The purpose of the study was to assess the effectiveness of self-instructional module on knowledge and practice regarding managing common discomforts during pregnancy among mothers attending antenatal OPD's in KMCH, Coimbatore.

The objectives of this study were to:

1. To assess the pre-test and post-test knowledge level of primigravida mothers on managing common discomforts
2. To assess the pre-test and post-test practice of primigravida mothers on managing common discomforts
3. To associate the level of knowledge and practice on managing common discomforts among primigravida mothers with their selected demographic characteristics.

Ludwig von Bertalanffy's General System Theory (1968) was modified and used to relate the concept of present study. One Group Pre-test Post-test design was used for this study. The sample size comprised of 60 among mothers attending antenatal OPD's in KMCH hospital. Non probability purposive sampling technique was used to select the samples.

The tool was developed for the purpose of obtaining data for the study.

Section I: - Socio demographic variables

Section II: - Structured self-administered questionnaire to assess the knowledge of the mothers regarding managing common discomforts during pregnancy.

Section III: - Structured self-administered questionnaire to assess the practice of mothers regarding managing common discomforts during pregnancy.

The reliability of the tool was tested with split half method. The reliability for Knowledge of mothers regarding managing common discomforts was 0.8 and for Practice score was 0.9.

MAJOR FINDINGS:

- ❖ The mean pre test and post test knowledge scores of respondents was 12.81 and 16.08 respectively.
- ❖ The mean pre test and post test practice scores of respondents was 19.78 and 23.81 respectively.
- ❖ Comparison of the mean pre-test and post-test knowledge score, the 't' value 12.768 significant at 2.00 level which indicate that there is a significant difference between the knowledge level of the primi mothers before and after the implementation of the self-instructional module.
- ❖ Comparison of the mean pre-test and post-test knowledge score, the 't' value 12.579 significant at 2.00 level which indicate that there is a significant difference between the practice level of the primi mothers before and after the implementation of the self-instructional module.
- ❖ There is no association between the post-test knowledge and practice scores of the mothers on the managing of common discomforts with the demographic characteristics.

CONCLUSION

The following conclusions are drawn from the study

- ✓ The study revealed that there is inadequate knowledge and practice regarding managing minor disorders during pregnancy among primi mothers.
- ✓ The study proved that there is a significant improvement in the knowledge and practice level of primi mothers after the self-instructional module.
- ✓ The study proved that there is no significant association between the knowledge and practice level and selected demographic characteristics.

IMPLICATIONS

Nursing practice

1. The findings of the study highlight the level of knowledge regarding the management of common discomforts during pregnancy.
2. The study would help the mothers to enhance their knowledge regarding management of common discomforts during pregnancy.
3. The study would help the mothers to enhance their practice regarding management of common discomforts during pregnancy.
4. The study can help to train the nurses for identifying the common discomforts during pregnancy by proper assessment in antenatal visits.

Nursing education

Nursing students can learn the importance of managing common discomforts during pregnancy and also to provide care in case of a common discomfort during pregnancy.

Nursing administration

1. Nurse administrators can organise and conduct in-service education for the nursing staff.
2. Nurse administrators can motivate the nursing personnel to identify quickly and plan effectively in case of a common discomfort during pregnancy.

Nursing Researcher

1. The study can be conducted with a larger sample using more improvised methods of training including power point presentation.
2. Further study can be conducted in future in the same aspect.

LIMITATIONS OF STUDY

- ❖ The findings can only be generalized to primigravida mothers.
- ❖ The study is limited only to 60 samples due to time constraints.
- ❖ The study was limited to mothers attending antenatal OPD's in KMCH, Coimbatore.
- ❖ The assessment of practice is done by response of the participant rather than the actual practice done.

RECOMMENDATIONS

- ❖ A similar study may be replicated in different setting with large scale.
- ❖ The same study can be conducted as a comparative approach through structured teaching programme among primigravida and multigravida mothers.
- ❖ A comparative study can be conducted between urban and rural areas mothers.
- ❖ A comparative study can be conducted between working and non - working mothers.
- ❖ A similar study can be conducted for mothers who are attending antenatal OPD's in different settings and knowledge and practice can be compared.

ABSTRACT

The study entitled “A Study To Assess The Effectiveness Of Self Instructional Module On Knowledge And Practice Of Managing Common Discomforts During Pregnancy Among Primigravida Mothers Attending Antenatal OPD’S At KMCH Coimbatore. ” aimed to assess the knowledge, and practice regarding managing common discomforts during pregnancy among Primigravida Mothers. The study was undertaken by 301420451, during the year 2014-2016 in partial fulfillment of the requirements for the completion towards degree of Master of Science in Nursing at KMCH College of Nursing, Coimbatore-14 which is affiliated by DR. M. G. R University, Chennai.

This study used one group pre-test post-test pre-experimental design and non-probability purposive sampling technique to select the samples. Data collected from 60 primigravida mothers attending antenatal OPD’S At KMCH Coimbatore. Structured questionnaires were used to collect data regarding demographic variables of the respondents and knowledge and practice regarding managing common discomforts during pregnancy. Objectives of the study were to assess the pre-test and post-test knowledge level of primigravida mothers on managing common discomforts, to assess the pre-test and post-test practice of primigravida mothers on managing common discomforts and to associate the level of knowledge and practice on managing common discomforts among primigravida mothers with their selected demographic variables. Conceptual framework used in this study was The Modified Ludwig Von Bertalanffy’s General System Theory (1968).The outcome measure was using a structured self-administered questionnaire. Intervention was a self-instructional module (Informational Booklet) regarding managing of common discomforts during pregnancy. The results showed that the respondents gained knowledge and practice After the teaching, the pre-test mean score of knowledge was 12.81 and post test score was 16.08 and the ‘t’ value is 12.768. The pre-test mean score of practice was 19.78 and post test score was 23.81 and the ‘t’ value is 12.579. There is no association of the post-test knowledge and practice with the demographic variables.

CONCLUSION

The result concludes that the self-instructional module on the managing of common discomforts during pregnancy is useful to improve the knowledge and practice of the primi mothers.

KEYWORDS

Self-instructional module, common discomforts during pregnancy, primi mothers

REFERENCES

BOOKS

1. Adele Pillitteri. (2010). *Maternal & child health nursing: care of the child Bearing & child rearing family.*(6th edition). New York:Wolter/ Lippincott William & Wilkins.
2. Basavanthappa, B.T. (1998). *Nursing Research.*(1st edition). Bangalore: Jaypee brothers.
3. Bennet, V.R., & Brown, L.K. (2003). *Myles Textbook for Midwives.* (15th edition). Philadelphia:W.B Saunder company.
4. Burns. (1993). *The Practice of Nursing Research.* (4th edition). Philadelphia: Lippincott.
5. Burroughs, A, Gloria. (2001). *Maternity nursing an introductory text.* (8th edition). Philadelphia:W.B Saunders Company.
6. Daftary, S.N., Chakravarti S. (2005). *Manual of obstetrics.* (2nd edition). New Delhi: Elsevier.
7. Daftary, S.N., Chakravarti S. (2012). *Manual of obstetrics.* (3rd edition). New Delhi:Elsevier
8. Dutta, D.C. (2011). *Text book of obstetrics.* (7th edition).
9. Fraser, D.M., Cooper M.A. (2009). *Myles Textbook for Midwives.* (15th edition). Elsevier.
10. George, J.B. (2011). *Nursing Theories: The base of professional nursing practice.*
11. Gupta, S.P. (2000). *Statistical Methods.* (5th edition). New Delhi: Sultan Chand & sons.
12. Jacob, A. (2008). *Textbook of Midwifery.* (2nd edition). Bangalore: Jaypee Brothers.
13. Jacqueline, F. (1995). *Analysis and Evaluation of conceptual models of nursing.* (3rd edition). Philadelphia: F.A. Davis Company.
14. Kothari, C.R. (2000). *Research Methods & Techniques.* (2nd edition). New Delhi: Wishva Prakash.
15. Leifer, G. (2003). *Introduction of Maternity & Paediatric Nursing.* (4th edition).Missouri: Saunder.
16. Littleton,L.,et al.,(2007).*Maternity nursing care.* India: Thomson Publishers.

17. Majill, S.M.J. (2011). *Mayer's Midwifery*. (4th edition). New Delhi: Elsevier.
18. Mudaliar, M.K. (2005). *Clinical obstetrics*. Hyderabad: Universities Press (India) Private Limited
19. Munro, B.H. (1999). *Nursing Research Principles & Methods*. (6th edition). Philadelphia: Lippincott.
20. Orshan, A.S., (2008). *Maternity, Newborn & Women's Health Nursing*. New York: Wolter/ Lippincott William & Wilkins.
21. Padubidri, V.A.E. (2006) *Text book of Obstetrics*. New Delhi: B.I publications Pvt.Ltd.
22. Perry, L., Cashion. (2010). *Maternity Nursing*. (8th edition). Philadelphia: Mosby Publishers.
23. Polit, F., & Beck. (2008). *Nursing Research: Generating & Assessing evidence for nursing practice*. (8th edition). New York: Wolker kluwer/Lippincott Williams & wilkins.
24. Polit, D.F., & Hungler, B.P., (1999). *Nursing Research: Principles & Methods*. (7th edition). Philadelphia: Lippincott.
25. Reeder, S.J., Martin, L.L., Konia, K-Griffin, D. (1997). *Maternity Nursing*. Philadelphia: Lippincott.
26. Roa, K.A. (2011). *Textbook of Midwifery: Obstetrics for nurses*. (2nd edition). New Delhi: Elsevier.
27. Sprong, C.Y. (2003). *Danforth's obstetrics & Gynaecology*. (9th edition). Philadelphia: Lippincott Williams & wilkins publication.
28. Tomay, A.m., Alligood, R.M. (2002). *Nursing Theories and their work*. (5th edition). St.Louis: Mosby.
29. Varney, H. (2005). *Text book of Midwifery*. New Delhi: All India publishers

ONLINE REFERENCE

30. Aage, K., Lebech, M., Hansen, M. (1995). Upper gastrointestinal symptoms in the third trimester of normal pregnancy. *European journal of obstetrics and gynaecology*, 60(1): 20-33 Retrieved From

<http://www.ncbi.nlm.nih.gov/pubmed/7635226>

31. Agampodi, S. B., Wickramasinghe, N. D., Horton, J., Agampodi, T. C., (2013) Minor Ailments in Pregnancy Are Not a Minor Concern for Pregnant Women: A Morbidity Assessment Survey in Rural Sri Lanka *PLoS One Journal*. 8(5) Retrieved From <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0064214>
32. Amasha, A. H., & Heeba, F. M. (2013). Maternal Awareness of Pregnancy Normal and Abnormal Signs: An Exploratory Descriptive Study. *IOSR Journal of Nursing and Health Science*. 2(5): 39-45 Retrieved from <http://iosrjournals.org/iosr-jnhs/papers/vol2-issue5/H0253945.pdf?id=8240>
33. Ayanniyi, O., Sanya, A.O., Ogunlade, S.O., Oni-Orisan, M.O., (2006) Prevalence and Pattern of back pain among Pregnant Women Attending Ante-natal Clinics in Selected Health Care Facilities. *African Journal of Biomedical Research*. Vol. 9 149-156. Retrieved From <http://www.bioline.org.br/pdf?md06026>
34. Bradley, C.S., Kennedy, C.M., Turcea, A.M., Rao, S.S., Nygaard, I.E. (2007) Constipation in pregnancy: prevalence, symptoms, and risk factors. *Hippokratia medical journal*. 15(3): 205–210. Retrieved From <http://www.ncbi.nlm.nih.gov/pubmed/18055731/>
35. Buss C, et al., (2009). Dietary Fiber Intake of the Pregnant Women, *Public health Nutrition journal*. 12(9): 1392-1398. Retrieved From <http://www.ncbi.nlm.nih.gov/pubmed/19063767/>
36. Derbyshire. E., Davies, J., Costarelli, V., Dettmar, P. (2006) Diet, physical inactivity and the prevalence of constipation throughout and after pregnancy. *Maternal Child Nutrition journal*. 2(3):127-134. Retrieved From <http://www.ncbi.nlm.nih.gov/pubmed/16881925>
37. Garshasbi, A., & Faghih, Z. S. (2005).The effect of exercise on the intensity of low back pain in pregnant women. *International Journal of Gynaecology& Obstetrics*.88(3):271-275 Retrieved From <http://www.ncbi.nlm.nih.gov/pubmed/15733880/>
38. Gururani, L., Kumar, A., Mahalingam, G. (2016) Minor disorder of pregnancy and its home management. *International Journal of Medical Science and Public Health*. 5(2): 162-383 Retrieved From

<http://www.scopemed.org/?jft=67&ft=67-1438578158/>

39. Jewell, D.J., & Young, G. (2001) Interventions for treating constipation in pregnancy Cochrane Database Systematic Review. Retrieved From <http://www.ncbi.nlm.nih.gov/pubmed/11405974>

40. Katonis, P., et al. (2011). Pregnancy-related low back pain. *Hippokratia medical journal*. 15 (3): 205-210 Retrieved From <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3306025/pdf/hippokratia-15-205.pdf>

41. Kumar, L. (2014) Effectiveness of ‘Self Instructional Module’ (SIM) On the Level of Knowledge Regarding Selected Minor Ailments and Their Remedial Measures among Pregnant Women. *IOSR Journal of Nursing and Health Science*. 3(1):32-38 Retrieved From <http://iosrjournals.org/iosr-jnhs/papers/vol3-issue1/Version-4/F03143238.pdf>

42. Marie, R. (2014) A Study to Assess the Knowledge and Practice Regarding Minor Disorders of Pregnancy and the Incidence among the Antenatal Mothers who Attending OPD at Selected Hospital, Kolar. *Asian Journal of Nursing Education and Research*.4 (3):284 – 287 Retrieved From <http://www.indianjournals.com/ijor.aspx?target=ijor:ajner&volume=4&issue=3&article=005>

43. Mogren, I. M. (2006). Long-term outcome for women with low back pain and pelvic pain during pregnancy. *European Spine journal*. 15(7):1093-1102. Retrieved From <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3233935/48/>

44. Patil, N., & Salunkhe, J. (2015). Assessment of Knowledge on Minor Ailments of Pregnancy and Home Remedies. *International Journal of Science and Research* 4(1): 674 – 667 Retrieved From <http://www.ijsr.net/archive/v4i1/04011503.pdf>

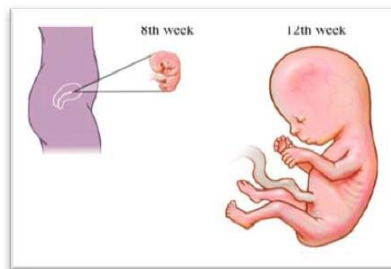
45. Ponce, J., et. al. 2008).Constipation during pregnancy: a longitudinal survey based on self-reported symptoms and the Rome II criteria. *European Journal of Gastroenterology and Hepatology*. 20(1):56-61. Retrieved From <http://www.ncbi.nlm.nih.gov/pubmed/18090992>

46. Ramachandra, P., Maiya, G., Kumar, P., Kamath, A. (2015) Prevalence of Musculoskeletal Dysfunctions among Indian Pregnant Women. *Journal of Pregnancy*. 1 - 4. Retrieved From <http://www.hindawi.com/journals/jp/2015/437105/>
47. Sangeetha, .E, Shanghais .R., Revathy, D. (2015) A Descriptive Study To Assess The Level Of Knowledge On Minor Ailments In Pregnancy Among Antenatal Mothers In Selected Tertiary Hospital, Kanchipuram, Tamilnadu. *TJPRC: Journal of Nursing and Patient*. 1(2): 1-6 Retrieved From <file:///C:/Users/user/Downloads/--1439021211-JNPSC%20%20A%20DESCRIPTIVE%20STUDY%20TO%20ASSESS%20THE%20LEVEL%20%20-%20REVATHY%20MANUSCRIPT.pdf>
48. Sangsawang, B. (2014) Risk factors for the development of stress urinary incontinence during pregnancy in primigravida. *European Journal of Obstetrics and Gynaecology and Reproductive Biology*.178:27-34 Retrieved From <http://www.ncbi.nlm.nih.gov/pubmed/24784708>
49. Vazquez, J.C. (2008) Constipation, haemorrhoids, and heartburn in pregnancy *British Medical journal: Clinical Evidence*. 110(6):1351-1357. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2907947/>
50. Vincent, S., Nayak, S., Paul, S. (2015) A Study Of Knowledge Of Primi Mothers On Self-Management Of Minor Discomforts Of Pregnancy. *Nitte University Journal of Health Science*. 5(2): 12 – 15 Retrieved From <http://nitte.edu.in/journal/june2015/3.pdf>
51. Wang, S. M., Dezinno, P., Maranets, I., Berman, M. R., Caldwell, A. A., Kain, Z. N. (2004) Low back pain during pregnancy: prevalence, risk factors, and outcomes. *Obstetrical and Gynecology journal*.104(1):65-70. Retrieved From <http://www.ncbi.nlm.nih.gov/pubmed/15229002>

COMMON DISCOMFORTS IN PREGNANCY



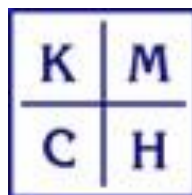
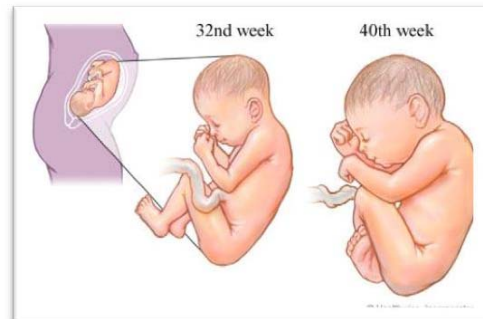
FIRST TRIMESTER



SECOND TRIMESTER



THIRD TRIMESTER



FREQUENT URINATION



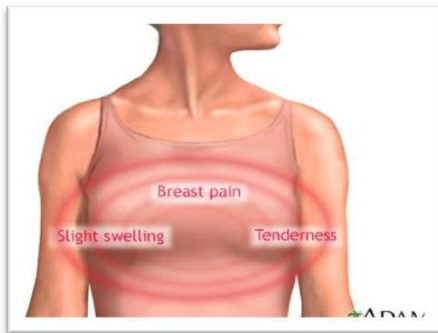
Management:

- ✓ Drinks plenty of fluids but limit it before you go to bed so you're not visiting the toilet too often in the night
- ✓ Reduce fluid intake in bed time
- ✓ Limit intake of caffeine products like coffee, tea and others.
- ✓ Do kegel exercises to increase control (Identify the muscles to be exercised by stopping the flow of urine midstream. Slowly contract the muscles around the vagina and hold for 10 seconds, relax for at least 10 seconds. Repeat the contraction for 5-10 times a day)

EXCESSIVE WHITE DISCHARGE

Management:

- ✓ Maintain adequate personal hygiene
- ✓ Wear clean and dry under garments
- ✓ Note: If you have any discharge which is a strange colour, smells, or is itchy then you may have an infection. See your doctor who would be able to help you.



BREAST TENDERNESS

Management:

- ✓ Wear supportive bra with pads to absorb discharge
- ✓ Breasts - Wash with warm water and keep dry
- ✓ Avoid tight fitting bras

TIREDNESS

Management:

- ✓ Get enough sleep for at least 8 hours a day
- ✓ Take naps during the day at least for 2 hours
- ✓ Eat well balanced meals
- ✓ Exercise regularly
- ✓ Sit with feet up whenever possible
- ✓ Avoid doing heavy works





CONSTIPATION

Management:

- ✓ Eat food that are high in fibre such as whole meal breads, wholegrain cereals, fruit and vegetables and pulses such as beans and lentils
- ✓ Drink at least 8-12 cups of fluid every day in the form of water, milk, juice or soup. Warm or hot fluid is helpful.
- ✓ Maintain an active lifestyle with regular exercise such as walking.
- ✓ Avoid standing for long periods of time
- ✓ Avoid straining during defecation and practice defecating in the morning and after meals.

LEG CRAMPS

Management:

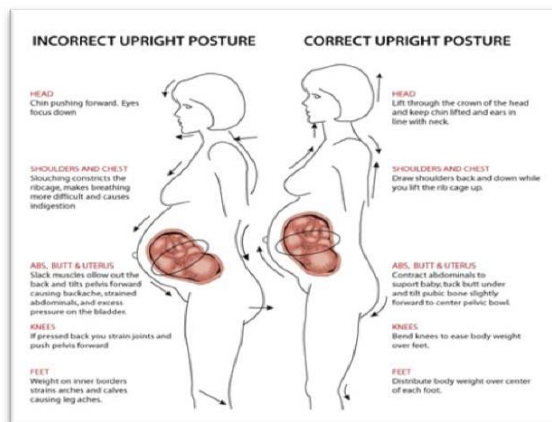
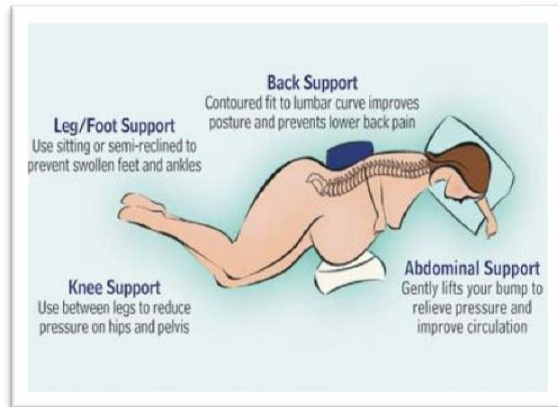
- ✓ Do some leg exercises, circling your feet and pointing your toes upwards if the leg cramps occur
- ✓ Eating bananas help, or drinks that replace nutrients and salts
- ✓ During leg cramps – massage, walking, and stretching may help
- ✓ A warm bath prior to bedtime
- ✓ Drinking adequate fluids
- ✓ Night-time calf stretching
- ✓ **Leg exercise:** Sit with back supported by pillow or head rest of bed. Rest the feet on two pillows, move the ankles up and down, inward and outward, then combine these movements by making a circle. Repeat 10 times



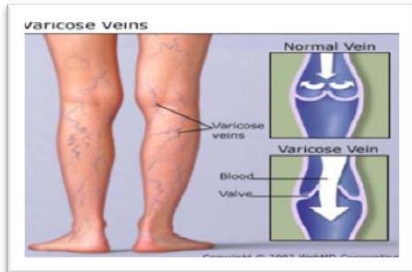
BACKACHE

Management:

- ✓ Avoid lifting heavy objects
- ✓ Avoid wearing high-heel shoes
- ✓ Bend your knees and keep your back straight when lifting anything off the floor
- ✓ Move your feet around with yourself when you turn to avoid twisting your spine
- ✓ Wear flat comfortable shoes so that the weight can be evenly distributed
- ✓ Work at a surface that is in line with your waist so that you don't have to stoop down
- ✓ Sit up with your back straight and well supported
- ✓ Use a firm mattress or place a piece of hardboard under your mattress to make it firmer as soft mattresses can cause backache
- ✓ Avoidance of fatigue and have frequent periods of rest
- ✓ Avoiding situations that aggravate the condition e.g. unrelenting postures, twisting while lifting, activities such as unequal weight bearing, bouncing
- ✓ Using pillows to support the abdomen while lying in the lateral position, and to support the lower back when sitting, and placement of a roll behind the back with the feet slightly elevated.
- ✓ Use of massage and local applications of heat and cold may provide relief



VARICOSE VEINS



Management:

- ✓ Elevate the legs when at rest
- ✓ Water immersion or compresses may alleviate symptoms
- ✓ Avoid prolonged standing or immobility, and wearing of high heels
- ✓ Avoid tight or restrictive clothing
- ✓ Regular exercise like ankle flexion exercise for at least 30 minutes per day.
- ✓ Compression stocking may relieve swelling and aching of legs
- ✓ If resting for long periods, to lie on the left side which decreases pressure on the veins in the legs and feet

TINGLING AND NUMBNESS OF THE HANDS

Management:

- ✓ Avoiding positions of extreme flexion or extension
- ✓ Avoiding repetitive actions or aggravating activities e.g. Typing
- ✓ Wrist splinting may be initiated – a neutral position decreases pressure on the median nerve. Splints are normally worn at night



GAS FORMATION

Management:

- ✓ Chew food thoroughly and slowly
- ✓ Avoid gas producing foods, fatty foods, and large meals
- ✓ Do regular exercise
- ✓ Maintain regular bowel habits.



TIREDDNESS, FAINTNESS AND DIZZINESS

Management:

- ✓ Get enough sleep and rest
- ✓ Take naps during the day
- ✓ Eat well balanced meals
- ✓ Exercise regularly
- ✓ Sit with feet up whenever possible
- ✓ Avoid doing heavy works
- ✓ Relieved by lying onto the side
- ✓ Always sleep on the side and not on the back
- ✓ If can only sleep on the back, support right thigh with pillows



DIFFICULTY IN BREATHING

Management:

- ✓ Avoid sleeping in lying down position
- ✓ Use pillows to prop up and support
- ✓ Sleep in left lateral position
- ✓ In daytime, sit straight and assume good posture while standing



DIFFICULTY IN SLEEPING

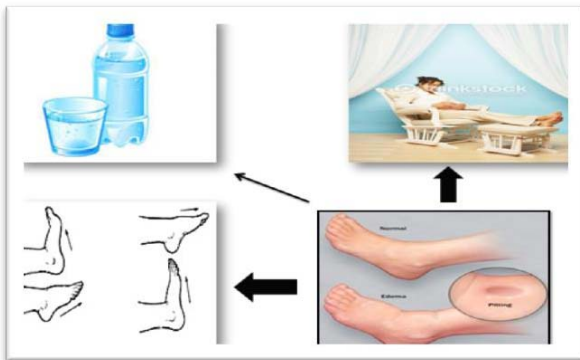
Management:

- ✓ Back massage
- ✓ Support with pillows while sleeping
- ✓ Warm milk or warm shower before sleep

HEARTBURN

Management:

- ✓ Eat small, low-fat meals frequently.
- ✓ Avoid spicy food.
- ✓ Avoid lying down, bending and stooping after eating.
- ✓ Avoid caffeine drinks like coffee and fizzy drinks
- ✓ Don't go to bed on a full stomach leave it a couple of hours after eating
- ✓ Heartburn can be worse when laying down so sleep with some pillows to help prop you up slightly at night.



ANKLE EDEMA

Management:

- ✓ Take ample amount of fluids
- ✓ Put on support stockings while arising
- ✓ Rest periodically with legs and hips elevated
- ✓ Exercise moderately

MY SINCERE THANKS TO

RESEARCH GUIDE

Prof. DR. S.Madhavi M.Sc. (N), Ph.D.

Principal

KMCH College of Nursing

Coimbatore – 14

MEDICAL GUIDE

Dr. Athima Pathak M.S. (OBS&GYN)

Consultant obstetrician & gynaecologist

Kovai Medical Center & Hospital

Coimbatore - 14

CLINICAL GUIDE

Mrs Indumathi M.Sc. (N)

Associate Professor

Dept. of OBG Nursing

KMCH College of Nursing

Coimbatore - 14

PREPARED BY

Ms. Chachu Anthrayose

MSc nursing 2nd year

KMCH College of Nursing

Coimbatore

SOCIO – DEMOGRAPHIC DATA

1. AGE
 - a) 18 – 22
 - b) 23 – 27
 - c) 28 – 32
 - d) 33 and above
2. Month of current pregnancy
 - a) 4 – 6 month
 - b) 7 – 9 month
3. Religion
 - a) Hindu
 - b) Christian
 - c) Muslim
4. Educational status
 - a) Primary education
 - b) Higher secondary
 - c) Graduate and above
5. Occupation
 - a) Private employee
 - b) Government employee
 - c) Housewife
6. Type of family
 - a) Joint family
 - b) Nuclear family
7. Any previous knowledge regarding minor ailments of pregnancy?
 - a) Yes
 - b) No
8. Source of information
 - a) Mass media
 - b) Health personnel
 - c) Others

**STRUCTURED QUESTIONNAIRE TO ASSESS KNOWLEDGE
REGARDING MANAGEMENT OF MINOR DISORDERS DURING
PREGNANCY**

1. Minor disorders of pregnancy means
 - a) Signs and symptoms of pregnancy
 - b) Minor health issues
 - c) Disease condition
 - d) Abnormality in fetus
2. The common discomfort seen in second and third trimester are
 - a) Nausea and vomiting
 - b) Haemorrhoids
 - c) Back pain
 - d) Pica
3. The exercise to increase control of frequency of urination
 - a) Breathing exercise
 - b) Kegel's exercise
 - c) Circulatory exercise
 - d) Leg rolling exercise
4. The frequent urination can result from
 - a) Increased fluid intake
 - b) Increased food intake
 - c) Decreased activity
 - d) Decreased intake of food
5. When white discharge should be reported to the doctor
 - a) Normal in nature
 - b) Foul smelling in nature
 - c) Watery in nature
 - d) No discharge
6. In case of breast tenderness we should
 - a) Wear tight bras
 - b) Wear supportive bras
 - c) Wear tight clothing
 - d) Avoid wearing bras

7. The normal amount of sleep a mother should have is

- a) 8 hrs night only
- b) 8 hrs night and 2 hrs afternoon
- c) 6 hrs night only
- d) 10 hrs night only

8. Foods to be eaten to prevent constipation is

- a) High protein diet
- b) High fibre diet
- c) High spicy diet
- d) High fat diet

9. In case of hard stools we should

- a) Take lots of fluids
- b) Sleep more
- c) Take fat rich diet
- d) Strain during defecation

10. Leg cramps is due to

- a) Walking for long time
- b) Standing for long time
- c) Lifting heavy objects
- d) Lack of minerals in body

11. To prevent leg cramps we should

- a) Walk more
- b) Massage legs
- c) Soak in cold water
- d) Soak in hot water

12. The back ache can be prevented by

- a) Wearing flat slippers
- b) Sitting with support
- c) Walk regularly
- d) All of the above

13. Back ache can result from

- a) Standing for long time
- b) Hot water application
- c) Sleeping in supine position

- d) Walking regularly
14. While lifting things from the floor, we should
- a) Bend your knees and keep your back straight
 - b) Bend your knees and bend your back
 - c) Bend your back and keep your knees straight
 - d) Avoid taking things from floor
15. The proper posture will help to
- a) Promote sleep
 - b) Prevent back pain
 - c) Work freely
 - d) Relief tension
16. Varicose veins can develop from
- a) Continuous bed rest
 - b) Prolonged standing
 - c) Adequate food intake
 - d) Wearing flat slippers
17. Varicose veins is prevented by
- a) Wear tight pants
 - b) Massage legs
 - c) Avoid prolonged standing
 - d) Frequent running
18. The exercise that helps to prevent varicose veins
- a) Pelvic tilt exercise
 - b) Buttock lift exercise
 - c) Ankle flexion exercise
 - d) Deep breathing exercise
19. Pain sensation in wrist is relieved by
- a) Raising hands
 - b) Stretching hands
 - c) Cold application
 - d) Take bed rest
20. To prevent flatulence, we should
- a) Sleep immediately after eating
 - b) Eat fatty foods

- c) Eat heavy meals
- d) Walk frequently

21. Burning sensation in the chest can arise after

- a) Drinking milk before sleep
- b) Drinking less amount of water
- c) Taking more foods
- d) Sleeping after eating food

22. The method to prevent heartburn is

- a) Sleep immediately after eating
- b) Sleep immediately before eating
- c) Taking spicy foods
- d) Avoid sleeping after eating

23. In case of leg oedema we should

- a) Lie straight
- b) Elevate legs
- c) Keep legs down
- d) Keep legs folded

24. The type of diet to prevent leg oedema is

- a) Decreased fat diet
- b) Decreased salt diet
- c) Increased iron diet
- d) Increased protein diet

**STRUCTURED QUESTIONNAIRE TO ASSESS
PRACTICEREGARDING MANAGEMENT OF MINOR DISORDERS
DURING PREGNANCY**

SL NO.	QUESTIONS	ALWAYS	SOMETIMES	RARELY
I	<p>Frequent urination</p> <p>1. Do you avoid drinks like coffee, tea, etc?</p> <p>2. Do you take more fluids in bedtime?</p>			
II	<p>Excessive white discharge</p> <p>3. Do you wear clean and loose undergarments?</p> <p>4. Do you maintain personal hygiene?</p>			
III	<p>Breast tenderness</p> <p>5. Do you wear tight fitting bras?</p> <p>6. Do you take adequate care of breasts?</p>			
IV	<p>Tiredness, dizziness and fainting</p> <p>7. Do you take adequate amount of rest while working?</p> <p>8. Do you take nap for at least 2 hours in daytime?</p> <p>9. Do you sleep for atleast 8 hours a day?</p> <p>10. Do you sit with feet up whenever possible?</p> <p>11. Do you always sleep on the back?</p> <p>12. Do you suddenly get up from the bed?</p>			
V	<p>Constipation</p> <p>13. Do you take fibre rich diet like green leafy vegetables, pulses, nuts, etc?</p> <p>14. Do you do exercise regularly?</p> <p>15. Do you strain during defecation?</p>			
VI	<p>Backache</p> <p>16. Do you lift heavy objects?</p> <p>17. Do you wear heels?</p> <p>18. Do you lie with support of pillows while sleeping?</p> <p>19. Do you sit up with back straight and supported?</p>			

	<p>20. Do you sleep in firm mattress?</p> <p>21. Do you stoop down while taking things from the ground?</p>			
VII	<p>Leg cramps</p> <p>22. Do you do leg exercise like circling your feet?</p> <p>23. Do you stand for long time continuously?</p> <p>24. Do you massage the legs during cramps?</p>			
VIII	<p>Varicose veins</p> <p>25. Do you elevate your legs during rest?</p> <p>26. Do you wear tight clothing?</p>			
IX	<p>Difficulty in breathing</p> <p>27. Do you sleep in side lying position?</p> <p>28. Do you assume good posture while sitting or standing?</p>			
X	<p>Heartburn</p> <p>29. Do you avoid eating spicy and fatty foods?</p> <p>30. Do you drinks that contain caffeine or carbonated drinks?</p> <p>31. Do you sleep immediately after taking meals?</p> <p>32. Do you take small and frequent foods?</p> <p>33. Do you take oily foods after getting up from the bed?</p> <p>34. Do you sleep with full stomach?</p>			
XI	<p>Ankle edema</p> <p>35. Do you elevate legs during sleep in case of edema?</p>			