



# International Journal of Obstetrics and Gynaecological Nursing

E-ISSN: 2664-2301  
P-ISSN: 2664-2298  
IJOGN 2023; 5(1): 01-05  
Received: 01-10-2022  
Accepted: 08-11-2022

**Bhupendra Kumar**  
Ph.D. Nursing Scholar, Pacific  
Medical University, Udaipur,  
Rajasthan, India

**Nischal Pathak**  
M.Sc. Nursing, MPMSU,  
Jabalpur, Madhya Pradesh,  
India

**Vaneshvar Suthar**  
Ph.D. Nursing Scholar,  
Geetanjali University,  
Udaipur, Rajasthan, India

**Chetna Paliwal**  
Assistant Professor, Tirupati  
College of Nursing, Udaipur,  
Rajasthan, India

**Dharmesh Chaturvedi**  
Ph.D. Nursing Scholar, Sai  
Tirupati University, Udaipur,  
Rajasthan, India

**Corresponding Author:**  
**Dharmesh Chaturvedi**  
Ph.D. Nursing Scholar, Sai  
Tirupati University, Udaipur,  
Rajasthan, India

## Impact of information pamphlet on knowledge regarding pregnancy-related problems among primigravida women

**Bhupendra Kumar, Nischal Pathak, Vaneshvar Suthar, Chetna Paliwal  
and Dharmesh Chaturvedi**

**DOI:** <https://doi.org/10.33545/26642298.2023.v5.i1a.98>

### Abstract

**Background:** As primigravida women are less aware or unaware about the pregnancy related problems and its ill effects on health of mother and growth of fetus during pregnancy. Therefore, present study aims to assess effectiveness of information pamphlet of knowledge of primigravida women regarding pregnancy related problems.

**Method:** Quantitative pre-experimental research design was used to conduct the study. A sample of 50 primigravida women was selected for the study by purposive sampling technique.

**Results:** The mean pre-test knowledge score was 9.14 and mean post-test knowledge score was 17.34. 39 (78%) participants had adequate knowledge level (>75%) and 11(22%) participants had moderate knowledge level (51% to 75%) in post-test. Paired t test knowledge score is 17.697 which is more than the table value 2.00 at due 49, which is significant at 0.05% level. This indicates that the informational pamphlet is effective in increasing the knowledge of primigravida women regarding pregnancy-related problems. The findings revealed that there was significant association between knowledge score with selected demographic variables of the primigravida women e.g. education, occupation, monthly income and previous knowledge.

**Conclusion:** Study concluded that knowledge regarding pregnancy related problems must be given more weightage for overall growth of the foetus and to reduce pregnancy related complications.

**Keywords:** Pregnancy related problems, primigravida mothers, effectiveness, information pamphlet, maternity clinics

### Introduction

Pregnancy is the term used to describe the period in which a foetus grows inside a woman's womb or uterus. Pregnancy usually lasts about 40 weeks, or just over 9 months, as calculated from the last menstrual period to delivery. Health care providers refer to three segments of pregnancy, called trimesters<sup>[1]</sup>. Pregnancy and the related changes are a normal physiological course in response to the growth of the foetus. These changes happen in response to numerous aspects; hormonal variations, increase in the total blood volume, weight increase, and growth in foetus size as the gestation advances. All these factors have a physiological effect on the pregnant lady: the musculoskeletal, endocrine, reproductive, cardiovascular, respiratory, nervous, urinary, gastrointestinal and immune systems are affected, along with changes to the skin and breasts<sup>[2]</sup>. Pregnancy is a time of transformation for both the mother and the baby, with significant physical and emotional alterations. There are many discomforts that happen during pregnancy. Morning sickness, headache and backache, bladder and bowel changes, changes in hair and skin colour, indigestion and heartburn, leg cramps and swelling, vaginal thrush and discharge are the some common complications facing during pregnancy<sup>[3]</sup>. The common problems may be physiological (backache, leg cramps, constipation, fatigue, uncomfortable position, sleep disturbance, heart burn, perineal discomfort, increased urinary frequency, etc), or psychosocial (anxiousness, lack of family support, etc), particularly in the first and third trimester<sup>[4]</sup>. According to WHO (2016)<sup>[5]</sup>, an estimated 303000 women died from pregnancy-related reasons, 2.7 million babies died during the first 28 days of life and 2.6 million babies were stillborn. Quality health care during pregnancy and childbirth can prevent many of these deaths, yet globally only 64% of women receive antenatal (prenatal) care four or more times during their pregnancy<sup>[5]</sup>.

Agampodi SB et al (2013) [6] revealed that 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%). The leading cause of hospitalization was NVP which accounted for 43.1% of total admissions during pregnancy [6] Sharma, Ankita et al (2020) [7] discovered that increased urine frequency is the most evident minor complaint faced during pregnancy. Overall antenatal mothers had fair knowledge regarding management of minor ailments and varied practices have been performed by antenatal mothers to relieve their problems. [7] Marie Rosy (2014) [8] found that, 87% of antenatal mothers have inadequate level of knowledge and 65% of them had inadequate practices regarding minor disorders of pregnancy. Study also found that there was high correlation between knowledge and practice scores of minor disorders of pregnancy. [8] Kaur B, Singh V (2018) [9] discovered that 73% of antenatal mothers had average knowledge, 16% of antenatal mothers had below average knowledge and 04% of antenatal mothers had poor knowledge regarding the self-management of minor ailments during pregnancy. [9] Bala M (2017) [10] also found that all the antenatal mothers experienced minor ailments during their pregnancy and those mothers also used home care for some of the minor ailments they experienced during their pregnancy. [10]

**Statement of Problem:** “A study to assess the effectiveness of information pamphlet on knowledge regarding pregnancy-related problems among primigravida women attending OPDs at selected hospitals of Udaipur, Rajasthan.”

### Objective

1. To assess the pre-test and post-test level of knowledge regarding pregnancy-related problems among primigravida women.
2. To assess the effectiveness of information pamphlet regarding pregnancy-related problems among primigravida women.
3. To find association between the pre test scores of knowledge regarding pregnancy-related problems among primigravida women with selected demographic variables.

### Material and methods

**Research approach:** Quantitative approach

**Research Design:** Pre experimental one group pretest post-test research design.

**Research Setting:** Study was conducted in selected hospitals of Udaipur, Rajasthan.

**Population:** Study population consisted of primigravida women attending OPDs at selected hospitals of Udaipur, Rajasthan.

**Sampling technique and sample:** 50 primigravida women selected through nonprobability purposive sampling technique.

**Research Tool:** The tools selected for the present study

divided in two sections.

**Section I:** Socio-demographic variables included 8 items seeking information on socio-demographic data.

**Section II:** Structured knowledge questionnaire consists of 24 questions to assess the level of knowledge regarding pregnancy-related problems among primigravida women. Prior to tool administration all subjects were given an information sheet, explaining the purpose and outcome of study. Informed consent was taken from participants and self-explanatory tools were administered to participants. Permission for study was taken from concerned authorities.

### Results

**Table 1:** Distribution of samples according to socio demographic variables (N=50)

S. No.	Demographic Variables	Frequency	Percentage
<b>Age (in years)</b>			
1	Below 20	13	26%
	20-24	23	46%
	25-29	08	16%
	29 & more	06	12%
<b>Religion</b>			
2	Hindu	39	78%
	Muslim	08	16%
	Christian	03	06%
<b>Maternal education</b>			
3	Primary Education	21	42%
	Secondary Education	17	34%
	Graduation & more	12	24%
<b>Type of family</b>			
4	Joint Family	38	76%
	Nuclear Family	12	24%
<b>Occupation</b>			
5	Private employee	14	28%
	Govt. Employee	08	16%
	Housewife	28	56%
<b>Monthly Income (in Rs.)</b>			
6	Below 5000	0	0
	5001-10000	28	56%
	10001-15000	10	20%
	15001 & above	12	24%
<b>Previous knowledge regarding pregnancy-related problems</b>			
7	Yes	08	16%
	No	42	84%
<b>Source of in information</b>			
8	Mass Media	20	40%
	Health personal	19	38%
	Peer group/friend	11	22%
	Other	0	0

According to table 1, majority of the respondents 23(46%) were between the age group of 20-24 years, followed by 13(26%) respondents were in the age group of below 20 years, 8(16%) respondents were between the age group of 25 – 29 years and 6(12%) were in the age group of 29 and above years. As per religion 39(78%) were Hindus, 8(16%) were Muslims and rest 3(6%) were Christians. With regard to maternal education, majority of the respondents 21(42%) were had primary Education, 17(34%) of them secondary level education and 12(24%) had graduation and more. Majority of respondents 38(76%) were belongs to nuclear family and, 12(24%) were from Joint family. In view of

occupational status, most of respondents 28(56%) were Housewife, 14(28%) were in private job and remaining 8(16%) were in Govt. Job. Majority of the respondents 28(56%) had monthly income Rs 5001 to 10,000, remaining respondents 10(20%) had 10,000 to 15,000 and 12(24%) had above 15,001 and above monthly income. As per previous knowledge, 42(84%) respondents do not have any

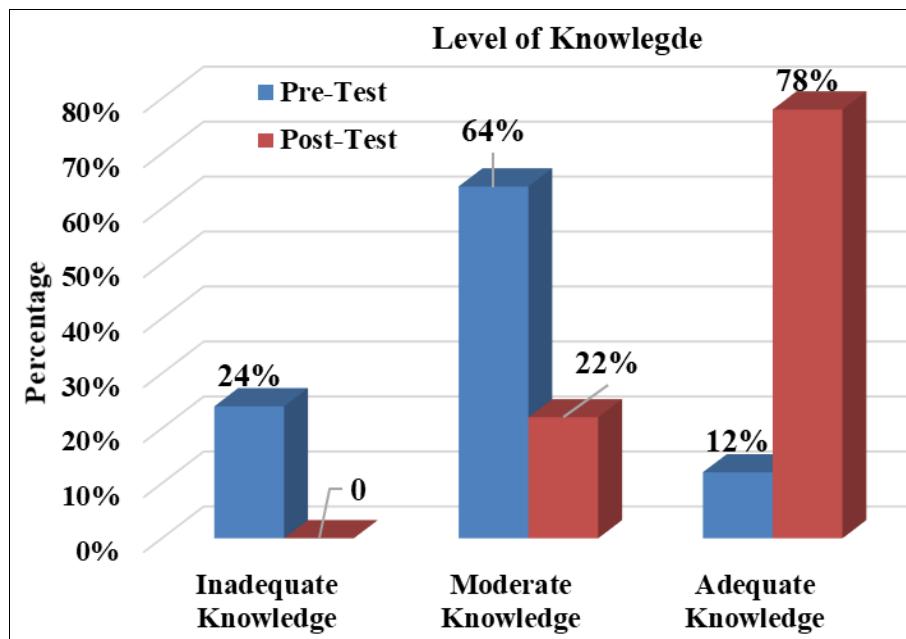
previous knowledge, and 08(16%) respondents had previous knowledge regarding pregnancy related problems. Regarding source of information about pregnancy related problems, 20(40%) of respondents got information from mass media, 19(38%) got from health professionals, remaining 11(22%) respondents gathered from peer group/friend.

**Table 2:** Pre-test and post-test level of knowledge among nursing students regarding pregnancy related problems

S. No.	Level of Knowledge	Score (%)	Pre-Test		Post-Test	
			Frequency	Percentage	Frequency	Percentage
1	Inadequate knowledge	0-50%	12	24%	00	00
2	Moderate Knowledge	51-75%	32	64%	11	22%
3	Adequate knowledge	76-100%	06	12%	39	78%
Total			50	100	50	100

Table 2 reveals that among 50 primigravida women, most of them 32 (64%) had moderate adequate knowledge level, 12 (24%) had inadequate knowledge level and 06 (12%) had adequate knowledge level in pre-test regarding pregnancy related problems. While in post-test 39(78%) primigravida women had adequate knowledge level, 11(22%) had moderate knowledge level and no one had inadequate

knowledge level regarding pregnancy related problems. From the above findings, it was inferred that, most of the primigravida women had inadequate and moderate knowledge level in pre-test and most of the primigravida women had adequate knowledge level in post-test regarding pregnancy related problems.



**Fig 1:** Percentage Distribution of Pre-test and Post-Test Level of Knowledge among primigravida women

**Table 3:** Comparison of Pre-test and post-test level of knowledge among primigravida women regarding pregnancy related problems

S. No	Level of Knowledge	Mean	Standard Deviation	Mean Difference	't' Value
1	Pre-Test	9.14	2.14	8.2	17.697*
2	Post-Test	17.34	2.37		

Table 3 revealed that among primigravida women, the mean pre-test score was 9.14 with the standard deviation 2.14 and post-test score was 17.34 with the standard deviation 2.37. The mean difference was 8.2. The obtained 't' value 17.697 was statistically significant at  $p < 0.05$  level. Hence the stated hypothesis (H1) was accepted. It was inferred that the mean post-test level of knowledge score was more than the pre-test level of knowledge score. There is a significant difference between the mean pre and post-test level of Knowledge among primigravida women regarding

pregnancy related problems. Thus, information pamphlet regarding pregnancy related problems was proven to be effective on the level of knowledge among primigravida women.

The chi square test ( $\chi^2$ ) was carried out to determine association between the pre-test knowledge and socio demographic variables such as age, education, religion, type of the family, occupation, monthly income, knowledge and source of knowledge of primigravida women. Out of which age ( $\chi^2 = .353^*$ , with 3df), Education ( $\chi^2 = 0.316^*$ , with 2df), type of the family ( $\chi^2 = 0.304^*$ , with 1df), occupation ( $\chi^2 = 0.144^*$ , with 2df), Monthly income ( $\chi^2 = 1.741^*$ , with 2df), religion ( $\chi^2 = 0.988^*$ , with 2df), Previous knowledge ( $\chi^2 = 0.152^*$ , with 1df) and Source of previous knowledge ( $\chi^2 = 0.451^*$ , with 2df) were found to be not significantly associated with pre-test knowledge level of the primigravida women.

## Discussion

Our study findings revealed that among 50 pregnancy related problems, most of them 32 (64%) had moderately adequate knowledge level, 12 (24%) had inadequate knowledge level in pre-test regarding pregnancy related problems.

Our result supported by Vincent et al (2020) <sup>[11]</sup>, his descriptive study also revealed that 59% primigravida women had poor knowledge and 29% had average knowledge regarding minor discomforts of pregnancy and its self-management. Our result also supported by, Sangeetha et al (2015) <sup>[12]</sup> with similar finding which showed that 43% of the pregnant women had average knowledge and 10% of the pregnant women had poor knowledge on minor ailments during pregnancy. Studies conducted by Radhika K (2019) <sup>[13]</sup> and Delma Pinto et al (2014)<sup>14</sup> also revealed similar findings regarding knowledge assessment about pregnancy related problems. While Aalyah Daghash Aldossary et al (2018) <sup>[15]</sup> revealed contradictory finding about knowledge and practices of primigravida women regarding minor discomforts of pregnancy, in their study finding, most of the mothers (59%) had good knowledge, 32% had excellent knowledge and only 2% of them had poor knowledge.

Our study revealed in post-test, 39(78%) pregnant mothers had adequate knowledge level, 11(22%) had moderate knowledge level and no one had inadequate knowledge level regarding pregnancy related problems. There was enhancement in knowledge level in post-test due to information pamphlet regarding pregnancy related problems. The mean pre-test score was 9.14 with the standard deviation 2.14 and post-test score was 17.34 with the standard deviation 2.37. The mean difference was 8.2. The obtained 't' value 17.697 was statistically significant at  $p < 0.05$  level. It was inferred that the mean post-test level of knowledge score was more than the pre-test level of knowledge score. Our findings supported by Apeksha A. Ambavkar (2021) <sup>[16]</sup> with similar findings in their study to improve the knowledge level of primigravida women regarding minor ailments and its home management through information booklet. Her study revealed that there was a significant difference in level of knowledge from pre-test to post test. Hager A., et al (2020) <sup>[17]</sup> also revealed similar findings in their pre-experimental study to assess the effect of planned teaching program on improving knowledge of pregnant woman regarding minor discomfort & problems. Ramaiah P (2020) <sup>[18]</sup> also found similar result indicating teaching program was effective in increasing the knowledge of the subjects regarding minor disorders of pregnancy and its Management. Tak H K, Chaturvedi D (2022) <sup>[19]</sup> also revealed similar findings while assessing effectiveness of learning package on knowledge regarding weaning practices among primipara mothers. P. Latha et al (2016) <sup>[20]</sup> also revealed Effectiveness of IEC (Information, Education & Communication) package on knowledge regarding minor ailments of pregnancy and its management among antenatal mothers.

## Conclusion

Findings of our study strongly recommend the need for conducting education program to increase the knowledge regarding pregnancy related problems among primigravida women. By educating anticipated mothers, problems related pregnancy period, pregnancy outcome and pregnancy

product can be minimized. It helps to reduce both morbidity and mortality of mother and child due to pregnancy related problems.

## Limitations

The small size (50) of the sample made it difficult to draw generalization. A structured questionnaire was used for data collection which restricts the amount of information that can be obtained from the respondents, only knowledge was assessed; no attempt was made to assess their attitudes due to time shortage and less resources.

## Conflict of Interest

Not available

## Financial Support

Not available

## References

1. Office on Women's Health. Stages of pregnancy. Retrieved Jan 12, 2023, from <http://womenshealth.gov/pregnancy/you-are-pregnant/stages-of-pregnancy.html>
2. Jukic AM, Baird DD, Weinberg CR, McConaughy DR, Wilcox AJ. Length of human pregnancy and contributors to its natural variation. *Human reproduction* (Oxford, England). 2013;28(10):2848-2855. <https://doi.org/10.1093/humrep/det297>
3. Gayatri Devi Ramalingam, Saravana Kumar Sampath, Jothi Priya Amersham. Challenges Facing during Pregnancy and Measures to Overcome. *Global Women health*, c2021. DOI: 10.5772/intechopen.100614
4. Dutta DC. *Textbook of obstetrics*. 6<sup>th</sup> ed; c2004.
5. WHO. Pregnant women must be able to access the right care at the right time, says WHO. 2016. Available from: <https://www.who.int/news/item/07-11-2016-pregnant-women-must-be-able-to-access-the-right-care-at-the-right-time-says-who>
6. Agampodi SB, Wickramasinghe ND, Horton J, Agampodi TC. Minor ailments in pregnancy are not a minor concern for pregnant women: a morbidity assessment survey in rural Sri Lanka. *PLoS One*. 2013;8(5):e64214. Doi: 10.1371/journal.pone.0064214. PMID: 23675528; PMCID: PMC3651131.
7. Sharma, Ankita, Rani Raj, Nebhinani, Mamta, Singh Pratibha. Knowledge and practices regarding management of minor ailments of pregnancy among antenatal mothers: a descriptive study from Rajasthan. *International Journal of Community Medicine and Public Health*. 2020;7:4010-4016. 10.18203/2394-6040.ijcmph20204369
8. Marie Rosy. 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 J. Nur. Edu. & Research* 2014;4(3):284-287. Available from <https://ajner.com/HTMLPaper.aspx?JournalPID=2014-4-3-5>
9. Kaur B, Singh V. A descriptive study to assess the knowledge of antenatal mothers regarding the self-management of minor ailments during pregnancy in selected hospital of Jalandhar, Punjab, India. *International Journal of Research and Review*.



- 2018;5(7):80-86.  
[https://IJRR\\_Vol.5\\_Issue.7\\_July2018/IJRR0011.pdf](https://IJRR_Vol.5_Issue.7_July2018/IJRR0011.pdf)
10. Bala M. A Descriptive Study to Assess the Prevalence of Minor Ailments during Pregnancy, Home Care Remedies Adopted by Primigravida Mothers and to Develop an Information Booklet regarding the Management of Minor Ailments during Pregnancy in a Selected Hospital of Delhi. *Int J Nur's Midwife Res.* 2017;4(4):3-13.  
<https://doi.org/10.24321/2455.9318.201739>
  11. Vincent, Sharon, Nayak, Sabitha, Paul, Shiny. A study on knowledge of primi mothers on self-management of minor discomforts of pregnancy. *Journal of Health and Allied Sciences NU.* 2015;05:012-015. 10.1055/s-0040-1703881.
  12. Sangeetha E, Shanghais R, Revathy D. 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 Safety & Care (TJPRC: JNPSC).* 2015,1(2):1-6. Available from <http://www.tjprc.org/publishpapers/--1439021211-JNPSC.pdf>
  13. Radhika K. A study to assess the knowledge of selected warning signs in pregnancy among primigravida women in Kempa Cheluvamba general hospital, Malleshwaram, Bangalore RGUHS *Journal of Nursing Sciences.* 2019;9(1):72-76, DOI:10.26715/rjns.9\_1\_14
  14. Delma pinto, Dhilshad, Emily, Honey, Jeethy, ArchaPrem. The knowledge on minor ailments of pregnancy and its management among antenatal mothers: A descriptive approach. *International Journal of Recent Scientific Research.* 2014;5(9):1550-1553. Available from [http://recentscientific.com/sites/default/files/download\\_112.pdf](http://recentscientific.com/sites/default/files/download_112.pdf)
  15. Aldossary AD, Sham SA, Haitham AA. A Cross sectional study about knowledge and practices of primigravida women: minor and common pregnancy discomforts. *Research and reviews: journal of nursing and health sciences.* 2018;4:32-45. Available from <https://www.rroj.com/open-access/a-cross-sectional-study-about-knowledge-and-practices-of-primigravida-women-minor-and-common-pregnancy-discomforts.pdf>
  16. Apeksha A. Ambavkar. A Study to assess the effectiveness of information booklet on knowledge regarding minor ailments of pregnancy and its home management among primigravida women in selected urban slum. *International Journal of Science and Research (IJSR).* 2021;10(6). DOI: 10.21275/MR21527164930
  17. Hager A. Effectiveness of teaching program on awareness regarding the minor discomfort problems among pregnant women. *Minia Scientific Nursing Journal.* 2020;8(1). Available from: [https://article\\_188055\\_c48d7280851c7c81c7b347700ae.pdf](https://article_188055_c48d7280851c7c81c7b347700ae.pdf)
  18. Ramaiah P. Exploring the incidence and the effectiveness of step on minor disorders of pregnancy and its management among primigravida mothers in a selected rural area in Dharmapuri Dt. *Asian J. Nur. Edu. and Research* 2015;5(1):118-120. Doi: 10.5958/2349-2996.2015.00025.7
  19. Tak HK, Chaturvedi D. Effectiveness of learning package on weaning practices among primipara mothers. *Int J Health Sci Res.* 2022;12(1):229-235. DOI: <https://doi.org/10.52403/ijhsr.20220131>
  20. P Latha. Effectiveness of IEC package on knowledge regarding minor ailments of pregnancy and its management among antenatal mothers. *International Journal of Applied Research.* 2016;2(10):593-596. Available from: <https://www.allresearchjournal.com/2016/vol2issue10/P-art1/2-10-61-771>.

**How to Cite This Article**

Kumar B, Pathak N, Suthar V, Paliwal C, Chaturvedi D. Impact of information pamphlet on knowledge regarding pregnancy-related problems among primigravida women. *International Journal of Obstetrics and Gynaecological Nursing.* 2023;5(1):01-05

**Creative Commons (CC) License**

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new