



## **Assess the Effectiveness of Self-instructional Module on Knowledge Regarding Cultural Beliefs of Dietary Habits among Postnatal Women**

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### **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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### **ABSTRACT**

**Background:** The study of cultural factors in nutrition emerged as a distinct focus of research only recently, with the formation of the National Research Council's Committee on Food Habits in 1941. The impact of culture on nutrition has primarily been studied in the realm of "food habits," which is the second of two distinct spheres comprehended by nutrition science. The first is concerned with determining nutritional requirements and dietary standards and includes biochemistry and physiology.

**Objective of the study:** This study aims to assess the effects of self-instructional module on knowledge regarding cultural beliefs of dietary habits among postnatal women. 1. To assess the existing knowledge regarding cultural beliefs of dietary habits among postnatal women 2. To assess the effectiveness of self-instructional module on knowledge regarding cultural beliefs of dietary habits among postnatal women 3. To associate knowledge regarding cultural beliefs of dietary habits among postnatal women with demographic variables.

**Material and methods:** Evaluatory research approach is used to assess the effectiveness of self-instructional module on through the difference between the pre-test and post-test knowledge score.

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In this study a total number of 60 postnatal women who fulfil the inclusion criteria were selected. A structured questionnaire developed for assessing the knowledge of postnatal women.

**Result:** According to the findings, 13.33% of postnatal women had an average level of knowledge, 55% had a good level of knowledge, and 31.67% had an excellent level of knowledge.

**Conclusion:** According to findings of the study, there is an improvement in knowledge of postnatal women. Statistically, the self-instructional module on knowledge regarding cultural beliefs of dietary habits among postnatal women was proved to be effective.

*Keywords: Effectiveness; self-instructional module; knowledge; cultural beliefs; dietary habits; postnatal women.*

## 1. INTRODUCTION

Culture is a taught behaviour made up of norms, beliefs, laws, religion, and other factors that are passed down through generations and have a significant impact on health and disease. These cultural behaviours and ideas differ greatly across India, with enormous differences in language, eating habits, clothing, economic status, tradition, and beliefs [1].

Postpartum phase is the initial six weeks after birth. This is a good time for mothers, but also a time of healing and transition. Although it is critical to look after the infant, it is also necessary to look after the mother. Most new mothers don't return to work for at least the first six weeks after childbirth. This provides a mother time to adapt to a new normal life and establish it [2].

Appropriate nutrition is especially crucial after childbirth to encourage breastfeeding and provide positive role modelling behaviours for children. While some women may eat properly throughout pregnancy are generally abandoned after childbirth, with evidence of a reduction in fruit and vegetable intake [3].

The difficulty for health-care workers is cultural adaptability, cross-cultural communication skills, awareness of nonverbal questions that are culturally driven and move to a trustful interpersonal relationship as soon as possible [4]. In order to have a healthy life in the postpartum period, more concentrated and focused care should be given to the mothers who in turn help in the healthy living of the child [5].

Diet culture is the culture of dieting with the goal of losing weight, rather than being on a specific diet. It's a belief system that prioritises thinness and a socially imposed ideal of beauty over our health and happiness [6]. The beneficial effects depend on breastfeeding initiation, duration, and age at which breastfed child is weaned, which is

influenced by social, cultural, and economic factors [7].

Breastfeeding mothers require an additional 11 grams of protein each day. Two large eggs, a cup of beans (such as chickpeas), a chicken thigh, or a quarter cup of seeds Infants take additional nutrients at a young age as a result of limited breast milk (before the age of 6 months) [8, 9].

Women recuperate and adjust to new roles throughout the postpartum period. It is also viewed as a precarious period in many cultures, making the new mother vulnerable to disease, and specific traditional practises are practised to assure recovery and avoid poor health in the future [10].

It is common for new mothers to disregard their own health during the postpartum period, the consequences of which we will discuss shortly. It is possible to fill the nutritional gap in a mother's recovery with a little planning and foresight, and this is what we are attempting to achieve by developing a postpartum nutrition plan [11].

Several studies in India and elsewhere have indicated the deleterious impact on maternal nutritional status in chronic undernourished women with an unaltered dietary consumption during pregnancy and lactation [12]. Due to poor dietary practices in India 30-35% of babies are LBW and more than half of these infants are full-term babies [13].

During the postpartum period in many cultures and locations across India, specific rituals and practises are used to ensure cure and avoid bad mother health in later years. However, some of these beliefs and practises can damage and effect mother and newborn health outcomes negatively [14].

Use of psychotropic, gastrointestinal, and analgesic medications is extensive among

women with eating disorders in the period around pregnancy. Female patients with eating disorders should receive evidence-based counselling about the risk of medication exposure versus the risk of untreated psychiatric illness during pregnancy and postpartum [15].

**2. MATERIALS AND METHODS**

Evaluatory research approach with pre-experimental one group pre-test post-test research design was used by the researcher. Sampling frame was 60 primigravida postnatal women living in urban and rural areas of Wardha district, were used as a sample by using non-probability convenient sampling technique. **Research variables** – Self-instructional module was independent variable and knowledge on cultural beliefs of dietary habit among postnatal women was dependent variable **Demographic variables** - In this study demographic variables include age, education, occupation, area of residence and religion. **Data collection** - A structured questionnaire is prepared and data collected. An informed consent taken from the postnatal women. Assessed the knowledge about cultural beliefs of dietary habit by pre-test first then implement self-instructional module and

again assessed the knowledge by taking post-test. Researcher given time of 30 minutes to complete the structured questionnaire. Data collection was carried out within the stipulated period. After the cycle of data collection the investigator thanked all the samples of the analysis as well as the authorities for their cooperation. Data collection instruments consist of the following sections. **Section A:** This section included items seeking demographic characteristics of the samples such as age, education, occupation, residence and religion **Section B:** Comprised of structured questionnaires about cultural beliefs of dietary habits **Statistical methods:** By using descriptive and inferential statistics.

**3. RESULT**

The table shows that 55% of the postnatal women had poor level of knowledge score, 38.33% had average and 6.67% of postnatal women had good level of knowledge score. Minimum knowledge score in pre-test was 2 and maximum knowledge score in pre-test was 12. Mean knowledge score in pre-test was 5.75±2.50 and mean percentage of knowledge score in pre-test was 28.75±12.54.

**Table 1. Percentage wise distribution of postnatal women according to their demographic characteristics**

Demographic Variables	n=60	
	No. of postnatal women	Percentage (%)
<b>Age(yrs)</b>		
18-25 yrs	22	36.6
26-33 yrs	27	45.0
34-41 yrs	7	11.7
≥42 yrs	4	6.7
<b>Educational Level</b>		
Illiterate	2	3.3
Primary School	18	30.0
High School	34	56.7
Graduation	6	10.0
<b>Occupation</b>		
Housewife	50	83.3
Employee	10	16.7
<b>Area of Residence</b>		
Urban	35	58.3
Rural	25	41.7
<b>Religion</b>		
Hindu	38	63.3
Muslim	7	11.7
Christian	7	11.7
Buddhist	8	13.3

**Table 2. Assessment with level of pre-test knowledge**

Level of pre-test knowledge	Score Range	Level of pre-test knowledge score	
		No of postnatal women	Percentage
Poor	1-5	33	55
Average	6-10	23	38.33
Good	11-15	4	6.67
Excellent	16-20	0	0
Minimum score		2	
Maximum score		12	
Mean knowledge score		5.75 ± 2.50	
Mean % Knowledge Score		28.75 ± 12.54	

**Table 3. Assessment with level of post-test knowledge**

Level of post-test knowledge	Score Range	Level of post-test Knowledge Score	
		No of postnatal women	Percentage
Poor	1-5	0	0
Average	6-10	8	13.33
Good	11-15	33	55
Excellent	16-20	19	31.67
Minimum score		9	
Maximum score		19	
Mean knowledge score		13.95 ± 2.67	
Mean % Knowledge Score		69.75 ± 13.35	

**Table 4. Significance of difference between knowledge score in post and post-test of postnatal women**

Overall	Mean	Mean Difference	t-value	p-value
Pre Test	5.75	8.20±3.58	17.70	0.0001
Post Test	13.95			S,p<0.05

The table shows that 13.33% of the postnatal women had average level of knowledge score, 55% had good and 31.67% had excellent level of knowledge score. Minimum knowledge score in post-test was 9 and maximum knowledge score in post-test was 19. Mean knowledge score in post-test was 13.95±2.67 and mean percentage of knowledge score in post-test was 69.75±13.65.

This table compares postnatal women's pre-test and post-test knowledge scores on cultural beliefs of dietary habits. The mean and mean difference values are compared, and the student's paired t test is used at a significance level of 5%. For n=60-1, or 59 degrees of freedom, the tabulated result was 2.00. For the overall knowledge of post-natal women which is statistically acceptable level, this calculated "t" value, i.e. 17.70 is significantly greater than the tablet value at 5% significance level. Accordingly,

the self-instructional module on knowledge of cultural beliefs of dietary habits between postnatal women is statistically assessed as effective.

#### 4. DISCUSSION

According to the pre-test assessment, 55 percent of postnatal women had a poor level of knowledge, 38.33 percent had an average level of knowledge, and 6.67 percent had a good level of knowledge. The pre-test had a minimum knowledge score of 2 and a maximum knowledge score of 12. Mean knowledge score in pre-test was 5.75±2.50 and mean percentage of knowledge score in pre-test was 28.75±12.54.

Post-test assessment shows that 13.33% of the postnatal women had average level of knowledge score, 55% had good and 31.67% had excellent level of knowledge score. Minimum

knowledge score in post-test was 9 and maximum knowledge score in post-test was 19. Mean knowledge score in post-test was  $13.95 \pm 2.67$  and mean percentage of knowledge score in post-test was  $69.75 \pm 13.65$ .

To demonstrate the success of the Self-instructional module, the levels of knowledge during the pre-test and post-test are compared. Student's paired 't' test is used to determine the significance of the difference at the 5% level of significance, and the tabulated 't' value is compared to the computed 't' value. The estimated p values are also compared to the acceptable p value, which is 0.05.

The exploratory descriptive design study was conducted on "Dietary Practices among Postpartum Women" in 2007. The goal was to analyse postpartum women's nutritional knowledge and practises. A total of 420 postpartum mothers were included in the study. The interview schedule was created to measure women's knowledge of postnatal nutrition in order to obtain the data. The individuals' total nutrition knowledge scores were poor, according to the findings. Only 6.0% of the students received a good grade. It can be concluded that there is a lack of understanding about a well-balanced diet during the postpartum time [16].

A descriptive survey approach study was conducted on "Cultural beliefs and practices among postnatal mothers" in Tirupati. The goal was to learn more about postnatal mothers' cultural beliefs and practises. A total of 100 postpartum women were participated in the study. The data was gathered using a one-to-five rating system with thirty points ranging from strongly disagree to agree. According to the findings, the majority of postnatal mothers (90%) believed that the postpartum time is a cold phase, hence women opted to eat more heat-producing foods. Almost all of them were convinced that a specific diet, consisting of non-vegetarian foods, was good to body strength and milk production. 97% of people believe garlic enhances breast milk production and have consumed it [17].

A cross-sectional descriptive study was conducted on "Assessment of cultural beliefs and practices during the postnatal period in an urban field practice area of SRMC, Nandyal, Kurnool, and Andhra Pradesh". The purpose of this study was to look into postpartum women's views and habits regarding diet, rest, hygiene, and

confinement. Women who had given birth in the previous three months were among the participants. A pretested semi structured questionnaire was used to collect data. Over 75% of the 140 women had increased their dietary intake after giving birth. 58.5 percent and 63.6% of women avoided vegetables like Brinjal and fruits like papaya, respectively. 18.3% of mothers drank less than 500 mL of water per day, and 22% did not drink any milk at all. Housework was avoided by 67% of the women, while going outside was avoided by 79.6% [18].

## 5. CONCLUSION

Findings of the study proves that level of knowledge has been improved among study subjects. Pre-test and post-test level of knowledge was compared to assess the effectiveness of self-instructional module. Therefore, it is statistically interpreted that the self-instructional module was effective for improving knowledge of postnatal women concerning cultural beliefs of dietary habits.

## CONSENT

An informed consent taken from the postnatal women. Assessed the knowledge about cultural beliefs of dietary habit by pre-test first then implement self-instructional module and again assessed the knowledge by taking post-test.

## ETHICAL APPROVAL

It is not applicable.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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