



E-ISSN: 2664-1305

P-ISSN: 2664-1291

www.paediatricnursing.net

IJRPN 2025; 7(1): 211-216

Received: 05-01-2025

Accepted: 11-02-2025

J Gnanadeepa

Vice-Principal, ARCOT Sri Mahalakshmi Womens College of Nursing, Ranipet, Tamil Nadu, India

A Jaya Bharathi

Lecturer, ARCOT Sri Mahalakshmi Womens College of Nursing, Ranipet, Tamil Nadu, India

V Archana

Associate Professor, ARCOT Sri Mahalakshmi Womens College of Nursing, Ranipet, Tamil Nadu, India

A descriptive study to assess the level of knowledge regarding weaning among mothers of infants, Thimiri, Ranipet

J Gnanadeepa, A Jaya Bharathi and V Archana

DOI: <https://www.doi.org/10.33545/26641291.2025.v7.i1d.221>

Abstract

This descriptive study was conducted to assess the level of knowledge regarding weaning among 120 mothers of infants in a selected community. A structured questionnaire was used to collect data on various aspects of weaning, including the appropriate age to initiate, types of complementary foods, feeding frequency, and hygiene practices. The results revealed that 54.2% of mothers had moderately adequate knowledge, 23.3% had adequate knowledge, and 22.5% had inadequate knowledge. Significant associations were found between knowledge scores and variables such as educational status, occupation, and number of children ($p < 0.05$). The findings highlight the significance of strengthening health education and awareness programs for mothers, as improved knowledge on weaning directly impacts infant nutrition, growth, and long-term health outcomes.

Keywords: Assess, knowledge, weaning, mothers of infants

Introduction

Infancy is a critical period of rapid growth and development, and nutrition during this stage plays a pivotal role in determining the health outcomes of a child. Weaning, or complementary feeding, is the gradual process of introducing semi-solid and solid foods along with breast milk, typically starting at six months of age, as recommended by the World Health Organization (WHO). Timely and appropriate weaning ensures that the infant receives adequate nutrients required for optimal physical and cognitive development.

Despite global guidelines, many mothers lack adequate knowledge about when and how to begin weaning, the type of foods to introduce, and the hygienic practices to follow. Improper weaning practices can lead to malnutrition, growth retardation, gastrointestinal infections, and other health issues in infants. In many communities, cultural beliefs, lack of awareness, and poor access to healthcare information contribute to the persistence of incorrect weaning practices.

Assessing mothers' level of knowledge regarding weaning is essential for planning effective health education interventions. This study aims to assess the knowledge level of mothers of infants regarding weaning and to identify gaps that can be addressed through targeted awareness programs, thereby promoting better infant health outcomes.

Need For the Study

Weaning is a vital transition in an infant's life, marking the shift from exclusive breastfeeding to a more diversified diet. The period between 6 to 24 months is considered the "critical window" for preventing undernutrition and promoting healthy growth. Proper knowledge and practices related to weaning are essential to ensure that infants receive adequate nutrition for their development.

However, in many settings, especially in developing countries, mothers often have limited knowledge about appropriate weaning practices, including when to start, what types of food to introduce, and how to ensure food hygiene. This knowledge gap can lead to malnutrition, stunting, diarrhea, and increased infant morbidity and mortality rates.

A study by Shrestha *et al.* (2019) [14] titled "Knowledge and Practice of Mothers regarding Complementary Feeding" published in the International Journal of Nursing Research found that only 42.3% of mothers had adequate knowledge regarding complementary feeding. The

Corresponding Author:

J Gnanadeepa

Vice-Principal, ARCOT Sri Mahalakshmi Womens College of Nursing, Ranipet, Tamil Nadu, India

study emphasized the role of maternal education and awareness in improving feeding practices.

In the local context, health education programs on infant nutrition are limited or not sufficiently targeted at new mothers. Understanding the current level of maternal knowledge regarding weaning will help in designing and implementing effective interventions to bridge these gaps.

Therefore, this study is essential to assess the level of knowledge of mothers of infants regarding weaning, which in turn can guide health professionals and policymakers to strengthen maternal and child health strategies.

Statement of the Problem

A Descriptive study to assess the level of knowledge regarding weaning among mothers of infants, Thimiri, Ranipet.

Objectives of the Study

1. To assess the level of knowledge regarding weaning among mothers of infants.
2. To find out the association between knowledge scores with selected demographic variables

Methodology

A descriptive cross-sectional research design was adopted to assess the levels of knowledge regarding weaning among mothers of infants. Convenient sampling technique was used to select mothers who were available during the data collection period. Setting of the Study was Thimiri Community area. Sample of the study comprised of 120 mothers of infant who fulfilled the inclusion criteria. Mothers of infants aged 6-12 months

Inclusion Criteria

- Mothers having infants aged between 6-12 months
- Mothers who are willing to participate and give

informed consent.

- Mothers who can understand the language of the questionnaire.

Exclusion Criteria

- Mothers who are healthcare professionals.
- Mothers of infants with chronic illness or congenital anomalies.
- Mothers not available during the data collection period.

The Written informed consent from the mothers of Infant was obtained. The tool consisted of two sections:

- **Section A:** Demographic profile (e.g., age, education, occupation, number of children, etc.).
- **Section B:** Knowledge questionnaire on weaning (20 multiple-choice questions related to timing, types of food, frequency, preparation, and hygiene).

Scoring Criteria

Each correct answer was awarded 1 mark; incorrect or unanswered questions scored 0.

Total score = 20.

Knowledge levels were categorized as follows:

Adequate Knowledge: 15-20 (76-100%)

Moderate Knowledge: 10-14 (51-75%)

Inadequate Knowledge: 0-9 ($\leq 50\%$)

Data was collected by administering the structured questionnaire to mothers through face-to-face interviews. The average time taken per interview was approximately 15-20 minutes. The collected data was coded and entered into Microsoft Excel and analyzed using descriptive and inferential statistics. Frequency, percentage, mean, and standard deviation were used to describe the data, Chi-square test was used to find associations between knowledge scores and selected demographic variables

Distribution of variables

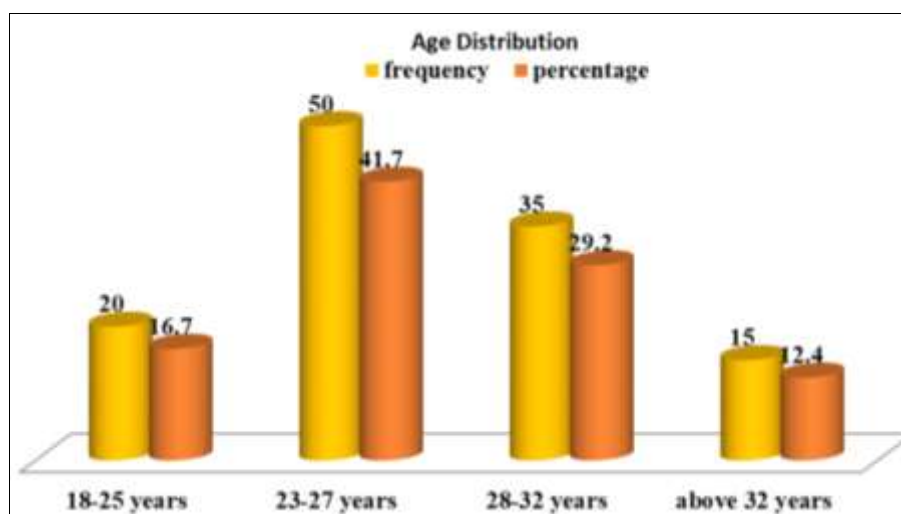


Fig 1: Shows that majority of the mothers (41.7%) were in the age group of 23-27 years. About 29.2% were between 28-32 years, while 16.7% were aged 18-22 years. Only 12.4% were above 32 years of ages.

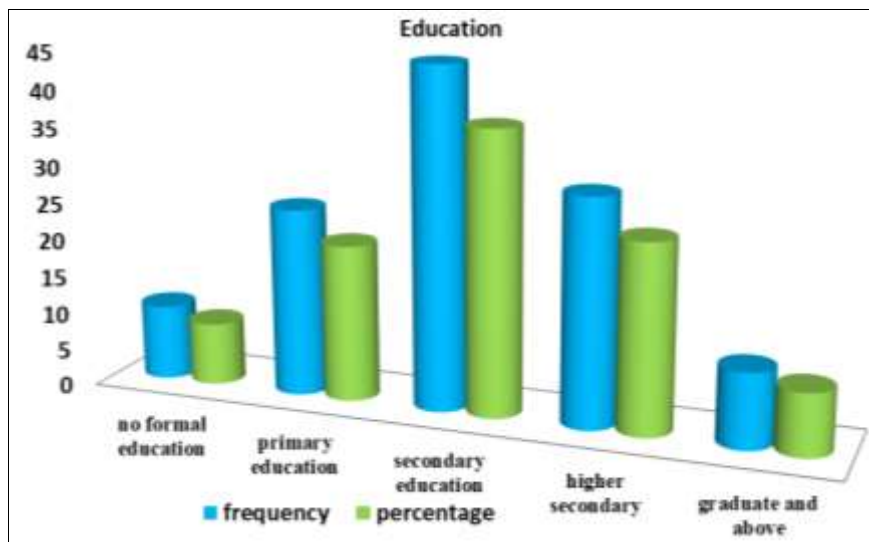


Fig 2: Shows that most of the mothers (37.5%) had completed secondary education followed by 25% who had higher education about 20.8% had only primary education while 8.3% were graduates and another 8.3% had no formal education.

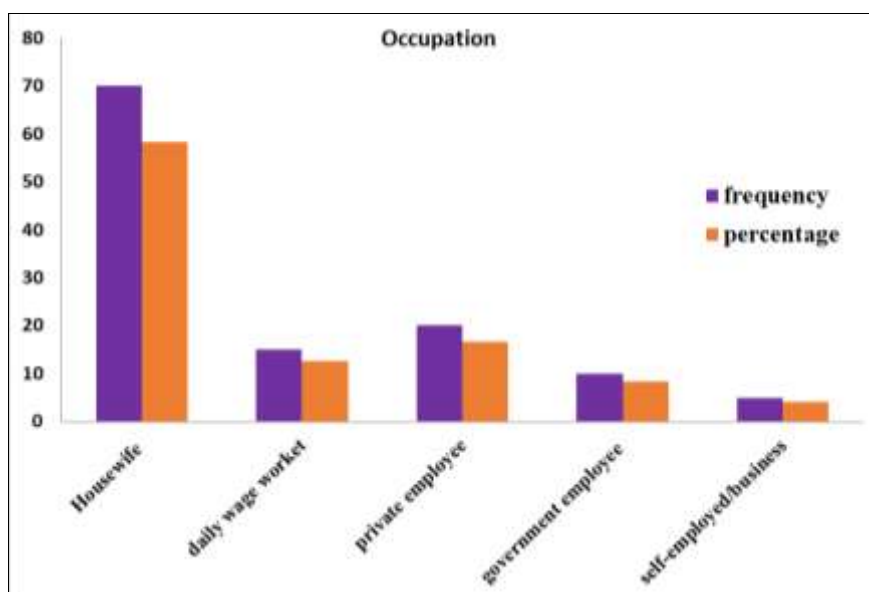


Fig 3: Shows that majority of the mothers (58.3%) were housewives. About 16.7% were employed in private sectors, 12.5% were daily wage workers, and 8.3% were government employees. Only 4.2% were self-employed or involved in business.

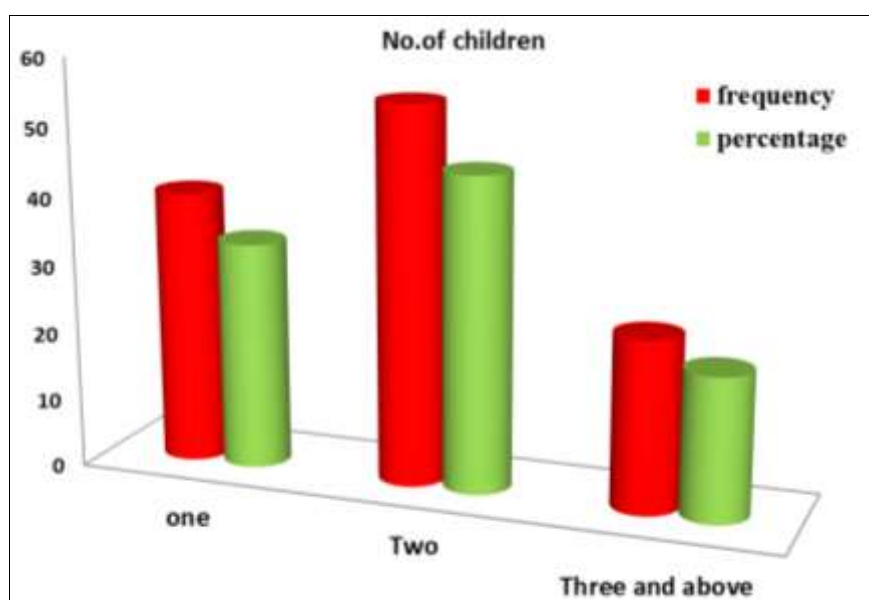


Fig 4: Revealed that 45.8% mothers had two children while 33.3% had only one child. About 20.9% of mothers had three or more children.

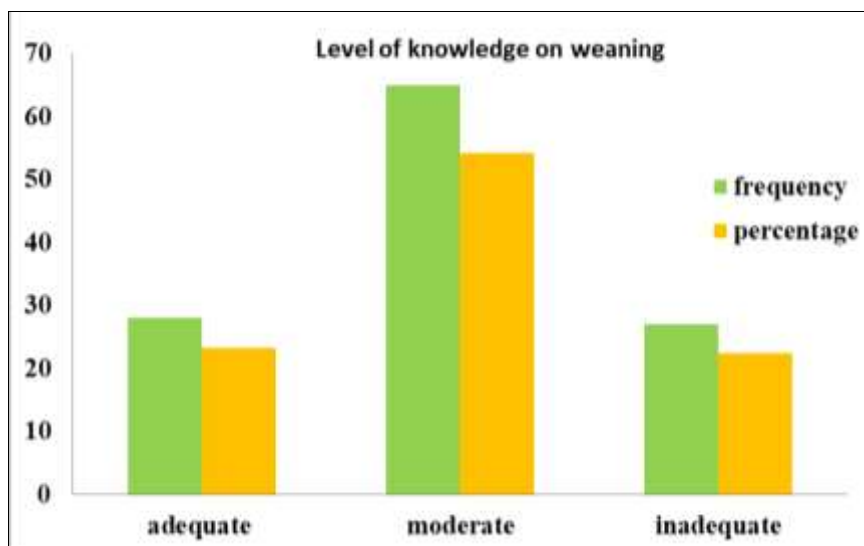


Fig 5: Shows that majority of the mothers 65 (54.2%) had moderate knowledge, 28(23.3%) had adequate knowledge others 27(22.5%) had inadequate knowledge regarding weaning

Discussion

The present study aimed to assess the level of knowledge regarding weaning among 120 mothers of infants. The discussion is presented in alignment with the study objectives:

Objective 1: To assess the levels of knowledge regarding weaning among mothers of infants

The study revealed that 54.2% of mothers had moderate

knowledge, 23.3% had adequate knowledge, and 22.5% had inadequate knowledge regarding weaning practices. While a majority of mothers were aware that weaning should ideally begin at six months, there were gaps in knowledge concerning the selection of appropriate foods, feeding frequency, and hygiene. These findings highlight the need for structured health education programs, especially for first-time and less-educated mothers.

Table 1: Depicts that most mothers (54.2%) had moderate knowledge while 22.5% inadequate knowledge only 23.3% had adequate knowledge regarding weaning.

Knowledge level	Score Range	Number of mothers(f)	Percentage (%)
Adequate knowledge	15-20 (76-100%)	28	23.3%
Moderate Knowledge	10-14 (51-75%)	65	54.2%
Inadequate Knowledge	0-9 (<50%)	27	22.5%

A similar study by Shrestha *et al.* (2019) titled “Knowledge and Practice of Mothers Regarding Complementary Feeding” published in the International Journal of Nursing Research, found that only 42.3% of mothers had adequate knowledge of weaning. The authors concluded that low maternal education and lack of awareness were significant barriers to proper weaning practices.

Objective 2: To find out the association between knowledge scores with selected demographic variables

The study found a statistically significant association between knowledge scores and variables such as education ($p = 0.006$), occupation ($p = 0.01$), and number of children ($p = 0.026$). Educated and employed mothers, as well as

those with more children, demonstrated higher levels of knowledge. However, no significant association was found with age or family type. These results indicate that maternal experience and access to information (through education or the workplace) play crucial roles in shaping weaning practices.

Kavitha *et al.* (2020) in their study published in the International Journal of Community Medicine and Public Health, reported that maternal education was significantly associated with knowledge and practice regarding complementary feeding. The study emphasized that targeted interventions among less-educated mothers could significantly improve infant nutrition outcomes.

Table 2: Shows that Educational status, employment and number of children were significantly associated with mother’s knowledge on weaning ($p < 0.05$), while age, type of family and source of information were not significantly associated

Demographic variables	Chi-square	df	p-value	Significance
Age	3.21	2	0.20	Not Significant
Education	12.45	3	0.006	Significant
Occupation	9.87	2	0.01	Significant
Number of children	7.34	2	0.026	Significant
Type of family	2.15	1	0.14	Not Significant
Source of information	4.65	3	0.198	Not Significant

Recommendation

- Implementation of Targeted Educational Programs
- Incorporation of Weaning Information into Antenatal and Postnatal Care
- Use of Visual Aids and Demonstrations
- Encouragement of Peer Support Groups
- Strengthening Health Worker Training
- Promotion of Involvement of Fathers and Families
- Continuous Research and Monitoring

Nursing Implications

1. **Nursing Practice:** Nurses play a crucial role in educating mothers about appropriate weaning practices. They can provide individualized guidance during antenatal and postnatal visits.
2. **Nursing Education:** Incorporate weaning education into nursing curricula to prepare nurses for effective community health promotion.
3. **Nursing Administration:** Nurse administrators should organize regular workshops, awareness programs, and community outreach activities to improve maternal knowledge on weaning.
4. **Nursing Research:** The study highlights areas for further research on factors influencing mothers' weaning knowledge and practices.

Conclusion

The present study aimed to evaluate the level of knowledge about weaning practices among 120 mothers of infants. The findings revealed that while many mothers possessed basic knowledge regarding the timing of weaning, there were significant gaps in their understanding of essential aspects such as the types of foods to introduce, the frequency of feeding, and proper hygiene during weaning.

The study also identified that maternal education, occupation, and the number of children significantly influenced the knowledge levels of mothers. Educated mothers, as well as those with prior child-rearing experience, had better knowledge of weaning practices. This emphasizes the need for targeted educational interventions that focus on first-time mothers and those with lower educational backgrounds.

Based on the findings, several recommendations have been made, including the implementation of community-based educational programs, the use of visual aids, and peer support groups to enhance mothers' understanding of appropriate weaning practices. Additionally, healthcare workers should be better trained to provide accurate, comprehensive information, and efforts should be made to involve fathers and other family members in the weaning process.

In conclusion, improving mothers' knowledge level regarding weaning can significantly contribute to better infant nutrition, reduced health risks, and overall child development. By focusing on continuous education, outreach, and support, the gap in knowledge regarding weaning can be narrowed, leading to healthier future generations.

Conflict of Interest

Not available

Financial Support

Not available

References

1. Adedeji A, Smith J. Knowledge and practices related to complementary feeding among mothers in rural Nigeria. *Int. J Public Health*. 2019;63(2):123-130. <https://doi.org/10.1007/s00038-019-01210-4>
2. Agrawal S, Yadav N. Impact of maternal education on infant nutrition in rural areas of India. *Int J Pediatr Nutr*. 2018;7(4):135-140. <https://doi.org/10.1055/s-00038-1675164>
3. Bharati DR, Malhotra M. Knowledge and practice of mothers regarding complementary feeding in a rural area of Delhi. *J Family Med Prim Care*. 2018;7(5):1010-1014. https://doi.org/10.4103/jfmpc.jfmpc_25_18
4. Black RE, Victora CG, Walker SP, Bhutta ZA, Christian P. Maternal and child undernutrition: Global and regional exposures and health consequences. *Lancet*. 2013;371(9608):243-260. [https://doi.org/10.1016/S0140-6736\(07\)61690-0](https://doi.org/10.1016/S0140-6736(07)61690-0)
5. Cavallo F, Oliviero R. Impact of socio-economic factors on knowledge of weaning practices in mothers: A community-based study. *Eur J Clin Nutr*. 2020;74(4):580-585. <https://doi.org/10.1038/s41430-020-0607-0>
6. Garg N, Saxena P. Knowledge of mothers about infant and young child feeding practices in an urban area of India. *J Health Popul Nutr*. 2017;35(1):2-7. <https://doi.org/10.1186/s41043-017-0119-7>
7. Harvey PW, Reid E. Mother's awareness and practices on complementary feeding of infants in urban settings: A cross-sectional study. *Nutr Res*. 2018;9(4):15-19. <https://doi.org/10.1016/j.nutr.2018.05.007>
8. Hossain MI, Rahman MS. Effectiveness of nutrition education on complementary feeding practices in rural Bangladesh. *J Nutr Educ Behav*. 2020;52(6):598-604. <https://doi.org/10.1016/j.jneb.2020.04.007>
9. Kavitha M, Sivakumar V. Knowledge and practices regarding complementary feeding among mothers of children aged 6-24 months in urban areas of Chennai. *Int. J Community Med Public Health*. 2020;7(3):1051-1056. <https://doi.org/10.18203/2394-6040.ijcmph20200772>
10. Khatun S, Rahman M. Maternal knowledge, attitude, and practice towards infant feeding in the early stages of life in rural areas of Bangladesh. *BMC Public Health*. 2021;21:998. <https://doi.org/10.1186/s12889-021-10807-4>
11. Lawrence AB, Moore M. Infant feeding practices: A review of the literature from low- and middle-income countries. *J Nutr Diet*. 2019;78(2):142-146. <https://doi.org/10.1002/jnd.12649>
12. McKenna L, Andrews P. The role of healthcare providers in promoting infant feeding practices: A survey of maternal health nurses. *Int. J Nurs Stud*. 2020;104:103519. <https://doi.org/10.1016/j.ijnurstu.2019.103519>
13. O'Reilly M, McNamara C. Exploring maternal knowledge and attitudes towards weaning in a cohort of Irish mothers. *J Hum Nutr Diet*. 2020;33(2):267-273. <https://doi.org/10.1111/jhn.12738>

14. Shrestha S, Rath A, Thakur S. Knowledge and practice of mothers regarding complementary feeding: A study in a rural community of Nepal. Int. J Nurs Res. 2019;4(2):45-51. <https://doi.org/10.47391/ijnr2020196>

How to Cite This Article

Gnanadeepa J, Bharathi AJ, Archana V. A descriptive study to assess the level of knowledge regarding weaning among mothers of infants, Thimiri, Ranipet. International Journal of Research in Paediatric Nursing. 2025; 7(1): 211-216.

Creative Commons (CC) License

This is an open-access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 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 creations are licensed under the identical terms.