

Article

Nurturing Futures: Evaluating IYCF Awareness and Practices among Women of Reproductive Age in Shimla, Himachal Pradesh

Akanksha Nadda¹, Ankush Bhagta²

¹ Medical Officer (Specialist Pediatrics), Civil Hospital, Sunni, District Shimla, Himachal Pradesh, 171301, India.

² Junior Resident, Department of Anesthesia, PGIMER, Chandigarh, 160012, India.

* Correspondence: ankushbhagta@gmail.com

Received: 05 February 2024; Revised: 20 February 2024; Accepted: 30 March 2024; Published: 30 April 2024.

Abstract: Background: The initial years of a child's life are crucial for their overall development and health. Practices such as exclusive breastfeeding and timely introduction of complementary foods are essential for reducing child mortality and improving health outcomes. This study investigates the awareness and implementation of IYCF practices among women of reproductive age in the culturally unique setting of Shimla, Himachal Pradesh, aiming to fill a notable gap in current research and contribute towards the Sustainable Development Goals (SDGs) related to health and nutrition.

Materials and Methods: A descriptive, cross-sectional survey was conducted from October to December 2023, involving 400 women of reproductive age residing in Shimla for at least 12 months. Data collection was facilitated through a pre-tested Google Form questionnaire, covering socio-demographic details and a wide range of questions on IYCF practices. Analysis was performed using Epi Info V7, focusing on frequencies and percentages to evaluate awareness and practices.

Results: The study revealed high awareness levels, with 91.75% of respondents correctly identifying the WHO-recommended duration for exclusive breastfeeding. Overall, 34% exhibited very good knowledge of IYCF practices, while knowledge on specific areas such as signs of adequate breast milk intake and the importance of iron-rich foods showed room for improvement. A significant rural-urban divide in responses indicated differential access to information and resources.

Conclusion: The awareness of IYCF practices among the study population is generally high, yet targeted interventions are needed to address specific knowledge gaps. These findings underscore the importance of tailored public health strategies to enhance maternal and child health in Shimla, contributing valuable insights to the national discourse on nutrition and health policy.

Keywords: Infant and Young Child Feeding (IYCF), Breastfeeding, Complementary Feeding, Awareness, Shimla, Himachal Pradesh, Public Health, Nutrition.

How to cite: Akanksha Nadda & Ankush Bhagta (2024). Nurturing Futures: Evaluating IYCF Awareness and Practices among Women of Reproductive Age in Shimla, Himachal Pradesh. IAR JrHlthCrePrvntn. Vol;4 Issue;2 page no.01-06

1. Introduction

In the landscape of global health, the foundational years of a child's growth are critical for ensuring a pathway towards achieving lower child mortality rates and improving maternal health outcomes. Practices related to feeding infants and young children — specifically, exclusive breastfeeding during the first half-year of life and introducing appropriate solid foods thereafter while continuing breastfeeding for two years or more — are recognized as crucial strategies for bolstering child health. However, the application and understanding of these Infant and Young Child Feeding (IYCF) guidelines vary widely, especially across areas with distinct cultural practices and levels of health education. [1–4]

Nestled in the northern part of India, Shimla district in Himachal Pradesh offers a unique vantage point for investigating how well women of childbearing age understand and apply IYCF norms. This

group's knowledge and practices are vital for the health trajectory of their offspring, influencing not only immediate nutritional outcomes but also long-term well-being. Despite the critical nature of this issue, detailed investigations into IYCF awareness within Shimla's unique socio-economic and cultural context are scarce, presenting a notable research gap that this study intends to bridge.

Our research aims to meticulously assess the awareness levels and the implementation of IYCF practices among reproductive-age women in Shimla. By identifying the degree of familiarity with and adherence to IYCF recommendations, the study seeks to highlight factors that either support or hinder the proper nutritional practices. Such an investigation is essential for crafting precise public health interventions that can elevate both maternal and child health in the district. Moreover, it is expected that the insights gained will enrich the national conversation on nutrition and health policy, offering evidence-based recommendations for enhancing child development and well-being across India.

This study is poised not just to fill an existing knowledge gap but to also contribute towards the global efforts encapsulated in the Sustainable Development Goals (SDGs), particularly those focused on health and sustainable communities. By closely examining the status of IYCF awareness and practices in Shimla, the research aims to forge a pathway towards improved nutritional strategies and health outcomes for children, ensuring a healthier future where every child has the chance to reach their full potential.

1.1. Objectives of the Study

To evaluate the awareness about IYCF Practices among women of reproductive age group in District Shimla, Himachal Pradesh.

2. Research Methodology

- Research Approach -Descriptive
- Research Design- Cross-sectional survey design
- Study area: District Shimla, Himachal Pradesh
- Study duration- between October 2023 to December 2023
- Study population: All women of reproductive age group who were staying in the District Shimla , Himachal Pradesh for 12 months or more.
- Sample size- 400 women of reproductive age group assuming 50% have adequate knowledge regarding Infant and Young Child Feeding (IYCF) Practices, 5% absolute error, 95% confidence level, and 5% non-response rate.
- Study tool: A google form questionnaire consisting of questions regarding socio-demography and Infant and Young Child Feeding (IYCF) Practices was created. The questionnaire was initially pre-tested on a small number of women of reproductive age group to identify any difficulty in understanding by the respondents.
- Description of Tool-

a) Demographic data survey instrument: The demographic form elicited information on participants' background: age, marital status, religion, employment, education and many more.

b) Questionnaire: The questionnaire contains 20 structured questions regarding knowledge about Infant and Young Child Feeding (IYCF) Practices. One mark was given for each correct answer and zero for incorrect answer. The maximum score was 20 and minimum score was zero in each category. Scoring was done on the basis of marks as >80%(16-20)=very good,60-79%(12-15) =Good,41-59% (8-11)=Fair,<40% (< 8)=poor

- Validity of tool - by the experts in this field
- Data collection- Data was collected under the guidance of supervisors. The google form questionnaire was circulated via online modes like email and social media platforms like Whatsapp groups, Facebook, Instagram and LinkedIn among women of reproductive age group in both rural and urban areas of District Shimla ,Himachal Pradesh till the 400 responses were collected.
- Data analysis- Data was collected and entered in Microsoft excel spreadsheet, cleaned for errors and analyzed with Epi Info V7 Software with appropriate statistical test in terms of frequencies and percentage.
- Ethical Considerations- Participants confidentiality and anonymity was maintained.

Sampling in this research was nonprobability sampling with a purposive sampling technique, namely a technique for determining samples that meet the criteria desired by the researcher. In this study, the sample size was 40 hypertensive patients who were Pronalis participants. Bivariate analysis in this study used a paired t test to determine the difference in scores between the pre-test and post-test as well as the effect of health education using leaflet media on self-care management of hypertension.

3. Result

The goal of the current study was to assess the awareness about Infant and Young Child Feeding (IYCF) Practices among women of reproductive age group in District Shimla, Himachal Pradesh through a non-experimental descriptive survey.

A total of 400 respondents including 163 (40.75%) were from urban areas and 237 (59.25%) from rural areas participated in the study. (Table 1)

Table 1. Knowledge regarding Infant and Young Child Feeding (IYCF) Practices among study participants

S.No.	Statements	Frequency of Correct Responses	Percent
	What is the recommended duration for exclusive breastfeeding according to WHO guidelines?	367	91.75
	Can you name some benefits of exclusive breastfeeding for infants?	342	85.5
	What are the signs that indicate a baby is getting enough breast milk?	235	58.75
	When should complementary feeding be introduced to an infant's diet?	287	71.75
	What are some appropriate first foods for introducing complementary feeding to a baby?	264	66
	How often should a baby be breastfed or given complementary foods at 6-8 months of age?	276	69
	What are some common challenges mothers may face while breastfeeding, and how can they be addressed?	231	57.75
	Can you explain the importance of iron-rich foods in a child's diet?	228	57
	What are some suitable sources of iron for infants and young children?	219	54.75
	How can mothers ensure their child receives adequate vitamin D?	178	44.5
	What are the risks associated with early introduction of solid foods before 6 months of age?	181	45.25
	Can you explain the concept of responsive feeding?	167	41.75
	How can mothers safely store and prepare breast milk and formula?	188	47
	What are the potential consequences of not following proper hygiene practices during feeding?	213	53.25
	What should be done if a child refuses certain types of foods?	194	48.5
	How can mothers support a smooth transition from breastfeeding to complementary feeding?	225	56.25
	Can you name some indicators that a child may be ready for weaning?	216	54
	What are some signs of a food allergy or intolerance in infants?	182	45.5
	How can mothers ensure their child receives enough fluids as they transition to solid foods?	193	48.25
	Can you discuss the importance of continued breastfeeding alongside complementary feeding?	261	65.25

In the present study 34% (136) females had very good knowledge (16-20 marks) towards Infant and Young Child Feeding (IYCF) Practices, 39.75% (159) having good knowledge (12-15 marks), 21.25% (85) having fair knowledge (8-11 marks) and 6% (24) having poor knowledge (<8 marks). (Figure 1)

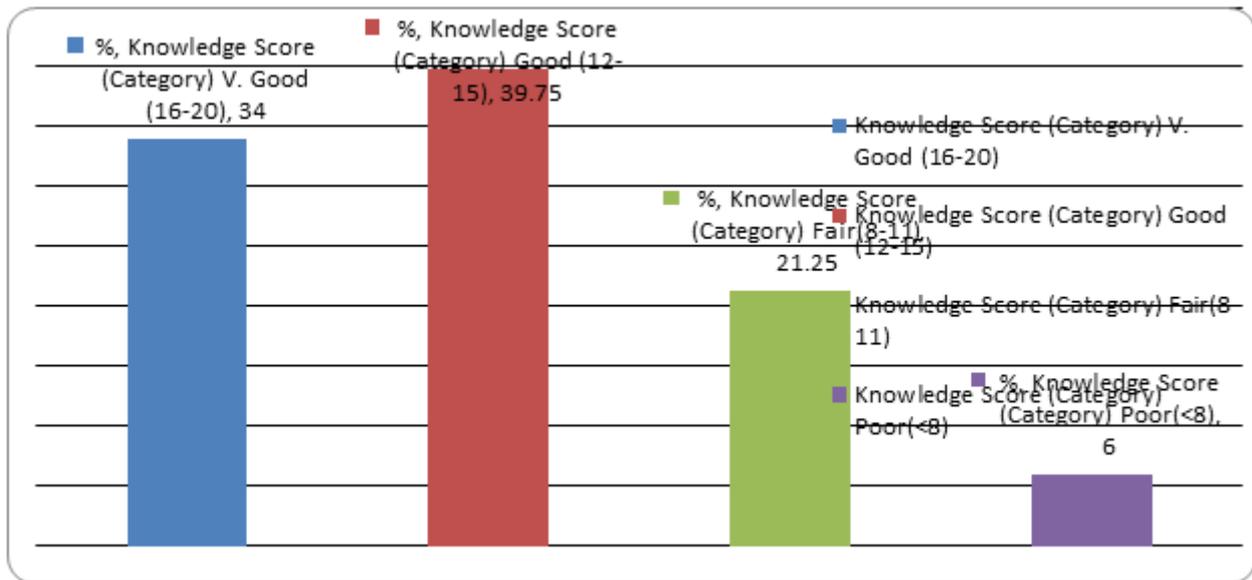


Figure 1. Knowledge score regarding Infant and Young Child Feeding (IYCF) Practices among study participants

Maximum =20 Minimum=6

4. Discussion

This study aimed to evaluate the awareness and implementation of IYCF practices among women of reproductive age in Shimla, revealing critical insights into maternal and child nutrition within the region. With 34% of the participants demonstrating very good knowledge, and a significant portion showing good to fair understanding, the results underscore a promising level of awareness about IYCF practices among the study population. These findings align with global research underscoring the importance of breastfeeding and appropriate complementary feeding in reducing child mortality and supporting healthy development.[5-9]

A notable 91.75% of respondents correctly identified the recommended duration for exclusive breastfeeding according to WHO guidelines, reflecting widespread recognition of breastfeeding's foundational role in child health. This is consistent with findings from other regions, indicating a strong global message on the benefits of exclusive breastfeeding. However, the study also highlighted areas needing improvement, such as knowledge on signs of adequate breastfeeding, management of common breastfeeding challenges, and the importance of iron-rich foods, where responses fell below 60%. [10-12]

Comparatively, these findings suggest a more nuanced understanding of IYCF practices in Shimla than in certain other contexts, where knowledge gaps remain more pronounced. The rural-urban divide, with a larger portion of rural respondents, hints at differential access to information and resources, a factor that has been identified in previous literature as a determinant of IYCF knowledge and practices. [13-15]

The study's cross-sectional design allowed for a broad snapshot of current practices and attitudes, echoing the work of previous studies who found varying levels of IYCF awareness across different Indian states. However, like all studies of this nature, it is not without limitations. The reliance on self-reported data may introduce bias, and the digital distribution of surveys could have excluded those without internet access, potentially skewing results towards more educated, urban participants. This suggests a need for diverse methodological approaches to fully capture the spectrum of IYCF practices across different communities. [16,17]

Future research should focus on longitudinal studies to understand changes in IYCF practices over time, especially in response to public health interventions. Additionally, qualitative studies could offer

deeper insights into the cultural, socio-economic, and environmental factors influencing feeding practices. Implementing community-based participatory research (CBPR) approaches may also enhance engagement and effectiveness of IYCF programs. [15,18]

5. Conclusion

In conclusion, while the awareness of IYCF practices among women of reproductive age in Shimla is generally high, there remain specific areas where knowledge could be improved. These findings provide a valuable foundation for developing targeted interventions aimed at enhancing IYCF practices, ultimately contributing to better health outcomes for children in Shimla and beyond. By addressing the identified gaps, stakeholders can work towards fulfilling the SDGs related to health, nutrition, and sustainable communities.

Conflicts of Interest: Write conflict of interests or write "The authors declare that they do not have any conflict of interests."

References

- [1] Engelhart, Alexis, et al. "Sustainability of breastfeeding interventions to reduce child mortality rates in low, middle-income countries: a systematic review of randomized controlled trials." *Frontiers in Health Services* 2 (2022): 889390. <https://doi.org/10.3389/frhs.2022.889390>
- [2] Beluska-Turkan, Katrina, et al. "Nutritional gaps and supplementation in the first 1000 days." *Nutrients* 11.12 (2019): 2891. <https://www.mdpi.com/2072-6643/11/12/2891>
- [3] Infant and Young Child Feeding. Available at: <https://www.who.int/news-room/fact-sheets/detail/infantandyoungchildfeeding> (Accessed on 12 March 2024)
- [4] Infant and Young Child Feeding. Available at: <https://www.unicef.org/media/145641/file/Nutrition%20Global%20Annual%20Results%20Report%202022.pdf>(Accessed on 12 March 2024)
- [5] Saxena, Vartika, et al. "Assessment of Infant and Young Child Feeding (IYCF) practices in rural areas of Dehradun, Uttarakhand." *Journal of Family Medicine and Primary Care* 11.7 (2022): 3740-3745. https://journals.lww.com/jfmpc/fulltext/2022/07000/assessment_of_infant_and_young_child_feeding.56.aspx
- [6] Mekonnen, Mathewos, et al. "Infant and young child feeding practice among mothers of children age 6 to 23 months in Debrelibanos district, North Showa zone, Oromia region, Ethiopia." *PloS one* 16.9 (2021): e0257758. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0257758>.
- [7] Parashar, Anupam, et al. "Infant and young child feeding practices-insights from a cross-sectional study in a hilly state of North India." *International Journal of Nutrition, Pharmacology, Neurological Diseases* 5.3 (2015): 103-107. https://journals.lww.com/ijnp/fulltext/2015/05030/infant_and_young_child_feeding_practices__3.aspx
- [8] Legesse, Seid, et al. "Infant and Young Child Feeding Practices and Associated Factors Among Mothers of Children Aged 0-23 Months in Kalu District, North-East Ethiopia: Community Based Cross-Sectional Study." *J Nutr Food Sci* 11 (2021): 794. <https://www.academia.edu/download/80086311/infant-and-young-child-feeding-practices-and-associatedfactorsamongmothersofchildrenaged023monthsinkaludistri.pdf>
- [9] Deshpande, Mugdha, and Devaki Gokhale. "Knowledge, attitude and practices regarding infant and young child feeding among lactating mothers from rural areas of Nanded, Maharashtra." *Biomedical and Pharmacology Journal* 13.2 (2020): 833-841. <https://dx.doi.org/10.13005/bpj/1949>
- [10] Exclusive breastfeeding. Available at: Kramer MS, Kakuma R. Optimal duration of exclusive breastfeeding. *Cochrane Database Syst Rev.* 2012 Aug 15;2012(8):CD003517.
- [11] <https://www.who.int/tools/elena/interventions/exclusive-breastfeeding>
- [12] Dukuzumuremyi, Jean Prince Claude, et al. "Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: a systematic review." *International breastfeeding journal* 15 (2020): 1-17. <https://link.springer.com/article/10.1186/s13006-020-00313-9>
- [13] Khandelwal, Shweta, et al. "Infant young child feeding practices in an Indian maternal-child birth cohort in Belagavi, Karnataka." *International Journal of Environmental Research and Public Health* 19.9 (2022): 5088. <https://www.mdpi.com/1660-4601/19/9/5088>
- [14] Lokesh, N., Kulkarni, P. R., Basheer, S., et al. "Comparative Study of Feeding Practices Among Children Less Than Two Years Attending Rural and Urban Primary Health Centers, Mysuru, Karnataka." *International Journal of Community Medicine and Public Health*, vol. 10, no. 9, 2023, pp. 3219-3225.
- [15] Tariqujjaman, Md, et al. "Between and within-country variations in infant and young child feeding practices in South Asia." *International Journal of Environmental Research and Public Health* 19.7 (2022): 4350. <https://www.mdpi.com/1660-4601/19/7/4350>

- [16] Dhami, Mansi Vijaybhai, et al. "Infant and young child feeding practices among adolescent mothers and associated factors in India." *Nutrients* 13.7 (2021): 2376. <https://www.mdpi.com/2072-6643/13/7/2376>
- [17] Radjasegarane, Arulprasad, et al. "A cross sectional study on optimal infant and young child feeding practices with reference to WHO indicators in a rural area of Puducherry." *Int J Community Med Public Health* 6.4 (2019): 1684. <https://www.academia.edu/download/74555187/2954.pdf>
- [18] Ahishakiye, Jeanine, et al. "Qualitative, longitudinal exploration of coping strategies and factors facilitating infant and young child feeding practices among mothers in rural Rwanda." *BMC public health* 21 (2021): 1-13. <https://link.springer.com/article/10.1186/s12889-020-10095-8>



© 2024 by the authors; licensee iARCON, Assam, India. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).