Assessment of Knowledge on Weaning among Mothers of Urban Slum

Dr. Savitha S.V1*, Dr. Sunanda G.T2, Dr. Patallia B.A.3, Dr. Nagarathnamma G.4

ABSTRACT

Background: Today’s children are the wealth of tomorrow. They are regarded as the future citizens of the nation. Every child has the right to have a healthy growth. Hence it is essential to nurture them to strive for their well being. Infancy is a period where rapid growth and development takes place. To attain this, the child requires good nutrition. As the child grows, the demand of nutrients increases. Insufficiency in the dietary intake may lead to poor growth and development and results in various physical, social and psychological problems later.

Aim: The study aim to assess the level of knowledge on weaning among mothers of selected urban slum. Method: A descriptive approach was used to collect data from 50 mothers, selected by purposive sampling technique in a selected Urban Slum, to assess the level of knowledge on weaning among mothers. Data were collected by using structured interview schedule. Results: Results reveals that highest percentage of (40.4% SD=3.49) of mothers had average knowledge. Conclusion: This study results revealed that there is a deficiency in knowledge of mothers on weaning, and There is a need for health care system interventions, family interventions, and public health education campaigns to promote optimal practice of weaning, especially in less educated women.

Keywords: Knowledge, Weaning, Mothers, Urban, Slum

Today’s children are the wealth of tomorrow. They are regarded as the future citizens of the nation. Every child has the right to have a healthy growth. Hence it is essential to nurture them to strive for their well being.

Infancy is a period where rapid growth and development takes place and the child is well molded. To attain this, the child requires good nutrition and it is the fundamental of all life. As the child grows, the demand of nutrients increases. Insufficiency in the dietary intake

1 M.Sc(N), PhD, RN, Principal and Professor, Department of Community Health Nursing, SJM Institute of Nursing Sciences, Basaveshwara Hospital and Research Centre Campus, Chitradurga- 577501, Karnataka, India
2 M.Sc(N), PhD, RN, Assistant Professor, Department of Psychiatric Nursing, Dharwad Institute of Mental Health and Neurosciences, Belagavi Road, Dharwad 580008, India
3 Principal, Shushruthi College of Nursing, Bangalore, India
4 Professor, Department of Community Health Nursing, Government College of Nursing, Fort, Bangalore, India
*Responding Author

Received: March 13, 2018; Revision Received: April 3, 2018; Accepted: May 20, 2018
may lead to poor growth and development and results in various physical, social and psychological problems later.

The term Weaning is derived from Anglo Sanon word “wenian”. The term ‘to wean’ means “to accustom” and it describes the process by which the infant gradually become accustomed to the full adult diet. The concise oxford dictionary says to wean is “to teach the sucking child to feed other-wise than from breast”. Weaning is often seen as the end of something. However, it is more appropriately viewed as a beginning. *(Brylin Highton, 2001)*.

The physiological process of weaning is complex and involves microbiological, biochemical, nutritional, immunological and psychological adjustments. The introduction of new food is important both socially and nutritionally. The beginning of weaning is the beginning of a time of great change for both the mother and the child. *(Brylin Highton, 2001)*.

When breast milk is no longer enough to meet the nutritional needs of the infant, complementary foods should be added to the diet of the child. The transition from exclusive breastfeeding to family foods, referred to as complementary feeding, typically covers the period from 6 to 18-24 months of age, and is a very vulnerable period. It is the time when malnutrition starts in many infants, contributing significantly to the high prevalence of malnutrition in children less than five years of age world-wide.

A world wide survey conducted by **WHO (2000)** showed that every year, there are about 120 million infants born, of which majority (85%) are in the developing countries. Before they reach the age of one year, 10% of these children die and another 4% die before they are five years old. The major causes for the mortality and morbidity among infants are malnutrition, diarrhoea and infections. In India 75% of the hospital admissions of infants and children are due to malnutrition (40%), diarrhoeal disease (15%) and infectious disease (30%). This can be prevented by meeting the nutritional needs of the infants through weaning *(Bhavani, 2000)*.

Most of the mothers come to hospital only when the child is sick. The teaching modules if effective may be used by the peripheral level of health workers in the community to educate the mothers on the child nutrition through adequate knowledge on the Weaning components, such as correct age of initiating and process of Weaning, its importance, and principles, problems related to early and late Weaning. For the above reasons, the investigator personally felt that there is a need to assess the knowledge of mothers regarding weaning, and to update knowledge aspect of weaning.

**MATERIALS AND METHODS**

**Aim**

- Aim of the study to assess the level of knowledge on weaning among mothers of selected urban slum.
Assessment of Knowledge on Weaning among Mothers of Urban Slum

Design
A descriptive survey approach was adapted to conduct study.

Participants
The participants were 50 mothers of having below 1 year old child.

Study Instruments:
Based on the aim of the study, a structured interview schedule was prepared in order to assess the knowledge of mothers regarding weaning. It is considered to be an appropriate instrument. The interview schedule was constructed in two parts, Section I: Includes items related to the demographic variables of the respondents about age of the mother, religion, type of family, educational status, occupation, family income per month and number of children. Section II: Consists of 30 items related to knowledge on weaning under 10 areas namely meaning importance, age of introducing, principles of weaning-hygiene, selection, preparation, feeding, preservation and storing, problems related to early and late weaning and commercial food. The correct response carries the score of one. Total score is 30.

Data collection
Prior permission was obtained from the medical officer, District Health and family welfare Officer, Chitradurga, Karnataka, selected Urban Slum to conduct the study. Investigator utilized the purposive sampling technique to select the study subjects. Investigator personally visited each respondent, introduced herself to the mothers and explained the purpose of the study and ascertained the willingness of the participants. The respondents were assured anonymity and confidentiality of the information provided by them. Interviews were conducted during their leisure time. The participants were made comfortable and relaxed. Data were collected with the help of interview schedule; approximately 3 to 4 mothers were interviewed per day and about 45 minutes to 1 hour spent with each mother.

Ethical consideration
The study was approved by the institutional ethical committee. The information was provided both orally and in written form.

Data analysis
Descriptive and inferential statistics were used and results were narrated in the form of tables.

RESULTS
Findings related to socio-demographic characteristics
Most of the mothers (62%) were in the age group of 21-30 years and between 31-40 years were only (12%). It reveals that all most all the mothers were in 21-30 years of age group. Majority of mothers (54%) under the study belongs to Hindu Religion. Highest percent, 54% of mothers (27) belongs to joint family, 42% of mothers (27) belongs to nuclear family and only 4% of mother (2) belongs to extended family. Distribution of mothers according to
Assessment of Knowledge on Weaning among Mothers of Urban Slum

educational status shows that highest percent, (48%) of mothers had primary education. Distribution of mothers according to occupation shows that most of mothers (86%) were house wives. Highest percent, (36%) of mothers had family income of Rs2001-3000. Distribution of mothers according to number of children, most of the mothers (60%) had two children.

Over all and item wise Knowledge Scores of Mothers Regarding Weaning.
The overall mean percent, 40.2% (SD = 3.49) of the maximum score revealing average knowledge. Highest mean percent, 60% (SD =0.5) was in the area of ‘preservation and storage’ and more or less similar mean percentage 42% (SD=0.5) was in the area of ‘problems related to early and late weaning’ revealing average knowledge. The lowest mean percent, 32% (SD=0.5) was in the area of commercial food revealing poor knowledge. However in other areas the mean percent, 41%( SD=0.9) for meaning and 40% (SD =0.6), for importance , 33% (SD=0.8) for age of introducing, 40% (SD=0.8) for selection, 37% (SD=1,0) for preparation, 36% (SD=1.6) for feeding, 43% (SD=0.8) for hygiene, (Table-1).

Table 1: Overall and item wise Knowledge Scores Of Mothers Regarding Weaning.

| Sl. No. | Areas                          | Number of questions | Min. Scores | Max. Scores | Mean Scores | Mean % | Standard Deviation |
|---------|--------------------------------|---------------------|-------------|-------------|-------------|--------|-------------------|
| 1.      | Overall                        | 30                  | 0           | 30          | 11.5        | 40.4   | 3.49              |
| 2       | Meaning                        | 3                   | 0           | 3           | 1.2         | 41     | 0.9               |
| 3       | Importance                     | 2                   | 0           | 2           | 0.8         | 40     | 0.6               |
| 4       | Age of Introducing             | 4                   | 0           | 4           | 1.3         | 33     | 0.8               |
| 5       | Hygiene                        | 2                   | 0           | 2           | 0.9         | 43     | 0.8               |
| 6       | Selection                      | 2                   | 0           | 2           | 0.8         | 40     | 0.8               |
| 7       | Preparation                    | 4                   | 0           | 4           | 1.5         | 37     | 1.0               |
| 8       | Feeding                        | 8                   | 0           | 8           | 2.9         | 36     | 1.6               |
| 9       | Preservation and storing       | 1                   | 0           | 1           | 0.6         | 60     | 0.5               |
| 10      | Problems related to early and late weaning | 3       | 0           | 3           | 1.3         | 42     | 0.5               |

Area wise Analysis of Correct Responses to Various Knowledge Items on Weaning.

- Meaning, Importance and Age of Introducing Weaning.
Correct responses of mothers regarding meaning, importance and age of introducing weaning shows that in the area of meaning the highest percent, (54%) of mothers correctly responded for the item ‘understanding of weaning’ revealing average knowledge, lowest percent, (26%) was found in the areas ‘meaning’ and ‘age of introducing weaning’ for the item ‘weaning process’ and ‘conditions of weaning’ revealing poor knowledge.
Assessment of Knowledge on Weaning among Mothers of Urban Slum

➢ Hygiene, Selection of Weaning Food and Preparation of Weaning Food.
Correct responses of mothers regarding hygiene, Selection of weaning food and preparation of weaning food shows that in the area of selection of weaning food, the highest percent, (56%) of mothers correctly responded for the item kind of food items selected revealing average knowledge, lowest percent (22%) was found in the area of preparation of weaning food for the item advantages of preparing weaning food at home revealing poor knowledge.

➢ Feedings Of Weaning Food, Preparation And Storage, Problems Related To Early And Late Weaning And Commercial Food.
Correct responses of mothers regarding feeding, preparation & storage, problems related to early and late weaning and commercial food shows that highest percent, (66%) of mothers correctly responded in the area of feeding of weaning food for the item duration of preserving cooked weaning food revealing good knowledge. Lowest percent, (18%) of mothers correctly responded in the area of feeding for the item type of food given initially revealing poor knowledge. (Table -2)

Table-2: Area wise Analysis of Correct Responses to Various Knowledge Items on Weaning.

| Areas                    | Items                                      | Correct responses Number | Percentage |
|--------------------------|--------------------------------------------|--------------------------|------------|
| Meaning                  | Understanding of weaning                   | 27                       | 54         |
|                          | Weaning period in infancy                  | 21                       | 42         |
|                          | Weaning process                            | 13                       | 26         |
| Importance of weaning    | Essentials of weaning                      | 24                       | 48         |
|                          | Use of weaning food                        | 16                       | 32         |
| Age of introducing weaning | Ideal age to start weaning                | 14                       | 28         |
|                          | Conditions of weaning                      | 13                       | 26         |
|                          | Essential of weaning to start at appropriate period | 22                     | 44         |
|                          | Age of giving normal diet                  | 16                       | 32         |

DISCUSSION
The present study results supported with several study which were conducted on knowledge regarding weaning. The overall mean percent, 40.2% (SD =3.49)of the maximum score revealing average knowledge. Highest mean percent, 60% (SD =0.5) was in the area of ‘preservation and storage’ and more or less similar mean percentage 42% (SD=0.5) was in the area of ‘problems related to early and late weaning’ revealing average knowledge. The lowest mean percent, 32% (SD-0.5) was in the area of commercial food revealing poor knowledge. However in other areas the mean percent, 41% for meaning and 40% for importance (S D =0.6), 33% (SD-0.8) for age of introducing, 40% (SD=0.8) for selection, 37% (SD=1.0) for preparation, 36% (SD-1.6) for feeding, 43% (SD-0.8) for hygiene (table – 3 ). The study findings are consistent with the study of Muhammed Khalil (2005) and Eman S. Mohamed(2014) who observed that 97% of working women initiated weaning at
Assessment of Knowledge on Weaning among Mothers of Urban Slum

6 months, 45% of housewives initiated weaning at 4–6 months, 39% of mothers were aware of weaning food and 27% had poor knowledge regarding weaning.

**Item Wise Analysis of Correct Responses To Various Knowledge Items On Weaning.**

1) **Meaning, Importance And Age Of Introducing Weaning:** Correct responses of mothers regarding meaning, importance and age of introducing weaning shows that in the area of meaning the highest percent, (54%) of mothers correctly responded for the item ‘understanding of weaning’ revealing average knowledge, lowest percent, (26%) was found in the areas ‘meaning’ and ‘age of introducing weaning’ for the item ‘weaning process’ and ‘conditions of weaning’ revealing poor knowledge. The study findings are consistent with the findings of Beckle A, Berhave Y (1999), who also reported that 40% of mothers initiated weaning at the age of 4–6 months. Das DK Ahmed S (1995) stated that most of mothers did not have correct knowledge about weaning food and appropriate time for introduction of weaning foods.

2) **Hygiene, Selection Of Weaning Food And Preparation Of Weaning Food.**
Correct responses of mothers regarding hygiene, Selection of weaning food and preparation of weaning food shows that in the area of selection of weaning food, the highest percent, (56%) of mothers correctly responded for the item kind of food items selected revealing average knowledge, lowest percent (22%) was found in the area of preparation of weaning food for the item advantages of preparing weaning food at home revealing poor knowledge. This study findings are consistent with the findings of Krug R, Gesicke G.J (2003) who also reported that weaning diets were compromised due to poor food chances and preparation practices.

3) **Feedings Of Weaning Food, Preparation And Storage, Problems Related To Early And Late Weaning And Commercial Food.**
Correct responses of mothers regarding feeding, preparation & storage, problems related to early and late weaning and commercial food shows that highest percent, (66%) of mothers correctly responded in the area of feeding of weaning food for the item duration of preserving cooked weaning food revealing good knowledge. Lowest percent, (18%) of mothers correctly responded in the area of feeding for the item type of food given initially revealing poor knowledge. This study findings are consistent with the findings of Aggarwal A, Verma S (2008) who observed that 46.5% of mothers had knowledge about adequate quantity of weaning food, 25.5% of mothers had knowledge regarding consistency of food, 46% about proper timing of weaning. The present study findings are also consistent with the findings of Walker R.B, Conn JA (2006) who observed that 84% mothers were aware of weaning food and 77% about problem of using commercial food.

Based on the findings of the present study, it was concluded that: urban slum women had poor knowledge about the weaning. However, this might be due to a low level of education. Hence, it is recommended to develop successful infant-feeding interventions aimed at promoting overall infant health, which can benefit from knowledge on weaning. Our
findings also support the need for health care system interventions, family interventions, and public health education campaigns to promote optimal weaning practices, especially in less educated women. There is need for improving strategies for maternal care during the antenatal and postnatal periods. Training needs could be extended to staff at private clinics and to traditional birth attendants. This study also recommends further study on covering large sample in community level.

**LIMITATIONS**
The study is limited to mothers having less than 1 year children, and because of less sample size, the generalization of the results were limited.

**CONCLUSION**
In conclusion the study result suggests that there is need for improving the educative strategies for maternal care during the antenatal and postnatal periods about infant feeding and weaning practices to mothers. Training needs could be extended to traditional birth attendants.

**REFERENCES**
Aggarwal. A, Verma S (2008) complementary feeding – recessions for appropriateness in timing, quantity and consistency, Indian Journal of Pediatric, 75(1), 49-53.
Bekele A, Berhane Y. (1998). Weaning in Butajira, south Ethiopia: a study on mothers' knowledge and knowledge of practice. Department of Community Health, Faculty of Medicine, Addis Ababa University, 36(1), 37-45.
Bhavani Belvady. (2000). Infant feeding practices of working mothers in an Urban area. Indian Pediatrics, 9, 834 – 38.
Brylin Highton, (2001). Weaning a natural process, Leaven, journal of public health, 36(6), 112-114.
Das DK, Ahmed S. (1995). Knowledge and attitude of the Bangladeshi rural mothers regarding breastfeeding and weaning. Institute of Child and Mother Health, Segunbagicha, Dhaka, Bangladesh, 62(2), 213-7.
Krugq .R, Gesicke G.J.(2003) A study on a qualitative exploration of rural feeding and weaning practice, knowledge and attitudes on nutrition, Public health nutritipn, Department of consumer science, University of Pretoria, South Africa, 6(2), 217-23.
Muhammed Khalil, Junaid Rashid, Mallik M Nazir Khan, Ahmed Zaheer. (2005). Assessment of knowledge and knowledge of practice regarding weaning among mothers of infants 4-12 months of age in a semi urban population, Pediatric Journal Community Medicine. Shah Di Khohi, Lahore, 29(1), 9-14.
Walker RB, Conn JA, et al (2006). Mothers' views on feeding infants around the time of weaning, public health nutrition, department of public health, university of Adelaide, south Austria, 9(6), 707-13.
WHO, (1996). National strategies for overcoming micro nutrient malnutrition, Geneva, Switzerland Doc, EB, 89/27pp.
Assessment of Knowledge on Weaning among Mothers of Urban Slum

Eman S. Mohamed, Eman R. Ghazawy, Eptesam E Hassan, (2014). Knowledge, attitude and practices of feeding and weaning among mothers of children’s up to 2 years old in a rural area in Egypt., *Journal of family medicine and primary care*, 3(2): 136-140.

**Acknowledgments**
The author appreciates all those who participated in the study and helped to facilitate the research process.

**Conflict of Interests:** The author declared no conflict of interests.

**Funding**
This research received no specific grant from any funding agency.

**Author contributions**
All the authors have agreed on the final version and meet the criteria of journal.

**How to cite this article:** Savitha S V, Sunanda G T, Patallia B A & Nagarathnamma G (2018). Assessment of knowledge on weaning among mothers of urban slum. *International Journal of Indian Psychology*, 6(2), 68-75. DIP: 18.01.008/20180602, DOI: 10.25215/0602.008