**Journal of Nursing Research, Patient Safety and Practise**
**ISSN: 2799-1210**
Vol: 01, No. 02, Oct – Nov 2021
http://journal.hmjournals.com/index.php/JNRPSP
**DOI:** https://doi.org/10.55529/jnrpsp.12.1.8

# Knowledge of the Mothers of Under-Five Children Regarding Growth Assessment

**Mrs. Monika Devi NR[1*], Dr. Jyoti Ram Shankar Tiwari[2]**

*[1*]Nursing Tutor, Govt AMT School GMCH Jammu J&K UT India.*
*[2]Principal Department of Medical Surgical Nursing, Chandigarh University Punjab India.*

*Correspondence Email: [1*]monikasyal98@gmail.com*

**Received:** 29 May 2021 **Accepted:** 14 August 2021 **Published:** 01 October 2021

***Abstract: Background: In India, 12% of the population is under five years old. In India, the death rate for under-five children may reach 4.9% of total deaths. The formative five years of a child's life are crucial. Development and growth are essential at this time.***
***Goals: To Evaluate Mothers' Knowledge of Growth Assessment***
***Methods: To evaluate mothers' knowledge of growth assessment, a quasi-experimental one-group pretest and posttest design was employed. The sample size consisted of sixty mothers of children under five who were chosen from specific settings using a systematic random technique.***
***Findings: A majority of the 53 moms (88.3%) are between the ages of 15 and 25. Conclusion: The research findings indicate that among moms aged 15 to 25, the majority (45%) had sufficient knowledge, followed by 36.7% with moderate knowledge and 6.5% with deficient knowledge.***

***Keywords: Mothers, Child Growth Assessment, Training Module, Knowledge, Effectiveness.***

## 1. INTRODUCTION

**For Society, A Healthy Kid is A Source of Pride."**
Not because they comprise around 12% of the population overall, but rather because there is a renewed understanding that children between the ages of one and five [or under five] are a significant age group in all nations, since they are the ones who are most likely to have chronic diseases in the future.

"**The Youth of Today are the Citizens of Tomorrow."**
Childhood is an essential time because of the process known as socialization. That is the transfer of attitude, custom, and behavior. People are also more susceptible to illnesses,

**Journal of Nursing Research, Patient Safety and Practise**
**ISSN: 2799-1210**
Vol: 01, No. 02, Oct – Nov 2021
http://journal.hmjournals.com/index.php/JNRPSP
**DOI:** https://doi.org/10.55529/jnrpsp.12.1.8

demise, and disabilities because of their age, gender, financial status, location of residence, and a host of other variables. To guarantee the child's and future adult's survival and good growth, a few physiological demands must be met. A feature of the pediatric age group is growth and development. While development refers to an improvement in skills and functions, growth refers to an increase in physical body size. Growth and development are taken into account together since the child grows and develops as a whole. The mother has a significant influence on the child's development assessment. By being familiar with the growth norms and charting them, mothers may evaluate the development and growth of their children.

When evaluating a kid under five years old's growth and development as well as nutritional health, measurements such as weight, height, length, and mid-upper arm circumference are crucial. A kid's length in a newborn or their height in an older child may be used to assess their nutritional condition. Being among the most fundamental anthropometric measures of growth and development, weight has a particularly wide range of practical applications. On the other hand, the most sensitive parameters for determining nutritional status in children under five are the circumference of the chest and upper arm. A similar number of children under three (46%), as well as over half (47%) who were underweight, were stunted, according to the NFHS-2 survey report. 18% of the children polled were undernourished based on weight for age, and 23% were undernourished based on height for age.

Since the mother is the one who will ultimately determine a child's development, she needs the right support and training to recognize the signs and causes of malnutrition in their offspring as soon as possible. Mothers are taking on more responsibilities inside the family as a consequence, which might affect the prosperity and health of the country.

**The Need for the Research**

Children under the age of five make up 12% of the Indian population. among India, 4.9% of fatalities are related to deaths among children under five. the high death rate, often brought on by illness and malnourishment. These kids are mostly living in urban, tribal, and rural slums. Due to their sheer number, children have a significant claim on social and health services. Children are also our future human resources. This development is helpful for the nation's overall success. They thus need to be given extra attention. Sadly, there is a significant lack of services for children under five. Malnutrition was the underlying or associated cause of death in over half of the children who died before the age of five, according to a research on child mortality in the Americas. During the period of 2000 to 2007, almost 25 percent of children under five worldwide were underweight. There are 27 million births in India annually. Ten percent of them do not survive to be five years old. India is directly responsible for 25% of the 9.2 million under-five fatalities that occur globally each year. The formative years of a kid are crucial. They last for five years. Development and growth are essential at this period. Child growth might be seriously hampered by any unfavorable factors, including hunger and sickness, that are present at this period. A portion of them are everlasting. Preventive care and special attention to the physiological requirements that are part of human growth and development are required in cases of

**Journal of Nursing Research, Patient Safety and Practise**
**ISSN: 2799-1210**
Vol: 01, No. 02, Oct – Nov 2021
http://journal.hmjournals.com/index.php/JNRPSP
**DOI:** https://doi.org/10.55529/jnrpsp.12.1.8

vulnerability. Key anthropometric criteria for assessing and screening children's health include height, weight, mid-upper arm circumference, and growth norms. A 2008 research by Kiran Bains and Brarjk examined the nutritional condition of children in Punjab aged one to five. The investigator selected 150 children, ages 1 to 5, using a straightforward random process. The overall data was gathered via anthropometry and a questionnaire. According to the results, the mean weight of boys and girls across all age groups is lower than what is required by the ICMR for similar groups. The results demonstrated the importance of educating mothers on the dietary needs of newborn babies and the best practices for feeding their children in order to avoid undernutrition in children. Mothers' educational attainment, social standing, health, and nutritional status are critical to their quality of life in developing countries and have a major role in the health, behavioral, and other elements of their children's welfare. The prevalence of undernutrition in children declined monotonically with mother education, as shown by several national and local studies. Given that 53% of Indian women are literate, this is very worrisome. The percentage of undernourished children among mothers from low-income homes is higher, and this number is even lower for them. The mother's knowledge and comprehension of growth assessment and awareness of new growth criteria were inadequate, particularly in rural areas. Therefore, early detection of malnutrition may be prevented by raising knowledge of growth norms and growth examinations. In order to monitor their children's nutritional condition and prevent malnutrition early on, mothers may benefit greatly from the training modules, particularly if their children are under five years old. Mothers of children under five need to know more about growth assessment, and this research is especially important in rural regions. It is essential to enhance the nutritional state of women and provide them with economic position, education, and information.

## 2. RESEARCH METHODOLOGY

Mothers of children under five years old were asked to complete an evaluation using a quasi-experimental one group pretest and posttest design using a systematic random procedure. In Patiala, Punjab, India, there were sixty moms with children under five in the sample. The research covers mothers who are willing to participate and who are married with children under the age of five and who can read Punjabi. Mothers of children under the age of five who are unable to comprehend Punjabi, mothers who have no interest in participating in the research, and women who do not have children under the age of five are excluded from the study. The primary research was carried out with 60 participants once official clearance was obtained. The investigator provided a training module, clarified the goal of the research, and gained respondents' oral agreement before selecting samples using a straightforward random procedure. The subjects are provided with tools, and sufficient data was collected from the participants via data collecting. Data analysis was done using descriptive and inferential statistics, and tables, figures, and graphs were utilized to highlight the key results. Day 1: To evaluate the participants' understanding of growth assessment using observation, a structured knowledge questionnaire, and Chick-list intervention (X). The same day, a training module on growth assessment was administered. Features like age, education, family type, monthly income, and number of children are examples of demographic factors. Moreover, there are knowledge questionnaire questions on general knowledge (4), growth charts (3), nutrition (7),

**Journal of Nursing Research, Patient Safety and Practise**
**ISSN: 2799-1210**
Vol: 01, No. 02, Oct – Nov 2021
http://journal.hmjournals.com/index.php/JNRPSP
**DOI:** https://doi.org/10.55529/jnrpsp.12.1.8

and growth and development (6). nursing a child. Day 7 Posttest: Utilizing an Observation Chick-list and a Knowledge Questionnaire, reevaluate your understanding of Growth Assessment.

## 3. RESULTS

The majority of the 53 moms (88.3%) are in the 15–25 age range. Ninety-seven percent (58 moms) are in the 0–10th class. Thirty percent of the moms, or fifty-seven out of the 57, had a combined income of between $1,000 and $5,000. Among the 58 moms, or 96.7 percent, the majority are raising one or two children. Of the twenty moms, the majority (33.3%) had a moderate level of expertise. 53 (88.33%) of the moms in the above table are between the ages of 15 and 25, while 7 (11.7%) are between the ages of 26 and 35. Two(3.3%) women have completed Higher Secondary school and are 96.66% of the 58 mothers in the 0–10 class. Three (5%) mothers and 57 (95%) mothers belong to the income range of $1,000–5,000 and $500–10,000, respectively. 42(70%) of moms belong to nuclear families, 18(30%) to joint families, and 58 96.66% of mothers have one or two children, and 2 (3.33%) have three or four children. In the 15–25 year age group, the majority of mothers—45%—had good knowledge, followed by 36.7% with moderate knowledge and 6.5% with deficient understanding. 3.3% of moms in the 15–25 age range had insufficient experience, compared to the majority of mothers (60%) who had appropriate practice.

## 4. CONCLUSION

Based on the pre-test results, the research found that among women in the 15–25 age range, 45% had acceptable knowledge, 36.7% had moderate knowledge, and 6.5% had deficient knowledge. 3.3% of moms in the 15–25 age range had insufficient experience, compared to the majority of mothers (60%) who had appropriate practice. Mothers of children under five did not show any statistically significant correlation with demographic characteristics such as age, income, education, number of children, or family type.

**Part I Distructive Demographic Profile of Mothers with Children under Fivf**

Table 1: Distribution of demographic factors (frequency and percentage) among mothers with children under five years of age.

| S.No | Demographic Variables | Frequency | Percentage |
|---|---|---|---|
| 1 | **AGE** | | |
| | 15-25 | 53 | 88.33 |
| | 26-35 | 7 | 11.7 |
| 2 | **EDUCATION** | | |
| | 0-10$^{th}$ | 58 | 96.66 |
| | Higher secondary –Graduation | 2 | 3.33 |
| 3 | **INCOME** | | |
| | 1000-5000 | 57 | 95 |
| | 6000-10000 | 3 | 5 |

**Journal of Nursing Research, Patient Safety and Practise**
**ISSN: 2799-1210**
Vol: 01, No. 02, Oct – Nov 2021
http://journal.hmjournals.com/index.php/JNRPSP
**DOI:** https://doi.org/10.55529/jnrpsp.12.1.8

| | | | |
|---|---|---|---|
| 4 | **NUMBER OF CHILDREN**<br>1-2<br>2-4 | <br>58<br>2 | <br>96.66<br>3.33 |
| 5 | **TYPE OF FAMILY**<br>NUCLER<br>JOINT | <br>42<br>18 | <br>70<br>30 |

**Section II Comparison Between Pre-Test And Post Test Knowledge Levels**

Table II: Distribution of Mean and standard deviation of pre-test and post test knowledge scores.

| **Descriptive Statistics** | | | | | |
|---|---|---|---|---|---|
| | N | Mean | Std. Deviation | Minimum | Maximum |
| Prekq | 60 | 9.78 | 3.988 | 3 | 19 |
| Postkq | 60 | 14.72 | 3.098 | 7 | 19 |

Here P=0.0000<0.05,

## 5. DISCUSSION

Mothers of under-five children's demographic characteristics
The majority of the 53 moms (88.3%) are in the 15–25 age range. The current research's results are consistent with those of a related study by Aziz Marjan and Jamaluddin, which found that mothers' mean ages were 28.5 and 27.
Ninety-seven percent (58 moms) are in the 0–10th class. 32% of those in the current survey had completed high school education, according to a comparable study done by Vijay Kumar. Thirty percent of the moms, or fifty-seven out of the 57, had a combined income of between $1,000 and $5,000. Comparing the results of this survey to a related one by Shantakka, N. Chouggale, it was found that 40% of families are made up of two people and that 95% of families earn less than three thousand rupees annually. Among the 58 moms, or 96.7 percent, the majority are raising one or two children. Comparing this survey to one comparable one done by Asmakulsum, 98% of the households had three or more children.to gauge mothers' understanding of growth assessment using a pre-test among children under five. Of the twenty moms, the majority (33.3%) had a moderate level of expertise. Comparing the results of this survey to those of a related study by Charu Katare and Shailaja Jain, it was found that 15% of respondents had average understanding.

**Nursing Implications:**
The study's conclusions have an impact on nursing research, nursing practice, and nursing education management.

**Nursing Practice:**
A prevention-focused approach is replacing a care-oriented one in today's health care delivery system. Its main emphasis is on health promotion via primary prevention. Health promotion

**Journal of Nursing Research, Patient Safety and Practise**
**ISSN: 2799-1210**
Vol: 01, No. 02, Oct – Nov 2021
http://journal.hmjournals.com/index.php/JNRPSP
**DOI:** https://doi.org/10.55529/jnrpsp.12.1.8

is achieved via educating people about their health, which leads to changes in their behaviors and lifestyles. The ignorance, malice, and illiteracy of mothers may cause their under-five infants to die or become very sick. Thus, the mother's education is essential. Nurses working in hospital and community settings may fulfill this responsibility by educating moms, helping them to prevent malnutrition and stunted development. To enhance infant health and avoid malnutrition, nurses should educate mothers about breast feeding, evaluating development indicators, and using basic anthropometric measures for growth assessment.

**Nursing Education:**
Only by keeping up with emerging trends and technologies can nursing professionals provide standard and great nursing care. A given industry's knowledge and skills might be updated and reinforced by new technologies. The nurse's most important tool is her role as a teacher, providing parents, caretakers, and pupils with sufficient information on malnutrition prevention and development assessment. Nurse educators should modify curriculum and place an emphasis on the preventative and promotional aspects of malnutrition in order to meet the ever-changing needs of society.

**Nursing Administration:**
In their capacity as administrators, nurses may influence the standard of nursing care provided by health care organizations via the creation of diverse health education initiatives, in-service education programs, and multi-level care supervision. In order to provide hospital and community health workers with knowledge, nurse administrators should plan and execute a variety of educational programs on growth assessment, the use of anthropometric measurements, interpreting growth indicators, and plotting on growth charts. They should also organize outreach initiatives in conjunction with other organizations. A specific budget for the development of health education materials in this region and their distribution to low-income mothers and the community might be established by nursing administrators in their neighborhood.

**Limitations:**
• Mothers with children older than five years old are
• Some mothers who have shown no interest in the research.

**Suggestions**:
• To educate moms of children under five, nurses may plan health education programs.
• A structured training course on growth assessment for high-risk individuals may be offered.

**Recommendations**
When it comes to using anthropometric measures, deciphering growth markers, and creating growth charts, moms in rural and urban areas may compare their knowledge levels.
To apply the results to a broad population of moms, the same research might be repeated with a bigger sample size.

**Journal of Nursing Research, Patient Safety and Practise**
**ISSN: 2799-1210**
Vol: 01, No. 02, Oct – Nov 2021
http://journal.hmjournals.com/index.php/JNRPSP
**DOI:** https://doi.org/10.55529/jnrpsp.12.1.8

## 6. REFERENCES

1. BARKER.DJ.Programming the baby. In: Barker DJ.ed. Mothers, babies, and disease in later life. London: BMJ Publishing Group. 1994-14-36
2. DE ONIS M.GARZA, C.VICTORA CG.ONYANGO AW, FRONGILLO EA,MARTINES J.for the WHO Multi centres Growth Reference Study Group. The WHO Multi centre Growth Reference Study: Planning study design, and methodology. Food Nutr Bull 2005☹1) (suppl 1); S13-26.
3. DE OINS M.ONYANGO AW, VAN DEN BROECK J, CHUMLEA WC, MARTORELL Rfor the WHO Multicentre Growth Reference Study Group. Measurement and standardization protocols for anthropometry used in the construction of a new international growth reference. Food Nutrition BULL 2004; 25(1) (suppl l); S27-36.
4. DE ONIS M.YIP R.The WHO growth chart: historical considerations and current scientific issues. In: Porrini M.Walter P.eds. Nutrition in pregnancy and growth Bibi Nutr Dieta 1996:53:74-89
5. Food and Nutrition Board: Committee on Nutrition Advisor to CDC Comparsion of body weights and lengths or heights of groups of children Nutr Rev 1974;32:284-8
6. FOOD AND NUTRITION BOARD: Committee on Nutrition Advisory to CDC. Comparison of body weights and body heights of groups of children. Atlanta. Ga USA :US Department of Health, Education and welfare public Health Service, Centers for Disease Control 1974
7. GRAITCER PL,GENTRY EM.Measuring children one reference for all Lancetr 1981: 2:297-9
8. HABICHT JP, MARTORELL R.YARBROUGH C,MALINA RM,KIEN RE.Height and weight standards for preschool children How relevant are ethnic differences in growth potential? Lancet 1974:1:611-4
9. Hamill Pvv.Driz Ta Johson Cl Reed Rb.Roche Af, Moore Wmphysical growth: National Center for Health Statistics percentiles. Am J Clin Nutr 1979:32:607-29.
10. INDIAN pediatricsprevalence of under nutrition in Santal children of puruliga Dr.west Bengal Sultanu Duta Chowdary conducted a survey –volume 45, number 1 January 2008. 43-46 pp.
11. JELLIFFE DB. The assessment of the nutritional status if the community Monograph series No 53. Geneva: World Health Organization, 1966.
12. KramerMS.Determinants of low birth weight: methodological assessment and meta analysis Bull WHO 1987:65:663-737.
13. Neyer MB.Breast feeding and smoking Lancet 1979: 1:975-6
14. Mansbach IK.Greenbaum CW Sulkes J.Onset and duration of breastfeeding among Isreli mothers : relationships with smoking and type of delivery Soc Sci Med 1991-33: 1391-7
15. Menternal and child under nutrition the laucet series and India perspective Number 4 April 2008. Volume 95-298-290 pp
16. Prevalence of overweight and obesity in school children in Delhi-Suprect Kaur and Umesh kapil number -4: volume -95 April 2008

**Journal of Nursing Research, Patient Safety and Practise**
**ISSN: 2799-1210**
Vol: 01, No. 02, Oct – Nov 2021
http://journal.hmjournals.com/index.php/JNRPSP
**DOI:** https://doi.org/10.55529/jnrpsp.12.1.8

17. The Indian Journal of Nutrition an dietetics feeding practices an morbidity patern aming infants in a rural area of south 24 PGS DTs West Bengal Jadab CS Pankaj K.M and Prasit G.
18. The Indian journal of Nutrition and Dieties Assessment of nututuonal status of 1-5year old children belonging to from families of punjab. By kiran Bains and brar J.K 2009 volume 46 page 345.
19. The Indian Journal of Nutrition and dietics nutritional status of tribal and nontribal per schoolers by RIJI HARI,2008, volume 45 page-102.
20. The Indian Journal of nutrition and dietics Feeding practices and morbidity pattern among infants in a rural area of south 24 PGS Districts west Bengal by Hadab CS Psnkak KM And pramet G 2008 volume 45 page 440.
21. The Indian Journal of nutrition and dietics socio-cultural factors as determinant of nutritional awareness in mothers of preschool nutritional awareness in mothers pre school children in Gwallior city by charu katare veena srinivasa 2009 volume 46 page - 298
22. The Indian Journal of child care nutrition and dietics behavioural knowledge of women from an urban slum with reference to health and nutrition by Jyothi Lakshmi and Jamuna prakash 2008 volume 45 page -264
23. The journal of the Royal Society for the promotion of health Anthropometric measurements in rural school children between 1-5 yrs 1990 by M.Jaheer volume 110 No-5 page 184-186.
24. The Indian Journal of pediatrics anthropometry and moderate malnutrition in preschool children by mary E. Bloyd 2007 pages -771-774
25. The international journal of Biological anthropometry Nutritional status among children aged 24-59 months in rural Bangladesh An assessment measured by BMI index by Golam mostafa 2009 volume 3 Number 1