

Impact of a Comprehensive Nursing Intervention on Parental Knowledge about Adolescent Development and Parenting

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Abstract: Background: Adolescence is a period marked by substantial physical, psychological, and emotional changes. Many parents lack the necessary knowledge to effectively support their teenage children through these changes. A comprehensive nursing program can equip parents with crucial knowledge and skills for better parenting during adolescence. **Objective:** To assess the effect of a comprehensive nursing program on the knowledge regarding adolescent changes and parenting among parents of teenagers. **Methods:** A one-group pretest-posttest pre-experimental design was employed. Fifty parents were selected through non-probability purposive sampling. A structured questionnaire was used to assess knowledge before and after implementation of the comprehensive nursing program. Descriptive and inferential statistics were applied for data analysis. **Results:** The mean pre-test knowledge score was 9.96 (SD = 2.22), and the mean post-test score was 12.52 (SD = 2.34). A paired t-test value of 31.81 was statistically significant ($p < 0.05$), indicating effectiveness of the program. No significant association was found between pretest knowledge and demographic variables. **Conclusion:** The comprehensive nursing program significantly improved the knowledge of parents regarding adolescent changes and parenting. Structured programs should be incorporated in community health and school-based parental guidance services.

Keywords: Adolescents, Parenting, Knowledge, Comprehensive Nursing Program, Education.

INTRODUCTION

Adolescence represents a crucial period of human development characterized by rapid physiological, psychological, and social transitions. These changes often present challenges not only for adolescents themselves but also for their parents. Unprepared parents may struggle with behavioral, emotional, and communication difficulties during this phase. In the Indian context, traditional family norms and lack of formal parental training often widen this gap. Providing education to parents through structured programs led by healthcare professionals, particularly nurses, can bridge the knowledge gap and improve parenting outcomes. This study was undertaken to assess the effectiveness of such a program in the specific cultural and demographic setting of Vadodara.

Materials and Methods

This study utilized a quantitative research approach with a one-group pretest-posttest pre-experimental design. It was conducted in selected schools in Vadodara to assess the effectiveness of a comprehensive nursing program among parents of adolescents.

Study Setting and Population: The study was carried out in a school setting where parents were easily accessible. The population included parents of adolescents aged between 10 to 15 years. The sample size was 50 parents, chosen using non-probability purposive sampling technique.

Inclusion and Exclusion Criteria: Parents were included if they had one or more children in the age group of 10–15 years, were willing to participate, and could comprehend the language used for data collection.

Parents who were not available during data collection or who had previously received similar training were excluded.

Development and Validation of Tool: The tool used for data collection was a structured knowledge questionnaire comprising 22 multiple-choice questions covering three domains—physical, emotional, and psychosocial changes in adolescence, and parenting strategies. The tool was validated by a panel of five experts in child health nursing and education. A pilot test was conducted on 10 participants to determine reliability, resulting in a split-half coefficient of 0.85, indicating high internal consistency.

Ethical Considerations: Ethical approval was obtained from the institutional ethics committee. Written informed consent was obtained from each participant. Confidentiality and anonymity were ensured throughout the study.

Data Collection Procedure: The data collection was conducted in three phases:

1. **Pre-test:** Administered to assess the baseline knowledge of parents.
2. **Intervention:** A comprehensive nursing program was delivered through lecture sessions, interactive discussions, flip charts, posters, and question-and-answer sessions. The content included adolescent developmental milestones, puberty, psychological changes, and communication techniques with teenagers.
3. **Post-test:** Conducted after 7 days using the same structured questionnaire to evaluate knowledge improvement.

Data Analysis: Data were analyzed using SPSS software. Descriptive statistics (mean, percentage, standard deviation) were used to summarize demographic data and knowledge scores. Paired t-test was used to assess the effectiveness of the intervention, and chi-square test was used to examine the association between pre-test scores and selected demographic variables.

RESULTS

Demographic Characteristics: The participants were mostly females (86%), aged between 25–40 years. About 62% belonged to nuclear families, and 84% were residents of urban areas. Most had a secondary level of education (34%) and were housewives (64%).

Table 1: Frequency and Percentage Distribution of Socio-demographic Data (n = 50)

Variable	Categories	Frequency (f)	Percentage (%)
Age (years)	25–30	19	38%
	31–35	18	36%
	36–40	10	20%
	41+	3	6%
Educational Status	Primary	10	20%
	Secondary	17	34%
	Higher Secondary	10	20%
	Above Higher Secondary	13	26%
Occupation	Govt. service	12	24%
	Business	4	8%
	Housewife	32	64%
	NGO	2	4%
Type of Family	Nuclear	31	62%
	Joint	14	28%
	Extended	5	10%
Residence	Urban	42	84%
	Rural	8	16%

Knowledge Score Analysis: The pre-test scores ranged from 5 to 14 with a mean score of 9.96 (SD = 2.22). Post-test scores ranged from 9 to 18 with a mean score of 12.52 (SD = 2.34). The mean difference was 2.92.

Table 2: Knowledge Scores – Pre-test and Post-test (n = 50)

Test	Score Range	Mean	SD
Pre-test	5–14	9.96	2.22
Post-test	9–18	12.52	2.34
Mean Difference		2.92	

Effectiveness of Intervention: The paired t-test value was calculated to be 31.81 with degrees of freedom = 49. This was statistically significant at $p < 0.05$, indicating a notable improvement in knowledge following the comprehensive nursing intervention.

Table 3: Paired ‘t’ Test to Determine Effectiveness of the Program

Group	Test	Mean	SD	t-value
Parents	Pre-test	9.96	2.22	
	Post-test	12.52	2.34	31.81*

$t(49) = 2.009$, $p < 0.05$ (significant)

Association with Demographic Variables: Chi-square analysis revealed no statistically significant association between knowledge scores and variables such as age, education, occupation, type of family, and age of noticing physical changes. This suggests that the Comprehensive Nursing Intervention was equally effective across different demographic groups.

Table 4: Association between Pre-Test Knowledge Score and Demographic Variables

Variable	Chi-square (χ^2)	Significance
Age	0.363	NS
Education	0.802	NS
Family Type	0.341	NS
Age of Noticing Changes	0.632	NS

NS = Not Significant at 0.05 level

Discussion

The findings of the present study revealed that the comprehensive nursing program had a significant impact on improving parental knowledge regarding adolescent changes and parenting. The post-test mean score (12.52) was significantly higher than the pre-test mean score (9.96), and the calculated paired t-test value of 31.81 confirmed the effectiveness of the intervention. The structured sessions improved the participants' understanding of adolescent growth and development, as well as effective parenting strategies. This finding aligns with the study conducted by Joshi and Bhatt (2019), which demonstrated a similar increase in maternal knowledge after a structured education program. Likewise, Kumar and Gupta (2020) emphasized the importance of systematic educational efforts for empowering parents to manage adolescent behavior. Interestingly, demographic characteristics such as age, education level, family type, and prior exposure to adolescent behavior showed no significant association with the baseline knowledge score, implying that lack of awareness regarding adolescent changes is widespread regardless of background. This finding emphasizes the need for universal parental education programs. The delivery method of the comprehensive nursing program—which incorporated visual aids, interactive discussions, and culturally relevant examples—likely contributed to the improved outcomes. Engagement-based learning enhances retention and applicability, particularly for adult learners. Nurses, especially those in school and community

health settings, are well positioned to deliver these interventions given their accessibility and community trust. Despite the positive findings, this study had some limitations. It involved a small sample size and lacked a control group, which restricts generalizability. Long-term retention of knowledge and behavioral changes were not assessed. Future studies could incorporate a larger, randomized sample and follow-up assessments to evaluate lasting impact. Nevertheless, the study provides strong evidence supporting the inclusion of structured nursing programs for parents in adolescent health promotion strategies. Schools, community health centers, and non-governmental organizations can collaborate to make such initiatives a part of regular parent engagement activities.

CONCLUSION

The comprehensive nursing program proved to be an effective method for increasing parents' knowledge about adolescent developmental changes and parenting practices. The notable improvement in post-intervention knowledge scores highlights the importance of such educational initiatives. Providing parents with accurate and practical information fosters healthier relationships within the family, promotes adolescent well-being, and contributes to stronger community health outcomes. The study recommends incorporating regular, structured parenting programs into school and community health services. Future research involving larger and more diverse populations, along with long-term follow-up, is essential to assess the sustained benefits and behavioral impacts of such interventions. Significantly improved the knowledge of parents regarding adolescent changes and parenting. Structured programs should be incorporated in community health and school-based parental guidance services.

References

1. Polit, D. F., & Beck, C. T. (2017). *Nursing Research: Principles and Methods* (10th ed.). Wolters Kluwer.
2. Basavanthappa, B. T. (2007). *Nursing Research* (2nd ed.). Jaypee Brothers.
3. Sharma, K. (2018). *Adolescent Health and Development*. Jaypee Brothers.
4. Patel, V., & Flisher, A. J. (2007). Promoting child and adolescent mental health in low and middle income countries. *Journal of Child Psychology and Psychiatry*, 48(3-4), 295-312.
5. Mohapatra, S., & Rajput, A. (2022). Enhancing adolescent development through parental support programs. *International Journal of Health Sciences and Research*, 12(2), 65-70.
6. Singh, A., & Singh, M. (2019). Impact of parental education on adolescent development. *International Journal of Nursing Education*, 11(2), 45-50.
7. Rao, C., & George, P. (2018). Parenting styles and adolescent behaviour: A review. *Journal of Child and Adolescent Behavior*, 6(3), 375-381.
8. Kumar, M., & Gupta, N. (2020). Effectiveness of parenting education programs on parental practices: A meta-analytic review. *Indian Journal of Community Medicine*, 45(1), 12-17.
9. Ghosh, S., & Chatterjee, R. (2021). Adolescents and mental health: Role of parents. *International Journal of Psychology and Counseling*, 13(2), 56-63.
10. Joshi, A., & Bhatt, R. (2019). Structured teaching programme to enhance knowledge on adolescent health among mothers. *International Journal of Advanced Nursing Studies*, 8(1), 20-24.
11. Devi, K., & Thomas, J. (2017). Knowledge and practice regarding adolescent health among parents. *Journal of Nursing Education and Practice*, 7(12), 43-49.
12. Bista, B., & Thapa, P. (2020). Role of parental guidance in the emotional development of adolescents. *Nursing Journal of India*, 111(6), 258-263.
13. Ali, M., & Singh, R. (2019). Health education as an intervention for improving adolescent-parent communication. *Journal of Education and Health Promotion*, 8, 143.