



Knowledge of adolescent girls regarding child development and childrearing and impact an awareness program on it

KEYWORDS

Adolescent girls, child care, health education

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ABSTRACT *The relation between parental self-efficacy and parenting competence is also moderated by parenting knowledge. In India, early marriage and early childbearing are most common among poor women and those with little education, which affects infant feeding and health. So, in present study the impact of health education on the knowledge of adolescent girls regarding child immunization, management of diarrhoea & ARI, growth & development has been found out. In all 268 adolescent girls of senior secondary and under graduate classes were selected by random purposive method for the study from Bhopal and Raisen Cities of Madhya Pradesh respectively. Data were collected by interview method and the girls were imparted specific education through guidance and counselling methods. Improvement in the knowledge of AGs of experimental group is shown 20.3% on immunization, 40.1% on management of diarrhoea & ARI, 42.4% on Child growth & development as compared to 25%, 19.8%, 8.3%, 21.9% and 25% of their counter part of control group. Thus the study indicates a need of educating adolescents for child care and rearing practices.*

Introduction:

Parenting knowledge of childrearing and child development encompasses many domains: parents' cognitions about various approaches appropriate to fulfilling the biological and physical as well as socio-emotional and cognitive needs of children as they develop; parents' understanding of normative child development, that is both developmental processes and the abilities and accomplishments of children as they grow; and parents' awareness of practices and strategies for maintaining and promoting children's health and coping effectively with children's illness (Bornstein, 2006). In turn, parenting knowledge about such topics as proper parenting, norms and milestones, and health and safety are believed to shape parents' other cognitions and their practices, to influence child development, and to portend consequences for children's health and well-being.

First, insights into the patterns and processes of childrearing and child development are thought to shape parenting. For example, parenting knowledge is associated with enhanced parental self-perceptions of competence, satisfaction, and investment in parenting (Bornstein, Hendricks, et al., 2003). The relation between parental self-efficacy and parenting competence is also moderated by parenting knowledge: Parental self-efficacy and parenting competence are positively associated when parenting knowledge is high; by contrast, self-efficacy and competence are inversely associated when knowledge is low (Hess, Teti, & Hussey-Gardner, 2004). Parenting knowledge has also been implicated in parents' more accurate interpretations of their children's behaviors (Bugental & Happaney, 2002). In these senses, parenting knowledge may underpin parents' global cognitive organization for adapting to or anticipating developmental changes in their children.

Resources and supports to parenting can have meaningful consequences. Parents with high levels of resources and supports tend to display more sensitive and responsive parenting and greater parental efficacy (Izzo, Weiss, Shanahan, & Rodriguez-Brown, 2000).

Accurate and complete developmental anamnesis and surveillance thus depend in large measure on parents' knowledge base. Parents have the most experience with their child, are believed to know their child best, and are routinely the clinician's primary source of outside information about the child. So, the present study deals about the knowledge of studying adolescent age girls of middle income group about child caring and rearing practices and impact of an education program on it.

Materials and Methods:

Sample Selection

In all 634 adolescent girls of Class IX to XII of schools and Under Graduate Arts students were contacted to participate in the study. Among them 137 and 131 total 268 agreed to join from Bhopal and Raisen Cities of Madhya Pradesh respectively through purposive random sampling method that consented to participate in the study. Bhopal based girls further received education so called as experimental and Raisen girls kept as control under the study period.

Assessment Tool: This was prepared to assess the knowledge about early childhood care i.e. which included immunization, management of diarrhoea and ARI, child's growth & development. This had total 15 aspects regarding child health and growth. The questions were in multiple choice format and some are of open questions types. Instructions to fill the answer sheet were clearly explained. If the respondent feels that she does not know the answer, was asked to tick '0' option which denotes ignorance.

Experimental intervention: The education intervention was based on participatory method. For better understanding and learning, activities were designed in such a way that AGs are encouraged to open up and talk about the issues first and ask questions. The role of the investigator was as a facilitator and expert, who answered their queries and made them, believe that right decision making and positive behaviour change will bring long term happiness in their life. Different methods of teaching were used to clear their concepts e.g. brain storming sessions, question, lectures, demonstration, chart presentation, group discussion,

case study etc. Question Box was placed for the convenience of AGs so that they can ask their questions without any hesitation and get the solutions of their problems. To design education tools various books and materials were consulted:

15 to 18 contact visits were made to experimental group and at least 1 hour time was spent with them for the purpose of data collection, education on different issues, answering their queries, check their understanding, building their confidence and to motivate them to take correct decisions for their present and future life. 8 contact visits were done for control group for data collection only.

Post Study Data Collection: After empowerment AGs of experimental group the post study knowledge of them as well as the control group was judged by using the same achievement tests and answer sheets were evaluated again to see the improvement in their knowledge on the above mentioned issues.

Statistical Analysis: Responses obtained from the answer sheets were sorted into 4 groups as: Ignorant, Partially Correct, Correct and Wrong. On the basis of the frequencies of these groups percent of responses were obtained for observations. Chi square test was also applied on the same for getting whether the differences among response of control and experimental groups are significant or not. Significance was checked on table value of chi square at level 0.01 and 0.05.

TABLE – 1 PRE & POST STUDY KNOWLEDGE OF AGs REGARDING IMMUNIZATION

Response	Pre Study				Post Study			
	Control (N=96)		Experimental (N=538)		Control (N=96)		Experimental (N=538)	
	Count	%	Count	%	Count	%	Count	%
Ignorant	57	59.4%	313	58.2%	54	56.3%	243	45.2%
Partially Correct	21	21.9%	166	30.9%	23	24.0%	182	33.8%
Correct	7	7.3%	50	9.3%	8	8.3%	109	20.3%
Wrong	11	11.5%	9	1.7%	11	11.5%	4	0.7%
χ^2 & inference	$\chi^2 = 27.3383$ P < 0.01 Insignificant				$\chi^2 = 50.4007$ P < 0.01 Significant			
	df=3				df=3			

Table 1 shows pre and post study knowledge of AGs regarding immunization. Above table makes it clear that before study 59.4% from control & 58.2% from experimental group were ignorant about child's immunization and 11.5% & 1.7% gave wrong responses only 7.3% and 9.3% gave correct responses whereas 21.9% and 30.9% gave partially correct response from control and experimental group respectively. χ^2 value also reveals that difference among control and experimental group is insignificant at 0.01 level df is 3.

Table further reveals that the improvement in the knowledge of AGs of experimental group after empowerment

on this issue. 20.3% gave correct responses and 33.8% gave partially correct responses against 8.3% correct and 24% partially correct from control group. Still 45.2% in experimental group and 56.3% in control group remain ignorant on this issue. This is an important finding that AGs further need empowerment on this issue. Furthermore χ^2 value reveals that difference among control and experimental group is highly significant at 0.01 level df is 3.

TABLE – 2 PRE & POST STUDY KNOWLEDGE OF AGs REGARDING MANAGEMENT OF DIARRHOEA & ARI

Response	Pre Study				Post Study			
	Control (N=96)		Experimental (N=538)		Control (N=96)		Experimental (N=538)	
	Count	%	Count	%	Count	%	Count	%
Ignorant	32	33.3%	174	32.3%	33	34.4%	66	12.3%
Partially Correct	27	28.1%	155	28.8%	28	29.2%	211	39.2%
Correct	22	22.9%	132	24.5%	21	21.9%	216	40.1%
Wrong	15	15.6%	77	14.3%	14	14.6%	45	8.4%
χ^2 & inference	$\chi^2 = 0.2226$ P > 0.01 Insignificant				$\chi^2 = 38.3437$ P < 0.01 Significant			
	df=3				df=3			

Table 4.13 shows pre and post study knowledge of AGs regarding management of diarrhoea & ARI in children. Before empowerment 33.3% AGs from control and 32.3% AGs from experimental group were ignorant on this issue. 22.5% from control group and 14.3% from experimental group gave correct responses and 28.1% and 28% gave partially correct responses from control and experimental groups respectively. χ^2 value clarifies that difference among control and experimental groups is insignificant at 0.01 level df is 3.

Table clearly indicates the improvement in knowledge of AGs of experimental group on management of diarrhoea & ARI. It reveals that after empowerment only 12.3% remain ignorant, 40.1% gave correct responses and 39.2% gave partially correct responses as against 34.4% ignorant, 21.9% correct and 29.2% partially correct responses from control group. χ^2 value clarifies that difference among control and experimental group is significant at 0.01 level df is 3.

TABLE – 3 PRE & POST STUDY KNOWLEDGE OF AGs REGARDING CHILD'S GROWTH & DEVELOPMENT

Response	Pre Study				Post Study			
	Control (N=96)		Experimental (N=538)		Control (N=96)		Experimental (N=538)	
	Count	%	Count	%	Count	%	Count	%
Ignorant	48	50.0%	229	42.6%	33	34.4%	146	27.1%
Partially Correct	14	14.6%	80	14.9%	27	28.1%	114	21.2%

Correct	22	22.9%	161	29.9%	24	25.0%	228	42.4%
Wrong	12	12.5%	68	12.6%	12	12.5%	50	9.3%
χ^2 inference	$\chi^2 = 2.4229$	$P > 0.05$	Insignificant	$\chi^2 = 10.3200$	$P < 0.05$	Significant		
	df=3			df=3				

Table 3 shows pre and post study knowledge of AGs regarding Child growth and development. Initially 50% AGs of control and 42.6% AGs from experimental group were ignorant on the issue. 12.5% from control and 12.6% from experimental gave wrong responses, Only 22.9% from control and 29.9% from experimental group gave correct responses. 14.6% from control and 14.9% from experimental group gave partially correct responses. χ^2 value clarifies that difference among control and experimental group is insignificant at 0.01 level df is 3.

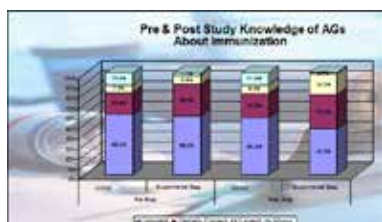
Table clearly reveals that the knowledge of AGs of experimental group on above mentioned issue have improved. In experimental group 42.4% have given correct, 21.2% gave partially correct responses against 25.0% correct and 28.1% partially correct from control group. Furthermore χ^2 value clarifies that difference among control and experimental group is significant at 0.01 level df is 3.

Discussion and Conclusion:

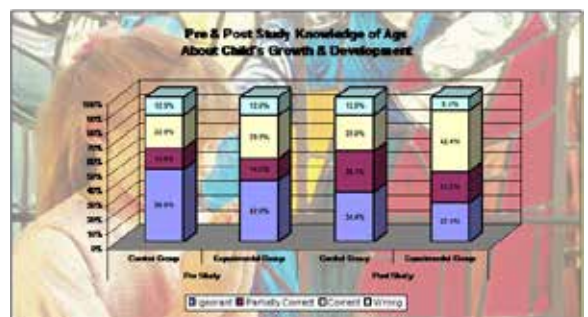
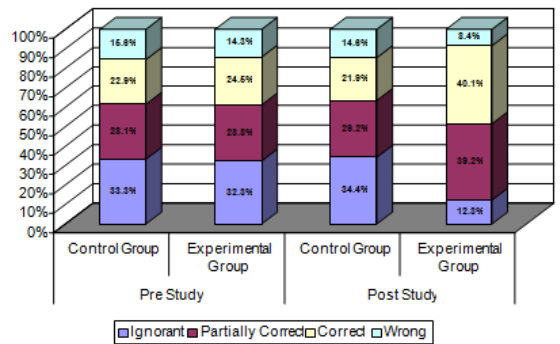
Every year, 10 million girls marry before their 18th birthday; in the developing world one in seven girls is married before age 15. In South Asia and Sub-Saharan Africa more than 40% of girls are married by age 18. The UN recognizes child marriage as a serious human rights violation that threatens the achievement of nearly all the Millennium Development Goals. Many cultural, social, and economic pressures contribute to the continued practice of child marriage, making it a difficult issue to tackle.

In late infancy and early childhood, children should receive adequate amounts of appropriate food — and, if necessary, supplements of iron and other nutrients — to complement their continued intake of breast milk and as they are weaned. Monitoring whether the children in a community are growing can help families identify and address problems, including vitamin deficiencies and infections. (Shubhada J et al., 2000)

In present study data revealed that commonly named vaccines were BCG, Polio drops other names of vaccines and schedule was not known to them. Most of the girls know about use of ORS during diarrhoea but could not identify the sign of ARI. They knew that gaining weight is the sign of growth but did not know the normal birth weight of child and when it doubles or triples and how child develops.



Pre & Post Study Knowledge of AGs About Management of Diarrhea & ARI



Most of the girls were confused about what is the use of knowing all these things at this stage and then they were explained that this information may be useful for their Bhabhi or Didi or friend and in future for themselves. They were motivated to work as agent of change in their neighbour and community and spread correct child care practices.

Impact of empowerment on all issues related with safe motherhood and early childhood care for survival growth and development of child was very positive. AGs learned well and asked many questions regarding growth and development of child. Girls were ready to learn more but time granted by school authorities was always short. Most of the information was given thorough life skill approach. Improvement in the knowledge of AGs of experimental group is shown in the figures which is, 20.3% on immunization, 40.1% on management of diarrhoea & ARI, 42.4% on Child growth & development as compared to 25%, 19.8%, 8.3%, 21.9% and 25% of their counter part of control group.

Formal education programs offer yet another way for parents to improve their parenting knowledge. Although health care professionals are less immediately accessible, they constitute an important reserve for all ages and social classes of parent and are the most often consulted about emergent or specific medical problems (Hickson & Clayton, 2002; Hulbert, 2003). Civitas Initiative et al. (2000) found 54% of mothers reported that they relied frequently on their child's doctor/pediatrician, 25% on nurses, and 20% on childcare providers for information and advice. At the same time, parents report that many anticipatory guidance topics are not covered in well-child visits, and that, even after such visits, they can still use more information the mothers' parenting knowledge sometimes lacking or incorrect. It could be that experiences surrounding child development do not automatically lead to parenting knowledge, or, if they do, mothers may forget what they know about

early child development by the time their children reach toddlerhood. Thus, with each new phase of development, the onrush of novel requirements supplants those of past developmental phases (retroactive inhibition). Science is dynamic and scientific knowledge concerning childrearing and child development is constantly changing and expanding (French, 2002). As developmental science, pediatrics, and related fields continue to advance, we become increasingly aware, on the one hand, that children possess abilities more advanced and more diverse than formerly believed and, on the other, that parents interact with and influence children's growth and development in sophisticated and subtle ways so knowledge update for parenting right from the adolescent age is must and should be given proper emphasis to prepare adolescents to be a good parent.

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