

EFFECTIVENESS OF TEACHING PROGRAMME ON KNOWLEDGE AND ATTITUDE OF MOTHERS REGARDING PLAY OF UNDER FIVE CHILDREN

Sigma Bhattarai,¹ Chet Kant Bhusal,² Kavita Lamichhane,¹ Rubina Shrestha,² Pradip Chhetri²

ABSTRACT

INTRODUCTION

Play is essential for healthy growth and development of children as it fosters their cognitive, physical, social, and emotional well-being. This study aims to find out the effectiveness of teaching program on knowledge and attitude of mothers regarding play of under five children in a selected municipality of Rupandehi district, Nepal.

MATERIAL AND METHODS

This was a community based one group pretest and posttest interventional study conducted from December 2020 to May 2021 among 255 mothers of under five children from randomly selected 3 wards out of the total of 13 wards of Siddharthanagar municipality of Rupandehi district in Nepal. Pretest was followed by educational intervention on play of under five children and after seven days of educational intervention, posttest was done among same mothers.

RESULTS

The study found that before intervention, level of knowledge regarding play of under five children was inadequate among 98.4% of the mothers and attitude was unfavorable among more than three-fourth (76.1%) of the mothers. After the teaching program level of the knowledge was adequate among 100% of the mothers and attitude was favorable among 100.0 % of the mothers. The post-test knowledge mean score was higher than the pretest knowledge mean score with a mean difference of 17.90. The calculated "t" value (-52.92) was highly significant with p value < 0.001. Similar to this, there was a mean difference of 21.38 between the mean attitude scores before and after the intervention. The calculated "t" value (-146.80) was highly significant with p value < 0.001.

CONCLUSION

The study concludes that teaching program tends to be effective in enhancing mothers' knowledge and attitudes towards play of under five children. Thus, community health nurses should implement such education program on play therapy to mothers of children under five.

KEYWORDS

Attitude towards play, Children, Knowledge regarding play, Teaching program on play

1. Universal College of Nursing Sciences, Bhairahawa, Rupandehi, Nepal
2. Department of Community Medicine, Universal College of Medical Sciences, Bhairahawa, Rupandehi, Nepal

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For Correspondence
Ms. Sigma Bhattarai
Universal College of Nursing Sciences
Bhairawaha, Nepal
Email: sigmabhattacharai@gmail.com

INTRODUCTION

Every child needs play in order to grow and develop properly since it promotes cognitive, physical, social, and emotional well-being.¹ Play also offers an ideal opportunity for parents to engage fully with their children. Despite the benefits derived from play for both children and parents, time for free play has been markedly reduced for some children.² Children's developmental trajectory is critically mediated by appropriate, affective relationships with loving and consistent caregivers as they relate to children through play.³ Play therapy represents a unique form of treatment that is not only geared toward young children, but is translated into a language children can comprehend and utilize the language of play.⁴ Play therapy may also be used to promote cognitive development and provide insight about and resolution of inner conflicts or dysfunctional thinking in the child.⁵ Play therapy allows children to change the way they think about, feel toward, and resolve their concerns.⁶

Although play is important in growth and development for children, research investigating the play in pediatric settings has been limited, a condition that may be attributed to practitioners' unfamiliarity with techniques for studying play. Therefore, the present study aims to find out the effectiveness of teaching program on knowledge and attitude regarding play of under five children among mothers residing in Siddharthnagar Municipality of Rupandehi district, Nepal.

MATERIAL AND METHODS

Community based interventional study using one group pretest and post-test research design was applied to carry out the study among mothers of under five children of Siddharthnagar municipality of Rupandehi district Nepal.

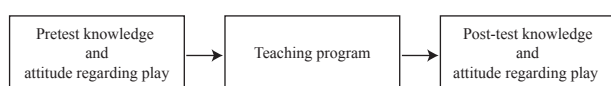


Figure 1. Intervention design used in the study

The sample size for the study was calculated by using the formula: $n = Z^2pq/L^2$, where n = the desired sample size, z (the standard normal deviate set for the 95% confidence level) = 1.96, p (prevalence of level of knowledge regarding play for preschooler among mothers in Nepal) = 65%,⁷ level of significance (α) = 5%; absolute allowable error (L) = 6%. Using these values the sample size came to be 242. Adding 5% non-response rate the required final sample size was 255.

A teaching program on play was developed based on the review of related literature. The program consisted of introduction, purpose and importance of play, types and selection criteria of play materials according to age group.

An interview schedule consisting of demographic information, knowledge items and attitude scale was developed by the investigators. There were 30 knowledge related questions with true/ false response. Each correct answer was given a score of one and incorrect answers received no score. The total score of knowledge items was 30. The participants were said to have inadequate knowledge if they had less than 50% score and adequate knowledge if they had 50% or

higher -scores. A Likert scale consisting of 10 statements with 5 positive statement and 5 negative statements was developed for measuring attitude towards play. Each item consisted of 5 options i.e. strongly agree, agree, uncertain, disagree and strongly disagree. The scores for the positively stated items were 5 points for those who strongly agree, 4 points for agree 3 points for uncertain 2 points for disagree and 1 point for strongly disagree. For the negatively worded items, the scores were reversed. Maximum possible score was 50 and minimum was 10. The respondents were said to have unfavorable attitude if they had less than 50% score and favorable attitude if they had 50% or higher score.

The interview schedule was translated into Nepali language with back translation into English by two bilingual experts to check for the validity of the translated version of the schedule. Pretesting of the schedule was done among 10% of similar mothers residing in Omsatiya rural municipality. Cronbach's alpha was calculated to check for the reliability of the attitude scale of schedule and the value was 0.80. Fieldwork was carried out by all investigators.

Study was implemented from December 2020 to May 2021, after receiving ethical approval (UCMS/IRC/108/20 dated 13th December 2020) from Institutional Ethical Review Committee of Universal College of Medical Sciences and Teaching Hospital (UCMS-TH), Bhairahawa. Siddharthnagar municipality of Rupandehi district was selected purposively. From a total of 13 wards of the municipality, 3 wards were selected randomly. These three wards were considered as separate clusters and from each cluster purposively 85 mothers having under five children and willing to participate in the study were selected.

Pretest and post-test data were collected through face to face interview by visiting their homes. During baseline data collection, their contact number was taken and all the pretested mothers from each of the 3 wards were gathered in their respective ward's community hall for educational intervention in two groups by contacting them through telephone. Educational intervention of one hour duration was provided to them through interactive lecture using visual aids i.e. chart papers poster and pamphlet. After seven days of intervention, posttest was done using the same interview schedule among the same mothers.

Collected data were edited and entered into Microsoft excel. SPSS version 16 was used to analyze the data. Simple frequency tables, cross tables and mean tables were used as per the study variables related to the study. Mean, standard deviation, mean differences, t value and p value was calculated to find the differences between before and after the teaching program. Level of significance was considered as $p < 0.05$.

RESULTS

Among 255 mothers, more than half (57.3%) were between the age group 31 to 40 years and nearly half (47.8%) of their children were of age group one to three years. More than two-third (68.2%) of children were female. Two-fifth (40.0%) were Janjati and nearly two-fifth (38.8%) were Christian. Nearly half (47.8%) of mothers had two children. More than three-fourth (67.8%) had more than five members in their family and living in joint family. More than three-fourth (67.8%) of the mothers were illiterate whereas

all of their spouses were literate. More than three-fifth (61.2%) of mothers was engaged in household activities and more than one-fourth of their fathers were engaged in small scale business (Table 1).

Table 1. Socio-demographic and socio-economic characteristics of mothers and their spouses (n=255)

Characteristics	Number	Percent
Age of mother (completed years)		
20-30 years	109	109
31-40 years	146	146
Age of youngest child (completed years)		
Below one year	32	32
One to three years	122	122
Three to five years	101	101
Sex of youngest child		
Male	81	81
Female	174	174
Ethnicity		
Bhahmin/Chhetri	32	32
Madeshi	27	27
Dalit	49	49
Janjati	102	102
Muslim	45	45
Religion		
Hindu	59	59
Muslim	97	97
Christian	99	99
Number of living children		
One	32	32
Two	122	122
Three	101	101
Size of family		
Five or less than five	82	82
More than five	173	173
Type of family		
Nuclear	82	82
Joint	173	173
Educational status of mother		
Literate	82	82
Illiterate	173	173
Spouses' educational status		
Literate	255	255
Illiterate	-	-
Occupation of mother		
Homemaker	156	156
Daily wages	49	49
Agriculture	50	50
Spouses' occupation		
Small scale business	77	77
Service	77	77
Daily wages	49	49
Agriculture	52	52

Table 2 presents the mothers' knowledge regarding play before and after the intervention. The table indicates that knowledge increased in all items after the intervention of teaching program.

Table 2. Distribution of mothers' knowledge regarding play in the pretest and post-test

Variables	Correct Responses			
	Pretest (n=255)		Post-test (n=255)	
	No.	%	No.	%
Activity engaged for enjoyment and recreation is play.	75	29.4	238	93.3
Play is necessary for child growth and development.	78	30.6	159	62.4
Play is enjoyable to the child.	82	32.2	249	97.6
Play improves the self-awareness, self-esteem and self-respect of the child.	92	36.1	230	90.2
Personality development is unrelated to play.	34	13.3	202	79.2
An infant enjoys playing alone.	80	31.4	238	93.3
When a child represents or symbolizes other people through play, it is role playing.	113	44.3	203	79.6
Watching others' play without playing themselves is most common in children.	60	23.5	220	86.3
In unoccupied play, child does not involve in play.	8	3.1	210	80.4
In solitary play, child plays alone.	24	9.4	244	95.7
Toddlers prefer playing alone.	77	30.2	236	92.5
Watching others' play is onlookers play.	40	15.7	217	85.1
Eighteen months to three years child prefer onlooker play.	97	38.0	228	89.4
In parallel play, children play side by side with other children with similar toys.	40	15.7	210	82.4
Toddler commonly prefers parallel play.	69	27.1	221	86.7
In associative play, a child plays with peer groups but have different goal.	14	5.5	231	90.6
Two to three years children commonly prefer associative play.	64	25.1	142	55.7
In cooperative play, a child plays in groups.	17	6.7	172	67.5
Preschooler selects cooperative play.	98	38.4	155	60.8
Child can be allowed for play for 2 hours/day	91	35.7	210	82.4
Toys are play materials of children.	1	0.4	181	71.0
Play materials should be safe, washable, light weight and easy to handle.	50	19.6	200	78.4
Electrical toys should be avoided for children.	3	1.2	230	90.2
Selection of wrong toys can result physical problems in children.	25	9.8	219	85.9
Musical toys are suitable for 6 months old child.	30	11.8	189	74.1
Cubes and blocks are more liked by nine month old child.	55	21.6	186	72.9
Toys that transport objects is more suitable for infants.	36	14.1	196	76.9
A toddler prefers push and pulls toys.	46	18.0	216	84.7
Household articles, doll, pots and pans can be used as play materials for toddler.	93	36.5	208	81.6
Tricycle is suitable for pre-school children.	113	44.3	220	86.3

Table 3 shows that before teaching program, the level of knowledge was inadequate among most (98.4%) of the mothers while attitude was unfavorable among more than three-fourth (76.1%). However after the intervention both knowledge and attitude increased to 100% among them. This indicates that teaching program was effective in increasing the knowledge and attitude regarding play among the mothers.

Table 3. Level of knowledge and attitude regarding play before and after the intervention among mothers of under-five children

Variables	Before intervention (n=255)		After intervention (n=255)	
	No	%	No	%
Level of Knowledge				
Inadequate	251	98.4	-	-
Adequate	4	1.6	255	100
Level of Attitude				
Unfavorable	194	76.1	-	-
Favorable	61	23.9	255	100

Table 4 shows that the posttest knowledge mean score was higher than the pretest knowledge mean score with a mean difference of 17.90. The calculated "t" value (-52.92) was highly significant having p value < 0.001. Similarly, before intervention attitude mean score was higher than after

intervention attitude mean score with a mean difference of 21.38. The calculated “t” value (-146.80) was highly significant having p value < 0.001 .

Table 4. Mean knowledge and attitude before and after the intervention among the mothers of under-five children

Variables	Mean	Standard deviation	Mean difference	t value	p value
Knowledge Level					
Before Intervention	6.65	2.53	17.90	-52.92	$<0.001^*$
After Intervention	24.55	4.00			
Attitude Level					
Before Intervention	23.10	1.35	21.38	-146.80	$<0.001^*$
After Intervention	44.48	1.86			

DISCUSSION

This study found that before the intervention, 98.4% of the mothers had inadequate knowledge and 76.1% had unfavorable attitude regarding the play. However in contrast to this study another study conducted in Bangalore, India found that lower portion (slightly more than half) of the parents had inadequate knowledge and less than two-fifth had unfavorable attitude regarding the play.⁸ This difference might be due to the study setting, study population as present study was conducted among only mothers and the previous study was conducted among parents and might be due to different methodology.

This study found that after the intervention both the knowledge and attitude increased to 100% among the mothers of under five children. This indicates that teaching program was effective in increasing the knowledge and attitude regarding play among mothers of under five children. This finding is in line with another study conducted in Tamil Nadu, India where after the delivery of the self-instructional module, there was a significant improvement in the level of play stimulation knowledge among mothers of infants.⁹ Similarly another study conducted in Bangalore, India found that after implementation of a planned teaching program, knowledge regarding play therapy among mothers of children under five had significantly increased.¹⁰

In the present study, the effectiveness of teaching program on the knowledge and attitude of play therapy was statistically tested by paired “t” test and the finding showed that for both the knowledge and attitude the calculated “t” value was significantly associated having p value < 0.001 . Similar result was also found in another study whereby using a paired “t” test, play therapy's efficacy on knowledge and attitude was statistically assessed, and the results were shown to be statistically significant at the p value < 0.001 level.¹¹ In concordance with the finding of this study, another study conducted in Bangalore India found that the paired t test showed that effectiveness of knowledge and attitude play therapy was statistically significant at $p > 0.001$.⁸

CONCLUSION

This study concludes that the teaching program tends to be successful in improving mothers' knowledge and attitudes toward play of under five children. Hence local administra-

tors and policy makers should focus on implementing the teaching program regarding play therapy among mothers of under five children.

CONFLICT OF INTEREST

None

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