A study to assess the knowledge of common health problems of child labourer at Tharamangalam, Tamilnadu

[1, 2] Revathi C[*] and [1] Kamala S.

[1] Pediatric Nursing, Rani Meyyammai College of Nursing, Annamalai University, Annamalai Nagar, Tamilnadu, India.

[2] Manjari Devi School & College of Nursing, Rasulgarh, Bhubaneswar, Odisha, India.

[*] **Corresponding Author:** E-Mail**:** revathisenthilkumar@rediffmail.com

ABSTRACT

Child labour indicates employment of child for economic wage earning work and the child is subjected to various hazards related to his mental, physical and social health. The child loses his "childhood" abruptly and is prematurely pushed to live an adult life and shoulder responsibilities. To assess the knowledge and attitude on child labour among parents and to rule out the physical health problems of working children. In order to achieve the objectives of the study, a non experimental research design with a descriptive approach was adopted. 300 working children were interviewed using non probability purposive sampling technique. The finding from table 22 reveals that in pretest 24.7% of child labourers had ill appearance, 18% of them had toxic appearance, 62.7% of them were under nourished, 25% of them were dull and 14.3% of them were tired. Regarding skin problems, 74.7% of them had dry skin, 15.6% of them had vesicles in pretest. In pretest 70.7% of them had clean and untidy dress 51.7% of them had unclean hair without dandruff and lice, 35.4% of them had unbrushed teeth without caries, 90% of them had untrimmed nails, 77.3% of them had running nose but not using handkerchief and majority (89.7%) of them had unclean skin. Regarding vitamin 'A' deficiency in pretest, 10% of the child labourers had Bitot's spots, 2.7% of them had scarred eyes.With regard to vitamin 'B' deficiency 20.3% of them had red, beefy tongue and 10% of them had fissured tongue in pretest. Regarding vitamin 'C' deficiency sign (8.7%) of them had bleeding gums, 6% of them had spongy gums. Regarding vitamin 'D' deficiency 15.4% of them had pigeon chest in the pretest.

Keywords: Child labor, Knowledge, Health problems and working children.

1. INTRODUCTION

According to World Health Organization, India is home to more than 12.6 million children who are forced to work in order to survive. These children, besides working as domestic helpers on streets, in factories and farmlands, silently suffer from abuse. In the recent decades, many children have been routinely exposed to physical, sexual and psychological abuse in their homes, schools, place of work and in their own communities. All these factors have devastating consequences on the health and wellbeing of the children presently and with future. Engaging children in any sort of work affects their fullest growth. Legislative provisions have been formulated only to prevent the menace of child labour. But the children are the most deprived section of the population which is forced to earn an inadequate payment or contribute their work for the welfare of family by sacrificing personal development. Poverty, coupled with a rapidly growing population, ignorance and increasing dependency load are the reasons behind the grim incidence of children employment in the villages and towns of developing countries. Though India is signatory of various international conventions and agreements, there is growing number of child labourers in India. They work under very hazardous conditions [1]. With respect to education, children engaged in labour, are usually the drop outs of school at different stages of their schooling. In a study, conducted in the Palestinian, West bank and Gaza strip, it was reported that

56% of the working children got dropped out of school at the preparatory stages, while 31% dropped out at the elementary stages [2]. Asia has the highest percentage of children working in export industries. The following list includes the type of industries which have the highest percentage of child labour worldwide: garments, carpets, shoes, small-scale mining, gem polishing, food processing, leather training, furniture, etc [3]. India has the largest number of child labour force estimated to be one – third of world's child labour. In India, over a quarter (26%) of labour force comprises children [4]. It may be totally shocking, but absolutely true, to note the point that child labour contributes to 20 percent of national product (GNP) which subsidizes higher education for privileged children. It is surprising to note that a country like India cannot find jobs for 60 million adults but can find space for 11.1 million child labourers [5]. As per Thukral [6] India has 37.5 million children more than any other country in the world. The report also states the government admits that about 2 million children are employed in hazardous industries, occupations and processes. As per Siddharth [7] study finding in India, child labour is not only found in factories, but also in many other places as agricultural labour (42.1%), cultivators (34.8%). mining and quarrying (6.5%), manufacturing industry (5.4%), trade and commerce (2.5%), household industry (4%) and others (4.6%). South Indian state of Tamilnadu is home to the highest concentration of child labour in the world. It is estimated that 1,00,000 children are employed of which 75% girls are employed in match factories located in the interior districts of Tamilnadu (Cook, 1994). Occupational hazards cause not only short-term health effects (mainly injuries, skin problems, etc.), but also long-term effects which will become evident later during adulthood. Therefore, it is very difficult to measure and quantify them cancer, infertility, chronic back pain and IQ reduction are some of the expected long-term outcomes (World Health Organization, 2007)[8]. Hence, a study to assess the prevalence of child labour and the effects of health promotion strategies on the health status of child labourers at Tharamangalam in Salem district was carried out.

2. METHODOLOGY

2.1. Research Design

One group pretest - posttest design was adopted to find out the effectiveness of structured teaching knowledge on knowledge regarding management of common health problems and health promotion strategies on health status of child labourers.

2.2. Research Setting

Salem District is one of the important districts in the state of Tamil Nadu, in southern India. Salem is the district headquarters and other major towns in the district includes Mettur, Tharamangalam and Attur. Salem has its significance in various aspects, as it is known for mango cultivation, silver ornaments, textile, sago industries and steel production. As of 2011, the district had a population of 3,482,056 with a sex-ratio of 954 females for every 1,000 males. Salem is one of the biggest cities in Tamil Nadu

The study was conducted in Tharamangalam block in Salem district. It is located in the Salem District in northwestern. Tharamangalam block has a population of 30,222. Males constitute 52% of the population and females 48%. Tharamangalam has an average literacy rate of 59%, male literacy is 75.3%, and female literacy is 53.7%.

2.3. Sampling Technique and Sample size

A multistage sampling technique was employed for the collection of data. The first stage was purposive selection of Salem District as one of the districts in Tamil Nadu, because, it was reported to have increased number of child labourers. The second stage was purposive selection of Tharamangalam zone in the district due to the prominence of the child labourers working in brick fields. At final stage purposive sampling technique was used to select the child labourers and their parents. Sample size consisted of 300 child labourers and their parents.

2.4. Development and Description of the Tool

Extensive review of literature discussion and views of experts, internet search enhanced the selection and development of tool to collect data from child labourers and their parents.

Health Status Index and Questionnaire regarding knowledge on management of common health problems and health promotion strategies which was developed by the researcher.

2.5. Health Status Index

This part of the questionnaire was developed by the researcher which consisted of 48 items which measures the health status of child labourers. The index included information such as, vital signs, anthropometric measurements, general physical examination which included examination of head, face, mouth, tongue, neck, chest, abdomen, skin, mental and nutritional assessment. Health Status Index is the observational checklist which measures the health status of the child labourers.

2.6. Score Interpretation

Questionnaire on knowledge regarding management of common health problems of child labourers and health promotion strategies consisted of 41 items. The correct answer was given a score of one and the wrong answer was given a zero and the maximum score was 66. The score was interpreted as below:

Table - 1: Questionnaire on knowledge

Score	Score (%)	Interpretation
0 – 22	1 – 33	Inadequate knowledge
23– 44	34 – 66	Moderately adequate knowledge
45– 66	67- 100	Adequate knowledge

2.7. Data Collection Procedure

Data collection was done from March 2013 to April 2014. A formal written permission was obtained from Village president, Tharamangalam block. The purposes of the study were explained to them. The child labourers and their parents who were willing to participate in the study, indicating their voluntary participation were included in the study.

3. RESULTS AND DISCUSSION

The table 2 reveals with regard to general appearance that 57.3% of them had healthy appearance, 27.4% had ill-appearance and the remaining 18% of them had toxic appearance.

Regarding nourishment, in pretest 37.3% of them were well nourished and 62.7% were under nourished. In posttest-I 50% of them were found well nourished and 50% were under nourished where as in posttest-II 89.7% were found well nourished and only 10.3% under nourished. Hence, after three months of structured teaching programme level of nourishment increased from 37.3% to 89.7% showing the effectiveness of structured teaching programme.

Regarding activity in pretest, 60.7% of child labourers were active, 25% of them were dull and 14.3% of them were tired. Where as in posttest-II 73% of them were active 19.7% of them were dull and 7.3% of them were tired.

Table - 2: Comparison of Pretest and Posttest Level of Health Status Regarding 'General Appearance' Among Child Labourers (N = 300)

Level of Health Status		Health Status					
		Pretest		Posttest-I		Posttest-II	
		No.	%	No.	%	No.	%
Appearance	Healthy	172	57.3	194	64.7	255	85.0
	Ill	74	24.7	67	22.3	40	13.3
	Toxic	54	18.0	39	13.0	5	1.7
Nourishment	Well nourished	112	37.3	150	50.0	269	89.7
	Under nourished	188	62.7	150	50.0	31	10.3
Activity	Active	182	60.7	219	73.0	272	90.7
	Dull	75	25.0	59	19.7	21	7.0
	Tired	43	14.3	22	7.3	7	2.3

Table - 3: Comparison of Pretest and Posttest Level of 'Skin Problems' Among Child Labourers (N = 300)

Level of 'Skin Problems'		Health Status					
		Pretest		Posttest-I		Posttest-II	
		No.	%	No.	%	No.	%
Texture	Normal	78	26.0	140	46.7	254	84.7
	Dry	222	74.0	160	53.3	46	15.3
Lesions	Normal	253	84.4	259	86.4	278	92.7
	Vesicles	47	15.6	41	13.6	22	7.3

The Skin problems of the child labourers, with regard to 'Texture, Lesions,' were analyzed and the result is shown in table 3.

Regarding the texture of the skin, in pretest, 26.02% labourers had normal texture and 74% of them had dry skin texture. In posttest-I, 46.7% had normal texture and 53.3% of them had dry skin where as in posttest-II 84.7% had normal skin texture and 15.3% had dry skin.

Regarding skin lesions, in pretest 15.6% child labourers had vesicles where as in posttest-II 7.3% of them had vesicles.

Table - 4: Comparison of Pretest and Posttest Level of Health Status Regarding 'Hygienic Problems' Among Child Labourers (N = 300)

Variables		Health Status					
		Pretest		Posttest-I		Posttest-II	
		No.	%	No.	%	No.	%
Dress	Clean and Tidy	67	22.3	151	50.3	245	81.7
	Clean but untidy	212	70.7	128	42.7	39	13.0
	Unclean and Untidy	21	7.0	21	7.0	16	5.3
Hair	Clean and combed	95	31.7	95	31.7	253	84.3
	Unclean without dandruff and lice	155	51.7	155	51.7	21	7.0
	Unclean with dandruff and lice	50	16.7	50	16.7	26	8.7
Teeth	Clean and brushed	142	47.3	158	52.7	230	76.7
	Unbrushed without caries	106	35.4	90	30	18	6
	Unbrushed with caries	52	17.3	52	17.3	52	17.3
Nails	Clean and Trimmed	30	10.0	112	37.3	271	90.3
	Untrimmed	270	90.0	188	62.7	29	9.7
Running Nose	Absent	68	22.7	100	33.3	241	80.3
	Present and uses handkerchief	-	-	45	15.0	44	14.7
	Present but does not use handkerchief	232	77.3	155	51.7	15	5.0
Skin	Clean	31	10.3	97	32.3	273	91.0
	Unclean	269	89.7	203	67.7	27	9.0

Table 5: Comparison of Pretest and Posttest Level of Health Status Regarding 'Nutritional Problems' Among Child Labourers(N = 300)

Variables		Health Status					
		Pretest		Posttest-I		Posttest-II	
		No.	%	No.	%	No.	%
Vitamin 'A' deficiency	Nil	262	87.3	262	87.30	270	90.0
	Bitot's spots	30	10.0	30	10.00	28	9.3
	Scarred eye	8	2.7	8	2.7	2	0.7
Vitamin 'B' complex deficiency	Nil	209	69.7	224	74.7	282	94.0
	Red, beefy tongue	61	20.3	46	15.3	15	5.0
	Fissured tongue	30	10.0	30	10.0	3	1.0
Vitamin 'C' deficiency	Nil	256	85.3	264	88.0	286	95.3
	Bleeding gums	26	8.7	20	6.7	8	2.7
	Spongy gums	18	6.0	16	5.3	6	2.0
Vitamin 'D' deficiency	Nil	254	84.7	254	84.7	254	84.7
	Pigeon chest	46	15.3	46	15.3	46	15.3

Table - 6: Comparison of Knowledge Level of Pre and Posttest Scores of Child Labourers Regarding Management of Common Health Problems and Health Promotion Strategies (N = 300)

Level of Knowledge	Pretest		Posttest-I		Posttest-II	
	No.	%	No.	%	No.	%
Inadequate	211	70.33	172	57.33	11	3.67
Moderately adequate	85	28.33	120	40.00	172	57.33
Adequate	4	1.33	8	2.67	117	39.00

The personal hygiene of child labourers was analyzed and the result is shown in table 4. Regarding dressing of child labourers in pretest 22.3% of child labourers were found clean and tidy, 70.7% were found clean but untidy and 7% were found unclean and untidy. In posttest-I 50.3% of them were found clean and tidy, 42.7% of them were found clean but untidy and 7% of them were found unclean and untidy where as in posttest-II 81.7% of them were found clean and tidy and 13% were found clean and only 5.3% of them were found untidy.

With regard to the condition of hair, in pretest, 31.7% of child labourer were found clean and combed, 51.7% of them were found unclean without dandruff and lice and 16.7% of them were found unclean with dandruff and lice where as in posttest-II 84.3% of them were found clean and combed and 7% were found unclean without dandruff and lice and 8.7% of them were found unclean with dandruff and lice.

Regarding condition of teeth, in pretest 47.3% of the laboruers had clean and brushed teeth and 35.4% had unbrushed teeth without caries and 17.3% of them found with unbrushed teeth with caries where as in posttest-II 76.7% were found clean and brushed, 17.3% were found unbrushed with caries and only few (6%) of them were found unbrushed without caries.

Regarding the condition of nails during pretest, 10% of them had clean and trimmed nails and 90% had untrimmed nails where as in posttest-II 90.3% of them had clean and trimmed and 9.7% had untrimmed nails.

Regarding running nose, in pretest, it was found that 77.3% of them had running nose but did not use handkerchief where as in posttest-II 80.3% of them did not have running nose, only 14.7% of them had running nose and used handkerchief.

Regarding skin, in pretest only 10.3% of the child labourers were found clean and 89.7% were found unclean where as in posttest-II 91.0%

of them were found clean and 9% were found uncluen.

Regarding vitamin 'A' deficiency, the above table shows that in pretest 87.3% of child labourers had no signs, 10% of them had bitot's spots and 8% of them had scarred eyes where as in posttest-II 90% of them had no signs of vitamin 'A' deficiency.

Regarding vitamin 'B" complex deficiency, in pretest 69.7% of child labourers had no signs, 20.3% of them had red, beefy tongue and 10.0% of them had fissured tongue where as in posttest-II 94% of them had no signs of vitamin 'B' complex deficiency.

Regarding vitamin 'C' deficiency, in pretest 85.3% of child labourers had no signs, 8.7% of them had bleeding gums and 6% of them had no signs of vitamin 'C' deficiency where as in posttest-II 95.3% of them had no sing of vitamin 'C' deficiency.

Regarding knowledge on management of common health problems the above table shows that in pretest 70.33% of the child labourers had inadequate knowledge, 28% of them had moderately adequate knowledge and very few (1.38%) of them had adequate knowledge. In posttest-I, 57.33% of child labourers had inadequate knowledge level, whereas 40% of them had moderately adequate knowledge and 2.67% of them had adequate knowledge level.

In posttest-II 3.67% of child labourers had inadequate knowledge level, 57.33% of them had moderately adequate knowledge level and 39% of them had adequate knowledge.

Hence, it can be interpreted that the structured teaching programme was effective as the level of knowledge level of the child labourers had increased.

4. CONCLUSION

The finding from table 2 reveals that in pretest 24.7% of child labourers had ill appearance, 18% of them had toxic appearance,

62.7% of them were under nourished, 25% of them were dull and 14.3% of them were tired. Regarding skin problems, 74.7% of them had dry skin, 15.6% of them had vesicles in pretest. Table 3 reveals that in pretest 70.7% of them had clean and untidy dress 51.7% of them had unclean hair without dandruff and lice, 35.4% of them had unbrushed teeth without caries, 90% of them had untrimmed nails, 77.3% of them had running nose but not using handkerchief and majority (89.7%) of them had unclean skin. Regarding vitamin 'A' deficiency in pretest, 10% of the child labourers had Bitot's spots, 2.7% of them had scarred eyes.With regard to vitamin 'B' deficiency 20.3% of them had red, beefy tongue and 10% of them had fissured tongue in pretest. Regarding vitamin 'C' deficiency signs (8.7%) of them had bleeding gums, 6% of them had spongy gums. Regarding vitamin 'D' deficiency 15.4% of them had pigeon chest in the pretest.

Data presented in table 2 revealed that in pretest only 21.7 of them had clean and tidy dress where as in posttest II majority of them (81.7%) had clean and tidy dress. With regard to condition of hair, only 39.5% of them had clean and combed hair in pretest where as in posttest-II 84.3% of them had clean and combed hair. Regarding teeth, in pretest only 47.3% of them had clean and brushed teeth, where as in posttest-II 76.7% of them had clean and brushed teeth. In pretest, only 10% of them had clean and trimmed nails where as in posttest-II 90.3% of them had clean and trimmed nails. Majority of them (77.3%) had running nose but not using handkerchief in pretest where as in posttest-II only 15% of them had running nose. Regarding vitamin deficiencies table 25 revealed that, in posttest-II 90% of them had no signs of vitamin 'A' deficiency. 94% of them had no signs of vitamin 'B' deficiency, 95.3% of them had no signs vitamin 'C' deficiency and 84.7% of them had no sings of vitamin 'D' deficiency. Regarding knowledge on management of common health problems and health promotion strategies that in pretest 70.33% of the child labourers had inadequate knowledge, 28% of them had moderately adequate knowledge and very few (1.38%) of them had adequate knowledge. In posttest-I, 57.33% of child labourers had inadequate knowledge, whereas 40% of them had moderately adequate knowledge and 2.67% of them had adequate knowledge. In posttest-II 3.67% of child labourers had inadequate knowledge, 57.33% of them had moderately adequate knowledge and 39% of them had adequate knowledge. Hence, it can be interpreted that the structured teaching programme was effective as the level of knowledge of the child labourers had increased. Thus the hypothesis of this study, there will be a

significant level of difference in knowledge regarding health promotion strategies on health status among the child labourers before and after implementation of structured teaching programme was accepted.

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