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Knowledge on Air Pollution and its Impact on Health Among Young Adults in Delhi

Anjali Kaushik[1], Naseem Mancheri[2]

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Abstract

The objectives of the study were to assess the knowledge regarding Air Pollutionand its impact on health among young adults studying in selected colleges of Delhi. *Method*: QuantitativeResearch with Exploratory research design was used. Structured questionnairewas used to assess the knowledge regarding Air Pollution. Quotasampling was adopted to select 200 students from a selected University inNew Delhi. *Results*: Data was analyzed using Descriptive statistics. The findings showed that 94% of the samples had inadequate knowledge on Air Pollution and its impact on Health.*Conclusion*: Thepresent study revealed that majority of the samples were not aware about Air Pollution and its impact on health. Therefore, there is an urgent need to create awareness and sensitize people about Air Pollution.

Keywords: Air Pollution; Young Adults

Introduction

Air Pollution is not a joke, air pollution will make you choke.[1] Environmental pollution is known as the main challenge of urban life, and imposes significant health and financial losses to countries. Among environmental risk factors, air pollution is introduced as the most important one. According to a report by World Health Organization, indoor and outdoor air pollution cause 7 million deaths annually. The majority of thesedeaths occur in developing countries.[2] Acute and chronic exposures to air pollution lead to many health outcomes, such as cardiovascular, respiratory, and cerebrovascular disorders.[3,4,5]

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Air pollution originates from various sources, but mainly caused by human activities such as vehicles, industries, etc. Solid, liquid or gaseous materials released into the air from natural resources or human activities, impose damages to human, plants and animals' health, and the ecosystem balance.[8] The most polluted cities cannot be determined based on available data. Although according to WHO's database, air pollution is high in a number of cities in China, India, Iran, etc.[9]

The most important health burden of air pollution can be seen in developing countries. Lack of knowledge about the health effects of air pollution is the biggest obstacle in defined activities and social organizations and international sources. The health sector plays a key role for leading a multi-pronged approach to prevent exposure to air pollution. It can encourage and support other sectors (transport, housing, energy and industry) in the development and application of long term policies to reduce the health risks of air pollution. [10]

Materials and Methods

In this cross sectional study, 200 students of Jamia were selected by Quota sampling. The only inclusion criterion was to be the student of Jamia Hamdard. Structured Questionnaire was used to collect data. The questionnaire consisted of two parts: demographic information, knowledge regarding air pollution. Formal administrative approval was obtained from the concerned authority toconduct the final study.

Results

Section I n=200

Socio-Demographic data of the Subjects.

Demographic Variables	Frequency	Percentage
Age (in Years)		
17-20	136	68.0
21-23	54	27.0
24 & above	10	5.0
Gender		
Male	114	57
Female	86	43
Religion		
Hinduism	52	26.0
Islam	145	72.5
Christianity	02	1.0
Buddhism	01	0.5
Education		
Sr. Secondary	81	40.5
Graduate	85	42.5
Post graduate	33	16.5
Other (Diploma)	01	0.5
Preferred mode of transport		
Private	85	42.5
Public	103	51.5
Pool	10	5.0
Other(by walk)	2	1.0
Vehicles at home		
Bicycle	91	45.5
Motorcycle	162	81
Cars	129	64.5

Section II n=200

Subjects Knowledge score on Air Pollution.

Knowledge Score

Possible Range of Score	Obtained Range of Score	Mean	Median	Standard Deviation
0 – 30	5 - 25	16.47	17	4.48

Section III n=200

Frequency and Percentage distribution of Subjects by their Knowledge score on Air Pollution.

Category	Frequency	Percentage (%)
Adequate (≥ 75%)	12	6
Inadequate (< 75%)	188	94

Information Regarding Vehicle Ownership

Only 43% of the subjects were having one motorcycle, 23% of the subjects had two motorcycles and 6.50% of the subjects had more than two motorcycles. 37% of the subjects had one car, 20.5% subjects had two cars and 6.5% had more than two cars.

Information Regarding Fuel Consumption

Majority (87%) subjects were using petrol as a fuel whereas 10.50% of the subjects were consuming diesel.

Information Regarding Frequency of Pollution Checked

40% of the subjects did pollution check once a year, 36% of the subjects did twice a year, 11.5% of the subjects never did pollution check and 12% of the subjects not using personal vehicle.

Discussion

The findings from the current study agree with those of Al Khamees and Alamari where the knowledge of indoor pollution was poor. In the present study, knowledge assessment about outdoor air pollution was done which was found to be inadequate. Also, the two studies agreed that there was a little advancement in the education on this topic within the examined population.[11]

A study conducted by Sharma R to assess the effectiveness of structured teaching programme Regarding Knowledge on Effects of Air Pollution on Health Among High School Students in Selected High School in Bangalore revealed that the students had poor or inadequate knowledge regarding air pollution which is consistent with the findings of the present study where 94% students had inadequate knowledge about air pollution. Air pollution can directly or indirectly affect human health, causing physical discomfort and leading to disease or even death. Studies have shown that when the human body is exposed to highly polluted air for a long time, the mortality rate increases.[12] Therefore, there is a need to create awareness among people about Air pollution asthe air we breathe has a lot of effect on our health. People having more number of vehices that not only pollute air but also have serious health effects. Vehicles if not maintained properly, not checked for pollution create more pollution. Fuels like solar energy, CNG should be promoted.

Conclusion

The present study revealed that 94% of the samples had adequate knowledge on Air Pollution. The study thus implies that awareness regarding Air Pollution, its ill effects on health and how to find an alternative should be created by health workers at all levels.Air quality is becoming poor and poor day by day especially in metropolitan cities.

Acknowledgment

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Conflict of interest: The authors declare no conflictsof interest

References

1. Global Burden of Disease (GBD). Global, Regional, and national age-sex specific all-cause and cause-specific mortality for 240 causes of death, 1990-2013: a system-atic analysis for the Global Burden of Disease Study 2013. Lancet. 2015;385(9963):117-71.
2. WHO. Seven million premature deaths annually linked to air pollution. Geneva, World Health Organization; 2014.
3. Cesaroni G, Badaloni C, Gariazzo C, et al. Long-term exposure to ur-ban air pollution and mortality in a cohort of more than a million adults in Rome. Environ Health Perspect. 2013;121(3):324-31.
4. Carey IM, Atkinson RW, Kent AJ, et al. Mortality associations with long-term exposure to outdoor air pollution in a national English cohort. Am J Respir Crit Care Med. 2013;187(11):1226-33.
5. Naddafi K, Atafar Z, Faraji M, et al. Health effects of airborne par-ticulate matters (PM10) during dust storm and non-dust storm condition in Tehran. Journal of Air Pollution and Health. 2017;1(4):259-68.
6. Dimitriou A, Christidou V. Pupils' understanding of air pollution. J Biol Educ. 2007;42(1):24-9.
7. WHO. Ambient (outdoor) air pollution in cities data-base. Geneva, World Health Organization; 2014.
8. Wang R, Yang Y, Chen R, et al. Knowledge, attitudes, and practices (KAP) of the relationship between air pollution and children's respira-tory health in Shanghai, China. Int J Environ Res Public Health. 2015;12(2):1834-48.

9. Khamees, Nedaa A. Al, and Hanaa Alamari. "Knowledge of, and attitudes to, indoor air pollution in Kuwaiti students, teachers and university faculty." College Student Journal, vol. 43, no. 4, 2009, p. 1306+. Accessed 18 Mar. 2020.

10. Tharby, R. (Ed.) Catching Gasoline and Diesel Adulteration (English); South Asia Urban Air Quality Management Briefing Note; NO. 7; World Bank: Washington, DC, USA, 2002. Available online: http://documents.worldbank.org/curated/en/223591468164352248/Catching-gasoline-and-diesel-adult eration (accessed on 13 June 2018).

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Effectiveness Music Therapy with Conventional Intervention on Preoperative Anxiety Among Children Undergoing Surgeries in Selected Hospitals of Rajasthan: A Pilot Study

S K Mohanasundari[1], A Padmaja[2], Kiran Kumar Rathod[3], Suni Kothari[4]

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Abstract

Introduction: Increasing attention is being paid to a variety of non-pharmacological interventions for reduction of preoperative anxiety such as music therapy, music medicine interventions, and visual imagery technique for the children undergoing surgeries. *Method*: Randomized controlled trial was conducted to assess the effectiveness of music therapy with conventional intervention on preoperative anxiety with total 24 children undergoing surgeries, aged between 4 to 12 years. Samples were equally distributed to 2 groups (12 in each group). Experimental group received prerecorded instrumental music for 15 to 30 minutes duration minimum 3 times a day, along with conventional interventions and control group received conventional interventions. Hamilton anxiety rating scale was used to measure the preoperative anxiety level. Data was computed in SPSS-16 *Result*: The mean and SD score of pre and post test in experimental group and control group was 7 ±3.43, 1.67 ±2.06 and 19.67 ±14.88, 19.08 ±12.12 respectively. The percentage of effect was 76.1 % and 2.89% in experimental and control group respectively. The effect size of the music therapy was 1.88. (Cohen'sD). So the intervention was effective in reducing anxiety level of the children preoperatively. *Conclusion*: The music therapy could be passive or active type but if it is based on child preference it will have very good impact on reducing anxiety level of the child and it will keep the children relaxed before going to surgery.

Keywords: Music therapy conventional interventions, preoperative anxiety and children undergoing surgeries.

Introduction

Background

Each year, more than 2 million children undergo surgical procedures. Children, their parents, and the nurses who care for them find the perioperative phase to be more stressful. Children may experience anxiety and fear about surgery, pain, separation from parents, unfamiliar surroundings, the unknown, unpleasant sensory stimulation, and loss of autonomy and control.[1] In the immediate preoperative period, which corresponds to 24 hours before surgery, discomfort is imminent for the children and their family, regardless of the type of surgery, outpatient or hospital approach and cultural context in which the child is inserted.[2,3] In addition, the susceptibility of the child, lack of understanding about the surgical procedure, unknown hospital environment, fear of physical injury, separation from their parents and feelings of sadness and punishment related to the fact that surgery is a scheduled procedure may contribute to such discomfort.[4,5]

Several evidence indicate age and temperament of the child, behavioral problems during health care previous surgery and hospitalizations level of parental education and maternal anxiety as factors associated with preoperative anxiety in children.[6-10]

Anxieties in children arise due to their altered interpretation of healthcare surroundings. Anxiety manifestations are variable as children transition

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through different stages of physical, emotional, and psychological development. Parental separation and induction of anesthesia have been implicated as the most stressful periods for children to endure during their surgical experience.[11]

Anxiety is a common feeling among children in the preoperative period. As acute stress source, anxiety induces functional changes in the central nervous system, increases the deleterious effects on the child's body when associated with other perioperative stressors[12] produces negative behaviors and high pain intensity scores in the postoperative period.[13] In addition, anxiety causes sleep disruption, nausea, fatigue, and inadequate responses to anesthesia and analgesia leading to higher costs for the health services and family.[14]

Increased anxiety, disturbances in eating and sleeping, as well as increased pain and analgesic use; continue to be psychological problems during postoperative period also. Parents are also anxious and their concern about the competency of staff, possible complications, and how to support their child. Unfamiliarity of surroundings, role expectations, added to parental stress and anxiety, can transmit to their children.[1]

Preoperative anxiety in children contributes to a myriad of physical and psychological sequelae. The literature revealed the effects of preoperative pediatric anxiety as contributory to the manifestation of numerous postoperative psychological behavioral changes such as feeding and sleeping problems, bedwetting, withdrawal and apathy, and these symptoms exist up to 2 weeks after surgery.[15]

To reduce child anxiety, sedatives and anti-anxiety drugs are regularly administered before surgery. However, these may prolong patient recovery and often have negative side effects. Therefore, a variety of non pharmacological interventions is paid increasing attention for reduction of preoperative anxiety such as music therapy, music medicine interventions, and visual imagery technique.[15]

Music interventions may provide a sensible alternative to sedatives and anti anxiety drugs for reducing preoperative anxiety. Interventions are categorized as 'music medicine' when passive listening to pre-recorded music is offered by medical personnel.[16]

Music therapy is a technique of complementary medicine that uses music prescribed in a skilled manner by a trained therapist. Patients overcome physical, emotional, intellectual, and social challenges with the help of these programs. These applications range from improving the wellbeing of geriatric patients in nursing homes to lowering the stress level and pain of women in labor.

Nurses must have an understanding of the impact of surgery on children and families to help ease the stress of this difficult time.[17] This present study focuses on effect of music therapy with conventional interventions in management of preoperative anxiety in children.

Need for the study

Children less than 15 years of age undergo approximately 2,159,000 surgeries annually in the United States, the reported incidence of preoperative anxiety in children is between 40% and 60%.[18] The incidence of preoperative anxiety is reported to be 60- 65 % in children. The risk factors are; excessive parental anxiety,[19] high operative pain, unfamiliar hospital environment, uncertainty about the outcome from the intervention, redo-surgery, parental detachment, stranger anxiety, previous unpleasant experience from hospital and children age above 7 yr. Parents having adjustment problem and less self-efficacy carry high preoperative anxiety in young children.[20] Children express preoperative anxiety in the form of excessive crying, agitation, worriness, cessation of play and probable vocalizing of their fear. These stressful situations lead to an increase in heart rate, sweating and sympathetic response. That leads to longer induction time, delayed recovery, more postoperative pain, longer hospital stay and high cost, high level of stress hormones and inflammatory markers, postoperative behavioral changes and high anxiety in subsequent surgery. The proper assessment and management of preoperative anxiety helps to address those anxiety needs and aid for better recovery.[21]

A study concluded that Interventions to treat or prevent childhood preoperative anxiety and possibly decrease the development of negative behaviors post surgery. Such interventions include sedative premedication, parental presence during anesthetic induction, behavioral preparation programs, music therapy, visual imagery technique, acupuncture and the use of toys, games, video and cartoons to keep the child engaged during preoperative period.[22] Children facing terminal illness and other chronic illness, undergoing surgeries are supported with music therapy interventions that are both developmentally appropriate as well as age appropriate. Because music therapy is a powerful,

nonthreatening and non-invasive approach and unique outcomes are possible. Music therapy can help a child manage pain and stressful situations and provide opportunities for socialization, self-expression and communication. Music therapy supports siblings, parents and extended family members throughout the child's illness and during the grief journey.[22]

A systematic review and meta-analysis of three RTC studies indicates that music interventions may have a statistically significant effect in reducing post-operative pain, anxiety and distress in children undergoing a surgical procedure. Evidence from that review and other reviews suggests music therapy may be considered for clinical use.[23] There was plenty of evidence to show that music therapy used in health care settings can help calm patients. And given there are no side effects associated to this therapy, it's certainly a treatment worth trying.

The children aged ≥ 4may be interested in listening music and may show personal preferences to choose music as well as better able to express anxiety. The purpose and primary objectives of this study is to determine effect of Music therapywith conventional interventions in management of preoperative anxiety in children.

Methodology

Research and sampling design: The research approach for this study was Quantitative approach. The effectiveness of music therapy with conventional interventions on preoperative anxiety among children undergoing surgery wasassessed in experimental and control groups. Randomized controlled trial research design was used to answer the research question. This pilot study was carried out in pediatric surgical ward of UMAID hospitals in Rajasthan in a controlled environment. Children aged between 4 to 12 years with mild to severe anxiety, who were planned for surgeries such as herniraphy inguinal hernia's, explorative laporatomy with appendectomy for appendicitis, anorectalplasty for fistula, orchidopexy for undescended testis, cystoscopic valve ablation for PUVD, colostomy closure, open reduction for tibial fracture, incision and drainage for cyst in lower limb and incision and drainage of submandibular abscess were participant of this study. The Children undergoing emergency surgery, Mentally retarded children, Children with hearing impairment, Children undergoing ear surgeries and Children participating in any other clinical trial were not included in the study. The sample size was calculated by Cochran's Sample Size Formula. This pilot study included (24 samples, 12 in each group) 1/3rd of the total sample size of the main study. The sample was chosen purposively and randomly distributed into 2 groups through computer-generated randomization allocation sequence. The type of randomization was block randomization using randomly varying block sizes to ensure equal numbers of participants into each group (Experimental group and control group)

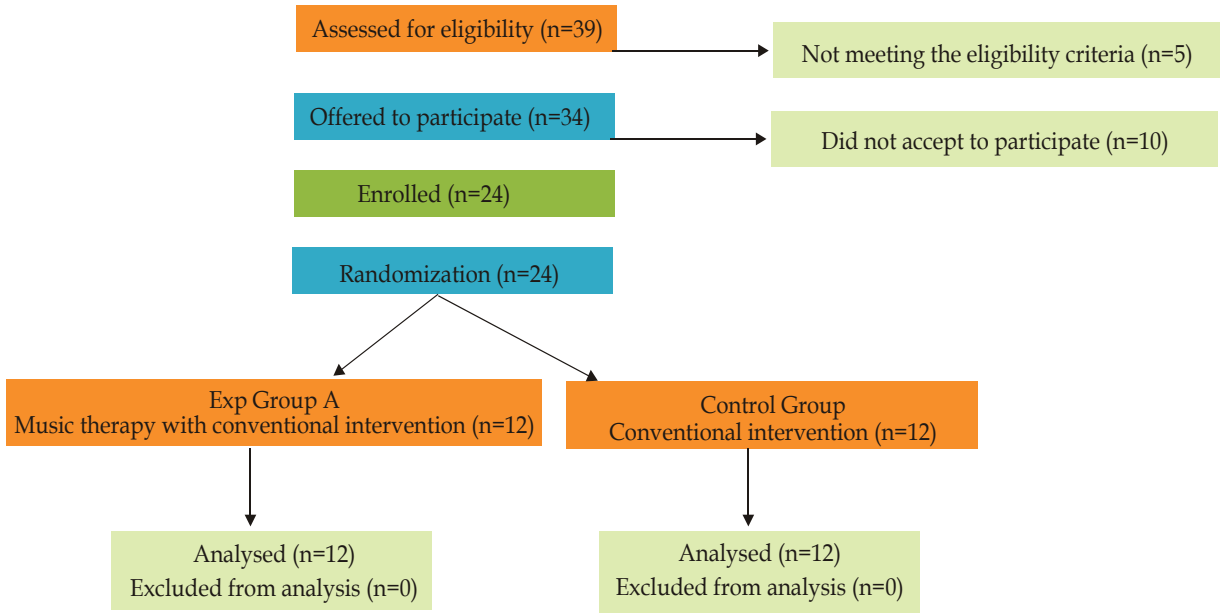

Fig. 1: CONSORT Diagram showing the flow of participation

Instruments: The instrument/tools for the present study were structured standard scales, and tools contain four sections such as.[24,25] section -1 was demographic variables which includes accompanying parent, age of the child, gender of the child, habitat, religion, socio economic status, duration of preoperative period, previous hospitalization and previous experience with anesthesia/Surgery. The level of parental anxiety was assessed through Numerical Visual Anxiety Scale (NVAS) as the parental anxiety was one of the major confounding variables for child anxiety. NVAS was the standard scale which included scoring 0-10, interpreted as increasing level of anxiety with increasing score. Session-2 was physiological variables which includes pain, respiration and pulse rate. Preoperative pain of the child was assessed through numerical visual pain scale (NVPS). As Pain and anxiety influences each other, it was assessed as secondary outcome; the NVPS was a standard scale with score of 0-10, the pain interpreted as increased severity with increased score. Child respiration, and pule rate also was monitored. Session -3 was standard rating scale -Hamilton Anxiety rating scale–it was first rating scales developed to measure the severity of anxiety symptoms, and is still widely used today in both clinical and research settings. The scale is intended for everyone and should take approximately ten to fifteen minutes to administer. The scale is not a private document. Since it is in the public domain, it is widely available for administration. The scale contains 14 items and a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety) the 14 items were anxious mood, tension, fears, insomnia, intellectual, depressed mood, somatic (muscular) somatic (sensory): cardiovascular symptoms, respiratory symptoms, genitourinary symptoms, gastrointestinal symptoms, autonomic symptoms, and behavior at interview. A total score range of 0–56 with each item scored on a scale of 0 (not present) to 4 (severe). Presence of any one symptom given in the each item (14 items) scored for its severity. Session 4 was semi structured check list which included list of conventional intervention that the child received and if any at the time of preoperative period. Most of the children received more than 2 convention interventions which was listed here as parental presence, the use of toys, playing games, watching videos, cartoons, psychological support, storytelling, play therapy, preadmission tour ward and others interventions. The content validity of the tool and interventions (type of music that reduces anxiety) was validated by 7 experts in the field of nursing, medicine, and music. Language validity of the demographic tool and Hamilton anxiety rating scale was obtained by translating the scale from English to Hindi and back translating the scale from Hindi to English by language experts. The setting reliability of the tool was tested through Chroanbachalpha test and it was found to be 0.76.

Description of the intervention and administration of intervention: Experimental group received passive music therapy, i.e. Prerecorded Instrumental music with other conventional interventions. From the day of admission until administering preoperative sedative medications music was played 3 times a day on average, through head phone for the period of 15 to 30 minutes. The researcher administers the music to the children. Children in control group received two or more conventional intervention as a part of supportive measures which helped to reduce preoperative anxiety of the children, they are Parental presence, the use of toys, playing games, videos, drawing cartoons, psychological support, storytelling and listening, playing actively/passively.

Music therapy administration: After getting the consent the child it was informed that his or her role is to listen to the music for 15 to 30 minutes. The child is positioned comfortable. The calm and quiet environment was provided. The researcher allowed the child to choose the one prerecorded music and allowed to control the volume, activity level, and desire to lead. After instructing the child to close the eyes the researcher administered the chosen prerecorded music through headphone for 15 to 30 minutes. Children were encouraged to making some physical movements to music. Music was played until child feels enough.

Ethical permission was obtained from institutional ethical committee of Dr SN Medical College Jodhpur. The informed consent was obtained from the children above 7 years and from the guardian of children below 7 years.

Data Collectionmethod and analysis: Preparative day -1 (on the day of admission) screened the child for anxiety with -Hamilton Anxiety rating scale (HAM-A) Children with no anxiety were excluded. children who meet the criteria was informed about the purpose of the study and Consent from children above 7 years and from guardian of children below 7 years was obtained. Samples randomly assigned to 2 groups. Obtained demographic data and level of pain, respiratory rate and pulse rate, Administer interventions 3 times a day until receiving

preoperative sedative medication (experimental group prerecorded instrumental musics (15-30 minutes for each time), after intervention children from both the group were reassessed for level of anxiety through HAM-A, reassessed pain and vital signs, and all the samples were questioned and assessed for the conventional interventions received until receiving preoperative sedative medications.The data was compiled for analysis in excel and analyzed with help of SPSS version 16. Independent' was computed to know the effectiveness between the groups.

Result

It was inferred from the table-1 that 50% children who exposed to music therapy with convention intervention showed improvement in anxiety reduction from mild to no anxiety. There was no one in music therapy group experience neither moderate nor severe anxiety at pre and post-test. Children who received conventional intervention alone suffered from mild to severe level of anxiety in post test (41.7% mild, 16.7% moderate, 25% severe and 16.7% very sever anxiety), were in pretest it was 58.3% with mild anxiety and 41.7% children had severe to very severe anxiety.

It was inferred from the table-2 that the samples in experimental group experienced 76.1 % of reduction in anxiety level, and in control group the reduction rate was 2.89% only when comparing to pretest level of anxiety. The effect size was calculated by Cohen's D and it was 1.88 among children exposed to music therapy and the effect size of control group was only 0.04. So it was interpreted that the music therapy was very effective in reducing preoperative anxiety level of the children when comparing to conventional intervention alone.

Table 3 showed that there was a significant difference exists between pre and posttest anxiety level of the children at P≤0.05 among children exposed to music therapy (MT). There was no significant difference exists between pre and posttest anxiety level of the children at P≤0.05 among children exposed to conventional intervention alone. So the intervention (MT) was effective in reducing preoperative anxiety level of the children undergoing surgeries.

Table 1: Frequency and percentage distribution of the samples in each group.

Score	Interpretation	Frequency (%)			
		Experimental group		Control group	
		Pretest	Post test	pretest	Post test
No anxiety		0	6 (50)	0	0
Mild	<17	12 (100)	6 (50)	7 (58.3)	5 (41.7)
Mild to Moderate	17-24	0	0	0	2 (16.7)
Moderate to severe	24-30	0	0	0	3 (25)
Severe to very severe	>30	0	0	5 (41.7)	2 (16.7)

Table 2: Pre and posttest mean and standard deviation of the samples.

Group	Pretest mean and SD	Posttest mean and SD	Mean differences	Effect size	Percentage of effect
Experimental Group (Music therapy-with conventional intervention)	7 ±3.43	1.67 ±2.06	-5.33	1.88	76.1
Control Group (Conventional intervention alone)	19.67 ±14.88	19.08 ±12.12	-0.57	0.04	2.89

Table 3: Pre and posttest mean and standard deviation of the samples.

Group	't'	'P' (<0.05)
Experimental Group (Music therapy-MT)	5.722	0.00*
Control Group (Conventional intervention-CI)	0.18	0.86

Table 4: Unpaired/Independent t test between the conventional intervention and music therapy with mean and standard deviations.

Between the group test	Independent "t" test	P values	Mean and SD		Mean Difference (% of difference)
			Control group	Experimental group	
Posttest	4.906	.000*	19.08 ±12.12	1.67 ±2.06	-17.417 (91.2%)
Pretest	2.871	.014*	19.67 ±14.88	7 ±3.43	-12.667 (64.4%)

Note: *Asterisk indicate significant association at p<0.05 level.

Table-4 showed that there was a significant difference exist in pre and posttest anxiety level of the children undergoing ($p<0.05$) surgeries between the groups (computed independent 't' test). But the mean difference in post-test was significantly high (91.2%) between the groups when comparing to pretest mean difference (64.4%)of the groups. So the music therapy with conventional intervention was effective in reducing preoperative anxiety level of the children when comparing to conventional intervention alone.

It was interpreted form the table-5 that most of the children were accompanied by mother (66.7% in experimental group, 58.3% in control group) More than half (58.7%) of the children in experimental group were aged between 4 to 7 years and in control group 50% samples were aged between 7-10 years. Male children in experimental and control group were 83.3% & 92.7% respectively.ZMajority of the samples (66.7%) in experimental group live in rural area and 75% samples of control group live in urban area. The status of religion was equal

Table 5: Frequency and percentage distribution of samples based on demographic variables

Demographic variables	**Frequency**	
	Experimental Group	**Control Group**
1. Accompanying parent		
a) Mother	8 (66.7)	7 (58.3)
b) Father	1 (8.3)	4 (33.3)
c) Others	3 (25)	1 (8.3)
2. Age of the child:		
a) 4 to7 years	7 (58.3)	4 (33.3)
b) 7-10 years	5 (41.7)	6 (50)
c) 10 to 14 years	0	2 (16.7)
3. Gender of the child:		
a) Male	10 (83.3)	11 (92.7)
b) Female	2 (16.7)	1 (8.3)
4. Habitat :		
a) Rural	8 (66.7)	3 (25)
b) Urban	4 (33.3)	9 (75)
5. Religion:	10 (83.3)	10 (83.3)
a) Hindu	2 (16.7)	2 (16.7)
b) Muslim		
6. Socio economic status of the family (per capita monthly income))		
a) Rs 5357 and above (Upper class)	3 (25)	0
b) Rs 2652 to 5356 (Upper middle class)	1 (8.3)	4 (33.3)
c) Rs 1570 to 2651 (Middle class)	2 (16.7)	5 (41.7)
d) Rs 812 to 1569 (Lower middle class)	0	2 (16.7)
e) Rs <811 (Lower class)	6 (50)	1 (8.3)
7. Duration of preoperative period		
a) 1 day	0	5(41.7)
b) 2 days	8 (66.7)	6 (50)
c) 3 days	0	0
d) >3 days	4 (33.3)	1(8.3)
8. Previous hospitalization		
a) Yesb) No	6 (50)	7(58.3)
	6 (50)	5(41.7)
9. Previous experience with anesthesia/Surgery		
a) Yesb) No	1 (8.3)	5 (41.7)
	5 (92.7)	5 (58.3)

Form figure one it was interpreted that all accompanying person experience some level of anxietytowards surgery of their children.

in both the groups. In experimental group 66.7% children's had 2 days and 33.3% samples had >3 days of preoperative period and in control group 50% samples had 2 days of preoperative period. In experimental group the history of previous hospitalization was equal and only one sample had history of experience with surgery. In control group 58.3 % samples were experienced with previous hospitalization and 41.7% had history of previous surgical experience.

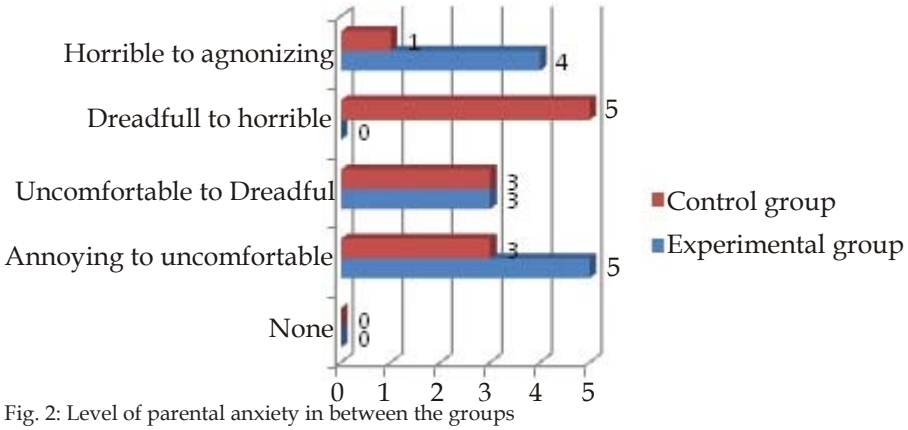

Fig. 2: Level of parental anxiety in between the groups

Table 6: Correlation between Pre-operative pain and anxiety level of children in both the groups

Correlation	Experimental group		Control group	
	'r'	'P'	'r'	'P'
Pre-test pain and anxiety level	0.248	0.437	0.246	0.441
Post-test pain and anxiety level	-.06	0.854	0.587	0.045*
Parental anxiety and pretest anxiety level of the children	-.253	0.427	0.355	0.257

Note: *Asterisk indicate significant correlation at p<0.05 level.

Form table-6 it was interpreted that there was no significant correlation exists between preoperative pain and anxiety level of the children in both pre and post-tests score of experimental group. But there was moderate positive correlation exists between post-test pain and anxiety level of children in control group. Same way parental anxiety and children preoperative anxiety also had no correlation in both the groups. Person 'r' correlation was computed.

Discussion

In this present study around 50% children who exposed to music therapy with convention intervention showed improvement in anxiety reduction from mild to no anxiety. There was no one in music therapy group experience neither moderate nor severe anxiety at pre and post-test. Children who received conventional intervention alone suffered from mild to severe level of anxiety in post test (41.7% mild, 16.7% moderate, 25% severe and 16.7% very sever anxiety), were in pretest it was 58.3% with mild anxiety and 41.7% children had severe to very severe anxiety. In this present study the mean pre and post test score of experimental group and control group was 7 ±3.43, 1.67 ±2.06 and 19.67 ±14.88, 19.08 ±12.12 respectively. The percentage of effect was 76.1 % and 2.89% in experimental and control group respectively. The effect size of the music therapy was 1.88. In this present study there was no significant correlation exists between preoperative pain and anxiety level of the children in both pre and post-tests score of experimental group. But there was moderate positive correlation exists between post-test pain and anxiety level of children in control group. Same way parental anxiety and children preoperative anxiety also had no correlation in both the groups.

The finding of this study was supported by the study conducted by Hartling et al (2013)[28] on Music to reduce pain and distress in the pediatric emergency department (RTC) the result showed there was a significantly less increase in distress for the music group. Pain scores among children remained the same in the music group,whereas in the standard care group increased by 2 points, while they the difference was considered clinically important.

Similarly the findings of this study was supported by study of Goldbeck L (2012)26A randomized controlled trial of multimodal music

therapy for children with anxiety disorders. MMT was superior compared to TAU(treatment as usual) according to the remission rates after treatment (MMT 67%; TAU 33%; chi2 = 4.0; p = 0.046) and remissions persisted until four months post-treatment. Dimensional measures showed equivalent improvement after either MMT or TAU. This study finding was contrast to the study finding of Kain ZN et.al. (2004)[27] who assessed interactive music therapy is an effective treatment for pre-induction anxiety. It was found that children who received midazolam were significantly less anxious during the induction of anesthesia than children in the music therapy and control groups. They found no difference in anxiety during the induction of anesthesia between children in the music therapy group and children in the control group.

Conclusion

Music therapy was effective in reducing anxiety level of the children when combined with other conventional interventions. The music therapy could be passive or active type but if it is based on child preference it will have very good impact on reducing anxiety level of the child and it will keep the children relaxed before going to surgery. If music therapy given especially just before giving preoperative medications, the child will experience very less anxiety or no anxiety and that could reduce the post operative stay and improve outcome status of the child

Limitations Recommendations: This study observed preoperative anxiety level of the children undergoing surgeries aged between 4 to 12 years only. But the study can be conducted to assess the post operative outcome of the intervention as well as the study can be conductedfor the children <4 years and >12 years. Most of the ample were had mild anxiety level but it could be better if implementing this intervention on children who had moderate to severe anxiety. Music can be encouraged even at the time of surgery. In this present study instrumental music was administer to the children, if it is added with smoothing lyrics it could be even better to make them more relaxed.

Conflict of Interest: No actual or potential conflict of interest.

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References

1. Banchs RJ, Lerman J. Preoperative Anxiety Management, Emergence Delirium, and Postoperative Behavior. AnesthesiolClin. 2014;32(1):1–23.
2. Pritchard MJ. Identifying and assessing anxiety in pre-operative patients. Nurs Stand. 2009;23(51):35–40.
3. Brewer S, Gleditsch SL, Syblik D, Tietjens ME, Vacik HW. Pediatric Anxiety Child Life Intervention in Day Surgery. J PediatrNurs. 2006;21(1):13–22.
4. Lee JH, Jung HK, Lee GG, et al. Effect of behavioral intervention using smartphone application for preoperative anxiety in pediatric patients. Korean J Anesthesiol. 2013;65(6):508–518.
5. Garanhani ML, Valle ERM. O significado da experiênciacirúrgicapara a criança. CiencCuidSaúde. 2012;11(supl):259–266.
6. Al-Jundi SH, Mahmood AJ. Factors affecting preoperative anxiety in children undergoing general anaesthesis for dental rehabilitation. Eur Arch Paediatr Dent. 2010;11(1):32–37.
7. Kim JE, Jo BY, Oh HM, et al. High anxiety, young age and long waits increase the need for preoperative sedatives in children. J Int Med Res. 2012;40(4):1381–1389.
8. Davidson AJ, Shrivastava PP, Jamsen K, et al. Risk factors for anxiety at induction of anesthesia in children a prospective cohort study. PediatrAnesth. 2006;16:919–927.
9. Cagiran E, Sergin D, Deniz MN, et al. Effects of sociodemographic factors and maternal anxiety on preoperative anxiety in children. J Int Med Res. 2014;42(2):572–580.
10. Kain ZN, Caldwell-Andrews AA, et al. Family-centered preparation for surgery improves perioperative outcomes in children. Anesthesiology, 2007. 106(1), 65-74.
11. Borsook D, George E, Kussman B, Becerra L. Anesthesia and perioperative stress Consequences on neural networks and postoperative behaviors. Progress in Neurobiology. 2010;92:601–612.
12. Chorney JM, Tan ET, Martin SR, et al. Childrensbehaviour in the post-anesthesia care unit the development of the child behaviour coding system-PACU (CBCS-P) J Pediatr Psychol. 2012;37(3):338–347.
13. Hilly J, Hörlin AL, Kinderf J, et al. Preoperative preparation workshop reduces postoperative maladaptive behavior in children. PaediatrAnaesth. 2015;25(10):990–998.

14. Kain ZN, Caldwell-Andrews AA, Maranets I, Nelson W, & Mayes LC. Predicting which child-parent pair will benefit from parental presence during induction of anesthesia: A decision-maiking approach. Anesthesia and Analgesia, 2006. 102, 81-84.
15. Bradt J, Dileo C, Shim M. Music interventions for preoperative anxiety. Cochrane Database Syst Rev. 2013 6;(6)
16. ArryM. Natalie R &Mark D. Visualization And Guided Imagery Techniques For Stress Reduction. JUN 30, 2008
17. Mohanasundari SK. Padmaja A. Music therapy in caring for children. IJPEN. 2018 4 (3).187-194.
18. DeFrances CJ, Lucas CA, Buie VC, & Golosinskiy A. 2006 National Hospital Discharge Survey. National Health Statistics Reports. (No. 5). Hyattsville, MD: National Center for Health Statistics.2008
19. Kain ZN, Mayes LC, Weisman SJ, Hofstadter MB Social adaptability, cognitive abilities, and other predictors for children's reactions to surgery. J ClinAnesth .2000.12(7): 549-554.
20. Rosenberg RE, Clark RA, Chibbaro P, et al. (2017) Factors predicting parent anxiety around infant and toddler postoperative and pain. HospPediatr 7(6): 313-319.
21. Wright KD, Stewart SH, Finley GA, Buffett-Jerrott SE. Prevention and intervention strategies to alleviate preoperative anxiety in children: a critical review. BehavModif. 2007 . 31(1):52-79.
22. Music therapy, Children's health. www. childrens.com/
23. Marianne JE. Heijden VD, Sadaf OA, et al. The Effects of Perioperative Music Interventions in Pediatric Surgery: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. PLoS One. 2015; 10(8).
24. Maier W, Buller R, Philipp M, Heuser I. The Hamilton Anxiety Scale: reliability, validity and sensitivity to change in anxiety and depressive disorders. J Affect Disord 1988;14(1):61–8.
25. Sheikh MS. Modified Kuppuswamy scale updated for Year 2018. PIJR, 2018: 7 (3)
26. Goldbeck L, Ellerkamp T. A randomized controlled trial of multimodal music therapy for children with anxiety disorders. J Music Ther. 2012 Winter;49(4):395-413.
27. Kain ZN, Caldwell-Andrews AA, et al. Interactive music therapy as a treatment for preoperative anxiety in children: a randomized controlled trial. 2004 May;98(5):1260-6
28. Hartling L, Newton AS, Liang Y, et al. Music to reduce pain and distress in the pediatric emergency department: a randomized clinical trial. 2013 Sep;167(9):826-35.

Original Article

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Effectiveness of Structured Teaching Program on Knowledge Regarding Malnutrition and its Prevention Among Mothers of Under Five Children

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Abstract

Background: Malnutrition related diseases are posing a great threat globally, it is an increasing trend globally and India is not an exemption. The mothers have less knowledge about malnutrition and its prevention. The present study aims to assess the Effectiveness of structured teaching program regarding malnutrition and its prevention among mothers residing in selected rural areas at Bedla of Udaipur district. *Method*: Quantitative Pre-experimental research design was selected to conduct study. Only 64 mothers of under five children were selected as samples based on exclusion and inclusion criteria through non-probability convenient sampling techniques. *Results*: The mean pre-test knowledge of mothers of under five children was 10.59 ± 2.19, whereas mean post-test knowledge of mothers of under five children was 20.15± 1.86. The findings revealed that structure teaching program was statistically effective (t = 36.83* p-value- 0.0001*) and the association between pre-test knowledge and selected demographic variables of mothers of under five children such as age ($\chi 2 = 9.83$, p-value -0.02*), educational status ($\chi 2 = 15.03$, p-value-0.0001*), monthly family income ($\chi 2 = 14.16$, p-value 0.002*), and previous knowledge regarding malnutrition (χ 2 =4.89, p-value- 0.02*) were statistically significant. *Conclusion*: The structured teaching program was effective in enhancing the knowledge of mothers of under five children about malnutrition and its prevention.

Keywords: Malnutrition; Mothers of under five children; Structured Teaching Program.

Introduction

Nearly half of all deaths in children under 5 are attributable to under nutrition. This translates into the unnecessary loss of about 3 million young lives a year. Under nutrition puts children at greater risk of dying from common infections, increases the frequency and severity of such infections, and contributes to delayed recovery. In addition, the interaction between under nutrition and infection can create a potentially lethal cycle of worsening illness and deteriorating nutritional status. Poor nutrition in the first 1,000 days of a child's life can also lead to stunted growth, which is irreversible and associated with impaired cognitive ability and reduced school and work performance.[1] In September 2016, UNICEF, WHO and World Bank Group released joint child malnutrition estimates for the 1990 -2015 period. In 2015, more than half of all stunted children under 5 lived in Asia and more than one third lived in Africa. In 2015, almost half of all overweight children under 5 lived in Asia and one quarter lived in Africa. In 2015, more than two thirds of all wasted children under 5 lived in Asia and more than one quarter lived in Africa.[2] The National Family Health Survey 2015-16 (NFHS-4), the fourth in the NFHS series, provides information on population, health and nutrition for India and each State /Union territory. Under-five mortality rate (U5MR) is 50 per 1000 live children. In rural area U5MR is higher than urban area. Infant mortality rate (IMR) is 41 in India. Only 58.2% Children under age 6 months got exclusively breastfed. Only 3.4 % Total Children aged 6-23 months are receiving an adequate diet. Malnutrition is differentiate in under

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five children as 39.1% stunted (height for age),23.0% are wasted(weight for height), 8.6% are severely wasted and 36.7% are underweight (weight for age). Only 39.0% of children under five receive vitamin A dose. 58.4% children are anemic.[3] Mothers of under five children have lack of knowledge regarding malnutrition and its prevention and structured teaching program was helpful in motivating mothers to correct malnutrition of their under five children.[4] A study conducted to assess nutritional status of under five children in Bijapur, Kerala, revealed that 26 % of children under 25 to 36 months had grade 1 malnutrition with regard to MAC and BMI standards.[5]

Objectives

1. To assess pre-test knowledge of mothers regarding malnutrition and its prevention.
2. To plan and administer the structured teaching programme regarding malnutrition and its prevention to the mothers.
3. To assess the effectiveness of structured teaching programme on knowledge of mothers regarding malnutrition and its prevention.
4. To find out the association between pre-test knowledge scores and selected socio demographic variables

Hypothesis (at 0.05 significance level)

H1: There will be significant difference between pre test and post test knowledge score of mothers of under five children.

H2: There will be significant association between pre test knowledge scores and selected socio-demographic variables

Materials and Method

A quantitative, Pre-experimental, One group pre- test and post-test research approach was used to assess the effectiveness of structured teaching programs on malnutrition and its prevention among mothers of under five children. The present study was conducted at rural areas of Bedla, Udaipur after obtaining permission from authorities. The sample consisted of mothers of under five children meeting inclusion criteria and those willing to participate in study. Through convenient sampling techniques 64 mothers of under five children were selected. The tools selected for the present study include socio-demographic scale and structured questionnaire. Structured questionnaire consists of questionnaires for assessing the knowledge of mothers of under five children about malnutrition and its prevention. 24 multiple choice questions were used to assess the knowledge. Based on total scores obtained, the level of knowledge is divided into three levels. Those who scored below 40% (correct less than 10 questions) were in Inadequate level of knowledge category, between 40 – 79.99% (correct between 11-20 questions) were in Moderate level of knowledge category and Above 80%(correct between 20-24 questions) were in Adequate level of knowledge category. A Split half method was used to establish the reliability of structured questionnaires. The reliability coefficient was found to be r = 0 .81. This was highly desirable so no modification was made. Prior to tool administration all subjects were given an information sheet, explaining the purpose and outcome of study. Informed consent was taken from participants and self explanatory tools were administered to participants. Permission for study was taken from concerned authorities. The data collected from participants was analysed using SPSS software 21 version.

Results

Majority of mothers of under five children, (34.37 %, N=22) were found in the age group 18-23 years and 31.25% (N=20) were within the age group of 24-29 years. Majority of mothers of under five children (68.75%, N=44) were living in a nuclear family and 31.25% (N=20) belonged to a joint family. Majority of mothers of under five children (43.80%, N=28) had primary level educational status. More than half of mothers of under five children (56.3%, N=36) had two children. Majority of mothers of under five children (81.25%, N=52) had previous knowledge regarding malnutrition and its prevention. Regarding sources of information about malnutrition and its prevention 38.5% (N=20) got information through health professionals. The data in above table revealed that mothers of under five children were having inadequate (34.4%) and moderate (65.6%) level of knowledge during pre-test, which after Structured teaching program during post-test changed as only one (1.6%) mother of under five children had inadequate level of knowledge and 59.40% mothers of under five children had adequate level of knowledge while 39% mothers of under five children had moderately adequate level of knowledge regarding malnutrition and its prevention. Paired t-test and chi-square findings: The mean post-test knowledge score of 20.15, mean pretest score of 10.59 which was statistically significant at 0.05 level of significance in paired t-test ($t = 36.83^*$ at $p<0.05$ level). There was a significant association between pre-test knowledge scores and socio demographic

variables like age in years, education status, monthly family income and previous knowledge about malnutrition and its prevention but the rest of the socio demographic variables were not significantly associated with the pre test knowledge score. Thus it concluded that structured teaching programs were effective in enhancing the knowledge of mothers of under five children regarding malnutrition and its prevention and there was partial association with pretest knowledge score and selected socio demographic variavles of mothers of under five children.

Table: 1. Distribution of sample according to socio demographic variables (N=64).

S. No.	Demographic Variables	Samples	
		Freq.	%
1.	Age (in years)		
a)	18-23 years	22	34.37%
b)	24-29 years	20	31.25%
c)	30-35 years	13	20.32%
d)	> 35 years	09	14.06%
2	Type of family		
a)	Nuclear	44	68.75%
b)	Joint	20	31.25%
3.	Educational status		
a)	Illiterate	10	15.60%
b)	Primary education	28	43.80%
c)	Secondary & Sr. Secondary	16	25%
d)	Graduation and above	10	15.60%
4.	Monthly income		
a)	Below 6500 Rs.	23	36.00%
b)	6501-14000 Rs.	27	42.20%
c)	14001-32000 Rs.	07	10.90%
d)	Above 32000 Rs	07	10.90%
5.	Mother's occupation		
a)	House wife	46	71.90%
b)	Daily wages	08	12.50%
c)	Private Job	05	7.80%
d)	Govt. Job	05	7.80%
6.	Number of children		
a)	1	14	21.90%
b)	2	36	56.30%
c)	3	08	12.50%
d)	Above 3	06	09.30%
7.	Previous knowledge of malnutrition and its prevention		
a)	Yes	52	81.25%
b)	No	12	18.75%
8.	Source of information		
a)	Print media	17	26.60%
b)	Electronic media	13	20.30%
c)	Health personals	24	37.50%
d)	Relatives and others	10	15.60%

Table: 2: Pre-test and post-test level of knowledge. N=64.

Level of knowledge regarding malnutrition and its prevention	Sample group.			
	Pre-test scores		Post test scores	
	Freq.	%	Freq.	%
Inadequate Knowledge (0-39.99%)	22	34.4%	01	1.6%
Moderately adequate Knowledge (40-79.99%)	42	65.6%	25	39%
Adequate Knowledge (80-100%)	00	00%	38	59.4%

Table: 3 Pre-test and post-test knowledge regarding malnutrition and its prevention among mothers of under five children.

N=64

Knowledge	Mean	Mean %	SD	df	Paired 't' value	p-value
Pre-test	10.59	44.12%	2.19	63	36.83*	0.0001*
Post-test	20.15	83.95%	1.86			

W

Table: 4 Associations between scores of pre-test knowledge in mothers of under five children with socio-demographic variables.

N= 64

S. No.	Demographic Variables	Level of knowledge			$\chi 2$	df	Level of significance
		≤ median (10)	> median (10)	Total			
1.	Age (in years)						
a)	18-23 years	06	16	22			
b)	24-29 years	08	12	20	9.83	3	S
c)	30-35 years	09	04	13			
d)	> 35 years	07	02	09			
2	Type of family						
a)	Nuclear	20	24	44	1.163	1	NS
b)	Joint	12	08	20			
3.	Educational status						
a)	Illiterate	09	01	10	15.03	3	S
b)	Primary education	17	11	28			
c)	Secondary & Sr. Secondary	06	10	16			
	Graduation and above	01	09	10			
d)							
4.	Monthly income						
a)	Below 6500 Rs.	19	04	23			
b)	6501-14000 Rs.	09	18	27	14.16	3	S
c)	14001-32000 Rs.	02	05	07			
d)	Above 32000 Rs	03	04	07			
5.	Mother's occupation						
a)	House wife	20	26	46			
b)	Daily wages	04	01	05	4.72	3	NS
c)	Private Job	06	02	08			
d)	Govt. Job	03	02	05			
6.	Number of children						
a)	1	06	08	14			
b)	2	19	17	36	6.15	3	NS
c)	3	07	01	08			
d)	Above 3	05	01	06			
7.	Previous knowledge of malnutrition and its prevention						
a)	Yes	25	27	52			
b)	No	10	02	12	4.89	1	S
8.	Source of information						
	Print media						
a)	Electronic media	06	11	17	1.91	3	NS
b)	Health personals	06	07	13			
c)	Relatives and others	08	16	24			
d)		05	05	10			

Discussion

The present study was aimed at assessing the baseline knowledge of mothers of under five children regarding malnutrition and its prevention and administering them a structured teaching program to enhance their knowledge. The key focus of the present study was malnutrition and its prevention as many studies and reports revealed prevalence of malnutrition among under five children. A study conducted by Sethy G et al highlighted that 69% of 300 children were having under nutrition in the form of underweight (55.3%), wasting (75%) and stunting (42%) in which maximum number of underweight children belongs to age group 37-60 months (52.6%).[6] Present study revealed that mothers of under five children were having inadequate (34.4%) and moderate (65.6%) level of knowledge during pre-test. Our finding supported by a study conducted by P. Brinda et al with the similar results.[7]

After Structured teaching program during post-test changed as only one (1.6%) mother of under five children had inadequate level of knowledge and 59.40% mothers of under five children had adequate level of knowledge while 39% mothers of under five children had moderately adequate level of knowledge regarding malnutrition and its prevention. This result was statistically significant at 0.05 level in paired t-test (t = 36.83* p-value-0.0001*). The findings are supported by a study conducted by Gangadhar. S. Isarannavar et al which revealed Effectiveness of Structured Teaching Programme (STP) on malnutrition and preparation of mix recipe in terms of gain in post test knowledge scores: calculated paired 't' value (t calculated =33.16) is greater than tabulated value (t table = 1.73).[8] A study conducted by Mishra A. et al on Knowledge regarding Malnutrition and Its Prevention – A Study on Slum Dwelling Mothers also found similar result with present study which was after administration of structured teaching program, 12 (26.7%) had poor knowledge, 21 (46.7%) had average knowledge and 12 (26.7%) had good knowledge about malnutrition and its prevention indicating that the intervention was effective and statistically significant.[9] Both studies give emphasis on effectiveness of STP on knowledge enhancement among mothers of under five children regarding malnutrition and its prevention.

Present study found partial significant association between pre-test knowledge scores and socio demographic variables. Our finding is also partially supported by the study conducted by Pawar Prashant V et al. which reveals no significant association of demographic variables on knowledge score regarding prevention of protein energy malnutrition among mothers of under five children at selected rural community.[10] Early initiation and exclusive breast feeding are equally essential for the infants to minimize the chances of malnutrition.[11]

Conclusion

The study concluded that the structure teaching program has a significant effect in terms of gain in the level of knowledge among mothers of under five children regarding malnutrition and its prevention. This study also showed that there was significant association between the pre-test knowledge score and the demographic variables such as age, educational status, family income and previous knowledge regarding malnutrition and its prevention.

Limitations: Though, the study was conducted with the best efforts, still perfection is rare and following limitations can be outlined. The small size of the sample made it difficult to draw generalization, Convenient sampling technique was used for conducting this study which restricts the generalization of result. A structured questionnaire was used for data collection which restricts the amount of information that can be obtained from the respondents, only knowledge was assessed; no attempt was made to assess their attitudes and practice due to time shortage and less resources.

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Conflict of Interest: There was no conflict of interest involved while conducting the present study.

References

1. World Bank report" World Bank report on malnutrition in India; 2009-03-13. Available from http://documents.worldbank.org/en/publication/documents-reports/India-nutrition-at-a-glance. Accessed on 13-6-2020.
2. Unicef/WHO/World Bank group-Joint child malnutrition estimates 2016 edition. Available from www.who.int/nutgrowthhdb/estimates/ Accessed on 15-6-2020.
3. NFHS-4 survey and factsheet. http://rchiips.org/NFHS/factsheet_NFHS-4.shtml
4. Thapa R.(2015).Effectiveness of STP on knowledge regarding prevention of malnutrition among mothers of under five children. Indian journal of research paripes4, 2250-1991, 232-234

5. Algur V. et al. (2012). Assessment of nutritional status of under five children in urban field practice area, IJCR, 4(22), 122-126

6. Sethy G et al.(2017) Prevalence of malnutrition among under five children of urban slums of Berhampur, Odisha, India: a community based crosssectional study. International Journal of Contemporary Pediatrics. ;4(6):2180-2186.

7. Brinda P. et al (2015). A study to assess effectiveness of STP on knowledge among mothers of low birth weight babies. International journal of innovative research in science, engineering and technology, 4.2347-6710, 87-92: DOI: 10.105680/IJIRSET.2015.04.2014

8. Isarannavar GS, Sannashivannanavar RS. (2017) Effectiveness of STP on malnutrition and the preparation of Hydrabadi and Davanagere mix recipe among mothers of under five children in selected Anganwadi centre of Hattikeri P.H.C., Karnataka. International Journal of Science and Healthcare Research. 2(2): 42-45.

9. Mishra A, Bhardwaj UD, Rani S. (2017) Knowledge regarding Malnutrition and Its Prevention – A Study on Slum Dwelling Mothers. Int J Nurs Midwif Res. 4(2): 32-37.

10. Pawar Prashant V, Mendagudli Veerabhadrappa G. (2019) Effectiveness of PTP on knowledge regarding prevention of PEM among mothers of under five children at selected rural community. International Journal of Advance Research in Community Health Nursing. 1(2): 1-05.

11. Pareek S. Exclusive breastfeeding in India: An ultimate need of infants. Nurs Pract Today. 2019; 6(1):416-418

Original Article

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Parental and Peer Attachment and its Correlation with Aggressivity Among Late Adolescents

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Abstract

Aim: To assess the parental and peer attachment and its correlation with aggressivity among late adolescents. *Introduction*: Parent- adolescent relationship continues to play a key role in influencing the adolescent's development. Attachment is a basic human need for a close and intimate relationship between adolescents and their parents. The impact of peers, whether positive or negative, is of crucial importance for personality development during adolescence. *Objective*: To assess and correlate parental & peer attachment with aggressivity among late adolescents. *Methodology*: A correlational research design was used to assess the level of parental & peer attachment with aggressivity among late adolescents (200), selected by convenience sampling technique, studying in selected nursing colleges of Ludhiana, Punjab. Inventory of Parent and Peer Attachment was used to assess the level of parental and per attachment and Aggression Questionnaire was used to assess the level of aggressivity. *Result*: Findings revealed that the 97.5% of late adolecents had secure maternal attachment & only 2.5% had insecure maternal attachment and 93.5% had secure paternal attachment while 6.5% showed insecure paternal attachment. In case of peer attachment, 99% of late adolescents showed secure peer attachment and 1% showed insecure peer attachment. Regarding aggressivity, 53.5% late adolescents had severe level of aggressivity, 44.5% had moderate level and only 2% had mild levels. There was no correlation between maternal attachment and aggressivity however, weak positive correlation was found between peer attachment and aggressivity and very weak positive correlation was found between paternal attachment and aggressivity. The association of level of parental attachment, peer attachment and aggressivity was found significant with gender.*Conclusion*: Thus, the study concluded that there was very weak positive correlation between paternal attachment and aggressivity and there was weak positive correlation between peer attachment and aggressivity whereas there was no correlation between maternal attachment and aggressivity.

Keywords: Maternal attachment; Paternal attachment; Peer attachment; Aggressivity.

Introduction

Attachment is a basic human need for a close and intimate relationsbhip between adolescents and their parents. The term "attachment" is used to describe aspects of intense, intimate emotional relationships with particular emphasis on parent–adolescent interactions and the emotions adolescents feel towards their parents. Attachment is often defined as an emotional tie or bond between two people.[1]

The goal of parental attachment is to ensure the protection, comfort, and assistance needed for survival. Secure parental attachment with adolescent positively influence the way the adolescent is capable of giving a meaning to his existence. But it also serves as a strong point in how he manages himself in different social context as a responsible person.[2]

Peer relation during middle childhood and adolescents are an important part of children's social and emotional development. Children and adolescents pick up essential social and communication skills for their peers as they move into late adolescence and early adulthood. Peer conflict is not necessarily a bad thing; disagreement and conflict are part of life, and children and adolescents need to develop skills to resolve

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disagreement. However, peer conflict can cause significant emotional and physical harm and can lead to aggressive behavior when youth lacks the social skills necessary to cope with their frustrations. Therefore, it is important to identify peer conflict and aggressive behavior and to promote positive peer conflict resolution techniques for child and adolescents.[3]

Men are more involved in aggressive risk-taking behavior than women, not only when it becomes to physical aggression but also in verbal one such as in the actual case. Men maybe more vulnerable to risk factors of displaying aggressive behavior related to the inappropriate parenting pattern compared to women. The risk factors for the types of aggression are the same, but that men are more exposed to risk factors than women. These negative transactions increase the risk of being exposed on the path of risky behavior and involves many of the adolescent's risk-taking behavior leading to criminality.[4]

Methodology

Research design- Correlational research design

Research setting- DMCH College of Nursing, Ludhiana, Punjab

Target population – 17-19 years of nursing students

Sample size- 200 late adolescents

Sampling technique: Convenience sampling technique

Description of tool(s)

The research tool was divided into three parts:

Part A: A tool to assess the socio demographic profile of adolescents.

Part B: A standardized tool to assess the parental and peer attachment among adolescents by inventory of parent and peer attachment (IPPA) by Armsden & Greenberg in 1987.

Part C: A standardized tool to assess the aggressivity among adolescents by Aggression Questionnaire (AQ) by Buss and Perry in 1992.

Socio demographic profile: This section includes age, gender, type of family, residential status, socio-economic status and religion.

Inventory of parent and peer attachment (IPPA) by Armsden and Greenberg in 1986: Three broad dimensions were assessed: degree of mutual trust, quality of communication, and extent of anger and alienation. The IPPA is a five point likert scale. It has 25 items for the mother, 25 items for the father and 24 items for the peers.

Aggression questionnaire (AQ) by Buss and Perry in 1992:

The Aggression questionnaire was developed in order to assess the aggressive behaviour in adolescents. It is a five point likert scale. It consists of 29 statements.

Reliability of tool(s)

The reliability of IPPA tool was established with the use of test re-test method by using of Pearson's coefficient of correlation. The tool was found to be highly reliable (r = 0.94).

The reliability of Aggression Questionnaire was established with the use of test re-test method by using of Pearson's coefficient of correlation. The tool was found to be reliable (r = 0.85).

Ethical Consideration-Approval from ethical committee of DMC & H, Ludhiana was taken.

Plan of data analysis

The analysis of data was planned according to the objectives of the study. Data obtained was analyzed in terms of descriptive statistics i.e. mean, standard deviation and in terms of inferential statistics i.e. t - test and ANOVA. Calculations were carried out manually using calculator, Microsoft excel, Statistical Package for Social Sciences (SPSS) 16 version.

Results

Section – I

Section – II

Objective 1: To assess parental and peer attachment among late adolescents.

Objective 2: To assess aggressivity among late adolescents.

Section – III

Objective 3: To find out the correlation of parental and peer attachment with aggressivity among late adolescents

There was no correlation found between maternal attachment and aggressivity, whereas there was statiscally significant very weak positive correlation between paternal attachment and aggressivity and weak positive correlation between peer attachment and aggressivity.

Table 1: Distribution of adolescents as per socio demographic profile.

N=200

Socio-demographic variables	**f (%)**
Age completed (in years)	
17	006 (3.00)
18	052 (26.0)
19	142 (71.0)
Gender	
Male	017 (8.50)
Female	183 (91.5)
Type of family	
Nuclear	140 (70.0)
Joint	060 (30.0)
Residential status	
Hostel	164 (82.0)
P. g.	036 (18.0)
Socio-economic status	
Upper class I	019 (9.50)
Upper middle class II	098 (49.0)
Lower middle class III	072 (36.0)
Upper lower class IV	010 (5.00)
Lower class V	001 (0.50)
Religion	
Hindu	071 (35.5)
Sikh	107 (53.50)
Muslim	019 (9.50)
Others	003 (1.50)

Table 2: Distribution of late adolescents as per maternal attachment. N=200

Level of maternal attachment	f (%)
Secure	195 (97.5)
Insecure	05 (2.50)

Mean score of late adolescents as per maternal attachment=97.25±10.39

Table 3: Distribution of late adolescents as per paternal attachment.

Level of maternal attachment	f (%)
Secure	187 (93.50)
Insecure	13 (6.50)

Mean score of late adolescents as per paternal attachment=88.31±10.47

Table 3: Distribution of late adolescents as per peer attachment.

Level of maternal attachment	f (%)
Secure	198 (99.0)
Insecure	02 (1.00)

Mean score of late adolescents as per peer attachment=87.29±11.54

Table 5: Distribution of late adolescents as per aggression.

n=200

Level of aggressivity	Score	f (%)
Mild	29-67	04 (2.00)
Moderate	68-106	89 (44.5)
Severe	107-145	107 (53.5)

Table 6: Correlation of parental and peer attachment with aggressivity among late adolescents.

n=200

Variables	Mean±SD	r value	p value
Attachment with mother	97.25±10.39		
Aggressivity	89.96±14.56	0.061	0.391NS

n=200

Variables	Mean±SD	r value	p value
Attachment with father	88.31±10.47	0.061	0.048
Aggressivity	89.96±14.56		

n=200

Variables	Mean±SD	r value	p value
Attachment with peer	87.29±11.54	0.190	0.007
Aggressivity	89.96±14.56		

*Significant at p<0.05, NS: non-significant at p>0.05

Table 7 (a): Association of parental attachment with selected socio demographic variables.

n=200

Socio demographic Variables	**n**	**Attachment with mother**		**Attachment with father**	
		Mean±SD	**F/t value p value**	**Mean±SD**	**F/t value p value**
Age completed (in years)					
17	06	106±8.89	F = 2.259	95.50±10.52	F= 1.587
18	52	96.52±9.99	p=.107^{NS}	88.71±10.24	p= .207^{NS}
19	142	97.14±10.51		87.86±10.51	
Gender					
Male	17	100.88±7.73	t=2.402	94.52±10.00	t= 8.268
Female	183	96.92±10.57	p=.123^{NS}	87.73±10.35	p=.004*
Type of family					
Nuclear	140	96.52±10.85	t=3.400	88.15±9.70	t=1.190
Joint	60	99.00±9.12	p= .67^{NS}	88.68±12.18	p=.277^{NS}
Residential					
Status	164	95.96±10.12	t= .193	87.17±10.14	t=1.861
Hostel	36	103.79±9.57	p=.661^{NS}	93.94±10.67	p= .174^{NS}
P. g.					

Cont.....

Socio-economic Status					
Upper class I	19	101.21±8.53		90.05±7.24	
Upper middle class II	98	97.87±8.92		88.42±10.11	
Lower middle class III	72	95.04±12.15	F=2.099 p=.03*	86.69±11.23	F=0.781 p= .539^{NS}
Upper lower class IV	10	98.40±11.24		95.70±11.64	
Lower class V	01	111.00		87.00	
Religion					
Hindu	71	101.70±8.59		89.90±7.08	
Sikh	19	97.87±8.92	F= 2.525	88.42±10.11	F=2.438
Muslim	10	95.04±12.15	p= .060^{NS}	86.69±11.23	p= .066^{NS}
Others	73	98.40±11.24		95.70±11.64	

Table 7 (b): Association of peer attachment with selected socio demographic variables.

Socio demographic variables	N	Mean±SD	F/t value p value
Age completed (in years)			
17	06	100±5.13	
18	52	88.19±10.81	F= 1.587
19	142	86.42±11.70	p= .207^{NS}
Gender			
Male	17	90.00±5.43	t= 8.268
Female	183	87.04±11.93	p=.004*
Type of family			
Nuclear	140	86.91±11.19	t=1.190
Joint	60	88.18±12.36	p=.277^{NS}
Residential status			
Hostel	164	86.56±11.80	t=1.861
P. g.	36	90.55±9.78	p= .174^{NS}
Socio-economic status			
Upper class I	19	89.21±5.96	F=0.781
Upper middle class II	98	87.81±11.97	p= .539^{NS}
Lower middle class III	72	85.86±12.16	
Upper lower class IV	10	89.90±10.76	
Lower class V	01	77.00	
Religion			
Hindu	71	88.60±6.41	F=2.438
Sikh	19	87.81±11.97	p= .066^{NS}
Muslim	10	85.86±12.16	
Others	73	89.90±10.76	

*Significant at p<0.05, NS: non- significant at p>0.05

In Table 7(b), there was statiscally significant association of peer attachment with gender.

Table 7 (c): Association of aggressivity with selected socio demographic variables.

n=200

Socio demographic Variables	N	Mean±SD	F/t value p value
Age completed (in years)			
17	06	93.33±21.60	F= .183
18	52	89.51±12.81	p= .833^{NS}
19	142	89.98±14.92	
Gender			
Male	17	91.58±9.95	t=2.948
Female	183	89.81±14.93	p= .048*
Type of family			
Nuclear	140	90.70±14.38	t= .113
Joint	60	88.25±14.95	p= .737^{NS}
Residential status			
Hostel	164	90.13±14.43	t= .451
P. g.	36	89.41±15.76	p= .503^{NS}
Socio-economic status			
Upper class I	19	90.13±14.43	F= .092
Upper middle class II	98	89.41±15.76	p=.964^{NS}
Lower middle class III	72	87.00	
Upper lower class IV	10	84.00	
Lower class V	01		
Religion			
Hindu	71	89.90±15.59	F= .309
Sikh	19	89.68±1.40	p= .776^{NS}
Muslim	10	89.70±1.82	
Others	73	94.70±4.07	

*Significant at p<0.0 NS: non- significant at p>0.05

In Table 7(c), there was statiscally significant association of aggressivity with gender.

Section–IV

Objective 4: To find out association of parental and peer attachment and aggressivity among late adolescents with selected socio demographic variables.

Discussion

In the present study, It was found that 97.5% of late adolescents had secure level of maternal attachment and 2.5% had insecure level of maternal attachment. In case of father, 93.5% of late adolescents had secure level of attachment and 6.5% had insecure level of attachment. Majority (99%) of late adolescents had secure level of attachment and only 1% had insecure level of attachment.

A similar study was conducted by Dervishi E and Ibrahimi S (2018), to assess the parental attachment with aggressivity during adolescence. The results showed that 89% of adolescents had secure attachment with mother and 85% had secure attachment with father.[5]

In the present study, It was found that more than half (53.5%) of late adolescents had severe level of aggressivity whereas, 44.5% had moderate level of aggressivity and only 2% had mild level of aggressivity.

A similar study conducted by Fatima S, Malik S K (2015), to assess the cause of aggressive behaviour among secondary school students. The results revealed that more than half (55.5%) of girls showed aggressive behaviour. Also, majority (66.67%) of boys showed aggressive behaviour. The main cause

behind aggressive behaviour was home & family background i.e. parent child relations.[6]

In the present study, It was found that there was no statistically significant correlation between maternal attachment and aggressivity. However, there was weak positive correlation between peer attachment and aggressivity and very weak positive correlation between paternal attachment and aggressivity.

A similar study was conducted by Bloodworth J E(2013) to assess attachment style and its influence on aggression. The findings showed that there was a negative relation (r=-.251, p=0.006) among attachment with care-giver and aggression.[7]

In the present study, It was found that there was statistically significant association of level of parental attachment, peer attachment and aggressivity with gender.

A similar study was conducted by Choon L J, Hasbullah M, Ahmad S, Wu S L (2013) to assess parental attachment, peer attachment and delinquency among adolescents in Selangor, Malaysia. The results revealed that there is significant association of aggression with gender.[8]

References

1. Hong Y and Park JS. Impact of attachment, temperament and parenting on human development. International Journal of Psychology. December 2012; 20(4): 37–49
2. Schwartz D, Hopmeyer A, Nahamato J, Mckay T. Popularity, social acceptance and aggression in adolescent peer groups. Journal of Developmental Psychology. 2016; 42(6): 1116–1127
3. Wright MF, Aoyama I, Shanmukh V, Kamble, Zheng L, Soudi S, Shu C. Peer attachment and cyber aggression involvement among Chinese, Indian and Japanese adolescents. Journal of Abnormal Child Psychology. December 2014; 5(1): 339–353
4. Chung JE, Song G, Gwak HS. Association between anxiety and aggression in adolescents. Journal of Adolescent Health. 2001; 29(4): 298–306
5. Dervishi E and Ibrahimi S. Aggressivity in adolescence and its connection to attachment. International journal of school and cognitive psychology. Febuary 2018; 5(1)
6. Fatima S, Malik SF. Causes of Students' Aggressive behaviour at Secondary School level. Journal of Literature, Languages and Linguistics. 2015; 11: 49–65
7. Bloodworth JE. Attachment styles and its influence on aggression. [internet] 2014 assessed on 06/04/2019. Available from URL://www.mckendree.edu
8. Choon LJ, Hasbullah M, Ahmad S, Wu SL. Parental attachment, Peer attachment and Delinquency among Adolescents in Selangor, Malaysia. Journal of Asian Social Sciencies. 2013; 9(15): 214-219
9. Wilkinson RB. The role of parental and peer attachment in the psychological health and self-esteem of adolescents. Journal of Youth and Adolescence. December 2004; 33: 479–493
10. Pan et Y al. Parental and peer attachment and adolescent's behaviours. Journal of Children and Youth. December 2012; 83: 218–225
11. Esmat M, Eman S, Ahmad ER, Mahmoud SA. Effect of parents and peer attachment on academic achievement of late adolescent nursing students. Journal of Nursing Education and Practice. March 2015; 5(6): 96–105
12. Aramis A, Neto L. Bullying- Aggressive behaviour among students. Journal of Pediatrics. November 2005; 81(5): 168–172
13. Phaik Y, Rebecca P, Denial S, S Fung, Wong G. The impact of parent- child attachment on aggression, social stress and self esteem. Journal of School Psychology. 2006; 27(5): 552–556
14. Crick NR, Bigbee MA. Relational and overt forms of peer victimization. Journal of Consult Clinical Psychology. 1998; 66(2): 337–347
15. Auslander W et al. Childhood abuse and aggression in adolescent girls involved in child welfare. Journal of Child Adolescent Truama. 2016; 7(5): 99–110

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To Assess the Effectiveness of Planned Teaching on Knowledge Regarding Newborn Care Among Primi Mothers

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Abstract

Newborn period encompasses the first 4 weeks of extra-uterine life. It is an important link in the chain of events from conception to adulthood. The physical and mental well being of an individual depends on the correct management of events in perinatal period. Newborns need a special care and intensive monitoring and support during this critical period of adaptation. It is possible to increase perinatal survival and quality of human life through prompt and adequate management of newborn.[1] *Aim*: To assess the effectiveness of planned teaching on knowledge regarding newborn care among primi mothers. *Objectives*:- • To assess the knowledge regarding newborn care among primi mothers. • To assess the effectiveness of planned teaching on knowledge regarding newborn care among primi mothers. • To associate the findings with selected demographic variables. *Material and Methods*: Research approach used for this study was an evaluative approach with one group pretest and posttest design, Population was Primi mothers in the A.V.B.R. Hospital, Sawangi (M), total 60 samples were selected by using non-probability Convenient sampling technique. *Result*: The Pretest mean knowledge score was 6.22 and the post test mean knowledge score was 14.02. The tabulated' values was 2.00 (df=59) which is less than the calculated' i.e. 25.51 at 5% level of significance. Also the calculated 'p'=0.001 which was much less than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that there is significant difference in knowledge score at pre and posttest of primi mothers regarding newborn care. *Conclusion*: The structure planned teaching programme on knowledge regarding newborn care among primi mothers was effective.

Keywords: Structured teaching programme; Newborn care; Primi mothers.

Introduction

The birth of an infant is one of the most awe-inspiring and emotional events that can occur in one's lifetime. After 9 months of anticipation and preparation, the neonate arrives amid of flurry of excitement. Immediately after birth the newborn must make rapid adjustment to successfully adapt to life outside the womb.[2]

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Children are our future and our most precious resources. Health of the future children's depends on the nurturing practice adopted by the family. The first few days of life is a period of transition occurring all of a sudden from parasitic fetal life (intra uterine environment) to a completely independent (extra Uterine life). The process of birth and adaptation to the new surroundings depend upon number of adjustments on the part of the newborn baby especially.[3]

The first four weeks of life constitute the "neonatal period". The ideal basic needs for any new born includes breathing, warmth, cleanliness, and feeding mothers milk. Then all new born babies' requires essential new born care to minimize the illness and maximize their growth and development. Clearly, essential care of new born will help to prevent many newborn emergencies, example umbilical cord may be the most common

source of neonatal sepsis and also of tetanus infection, and good cord care could dramatically reduce the risks of these serious conditions. Breast feeding has a significant protective effect against infections, early breast feeding and the baby kept close to the mother reduce the risk of hypothermia, as well as hypoglycemia.[4]

Objectives

- To assess the knowledge regarding newborn care among primi mothers.
- To assess the effectiveness of planned teaching on knowledge regarding newborn care among primi mothers.
- To associate the findings with selected demographic variables.

Hypothesis:-

H_0:- There is no significant difference between the pre test knowledge score and post test knowledge score regarding newborn care among primi mothers.

H_1:- There is significant difference between the pre test knowledge score and post test knowledge score regarding newborn care among primi mothers.

Assumption:- Primi mothers may have some knowledge regarding newborn care.

Material and Methods

Research approach used for this study was an evaluative approach with one group pretest and posttest design, Population was Primi mothers in the A.V.B.R. Hospital, Sawangi (M), total 60 samples were selected by using non-probability Convenient sampling technique. Variable: Independent Variable: Planned teaching on knowledge regarding newborn care Dependent Variable: Knowledge of primi mothers regarding newborn care.

The Inclusion Criteria for selection of sample was Primi mothers, those who are available at time of time data collection and those who could read write & understand Marathi.

Exclusion Criteria was primi mothers attended the any programme on similar topic.

The instrument used for data collection was structured questionnaire which consisted of 2 sections. Section I: Demographic profile Section II: Knowledge questionnaire regarding newborn care.

Result:

The analysis and interpretation of the findings are given in the following sections:

Section-1:-Distribution of subjects with regards to their demographic variables.

Section-2:- i) Assessment of pretest knowledge regarding newborn care among primi mothers.

ii) Assessment of posttest knowledge regarding newborn care among primi mothers.

Section-3:- Evaluate the effectiveness of plan teaching program on knowledge regarding newborn care among primi mothers.

Sections-4:- Association of the findings with selected demographic variables.

The above table no. 4 shows the comparison of knowledge scores in pre and posttest of primi mothers regarding newborn care. The mean knowledge score in the pretest was 6.22 ±1.78 and the posttest knowledge score was 14.02 ±1.57 .The tabulated' values was 2.00 (df=59) which is less than the calculated' i.e. 25.51 at 5% level of significance. Also the calculated 'p'=0.001 which was much less than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that there is significant difference in knowledge score at pre and posttest of primi mothers regarding newborn care. Hence it is statistically interpreted that the planned teaching regarding newborn care among primi mother was effective. Thus the H_1 is accepted.

Sections-4:- Association of the findings with selected demographic variables.

There was association between the occupation of samples and the knowledge score. There was no association found between age (in years), education, types of family and residence.

Table 1: Percentage wise distribution of nursing student's according to their demographic variables.

S. N.	Demographic Variables	Frequency	Percentage (%)
1	Age		
	Years	5	8.33%
	21-23 Years	12	20%
	24-26 Years	33	55%
	27-29 Years	10	16.66%
2	Education		
	Illiterate	12	20%
	Primary education	28	46.66%
	Higher secondary education	20	33.33%
	Graduation	00	00 %
3	Occupation		
	Housewife	22	36.66%
	Private	26	43.33%
	employee	12	20%
	Daily wages	00	00 %
	Government employee		
4	Types of Family		
	Nuclear family	42	70%
	Joint family	18	30%
5	Residency		
	Rural	38	63.33%
	Urban	22	36.66%

Table 2: Assessment of pretest knowledge regarding newborn care among primi mothers.

N=60

Level of knowledge score	Percentage score	Pretest Knowledge	
		Frequency	Percentage
Poor (1-5)	0-25%	15	25%
Average (6-10)	26-50%	45	75%
Good (11-15)	51-75%	00	00
Excellent (16-20)	76-100%	00	00
Minimum score		1	
Maximum score		9	
Mean score		6.22 ±1.78	

Table 3: Assessment of posttest knowledge regarding newborn care among primi mothers.

n=60

Level of knowledge score	Percentage score	Pretest Knowledge	
		Frequency	Percentage
Poor (1-5)	0-25%	0	0%
Average (6-10)	26-50%	0	0%
Good (11-15)	51-75%	47	78.34%
Excellent (16-20)	76-100%	13	21.66%
Minimum score		11	
Maximum score		18	
Mean score		14.02 ± 1.57	

Table 4: Evaluate the effectiveness of plan teaching program on knowledge regarding newborn care among primi mothers.

n=60

Overall	Mean	Std. Deviation	t-value	p-value
Pretest	6.22	1.78		0.001
Posttest	14.02	1.57	25.51	S,p<0.05

Discussion

The result of present study shows that The mean knowledge score in the pretest was 6.22 ±1.78 and the posttest knowledge score was 14.02 ±1.57. The tabulated' values was 2.00 (df=59) which is less than the calculated' i.e. 25.51 at 5% level of significance. Also the calculated 'p'=0.001 which was much less than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that there is significant difference in knowledge score at pre and posttest of primi mothers regarding newborn care.. Hence it is statistically interpreted that the planned teaching regarding newborn care among primi mother was effective.

The study was supported by Quasi-Experimental with One group pretest posttest design study The pretest, showed that, 23(77%) were had average knowledge, followed by 4(13%) were had below average knowledge and 3(10%) were had above average knowledge regarding newborn care. In post-test, 16(53%) were had average knowledge and 14(47%) had above average knowledge none of them had below average knowledge regarding newborn care. The pre test mean was 15.2 and standard deviation was 3.75. And the post test mean was 20.6 and standard deviation was 2.7. The calculated value was greater than table value. So, it is significant at p <0.05. The study showed that there was a significant difference in the knowledge level after STP.5

A study was conducted to assess the effectiveness of Neonatal care package on knowledge and practice among primi gravid mothers. The findings revealed that the pretest mean score of knowledge was 7.68 with SD 2.27, whereas in the post test mean score of knowledge was 10.21 with S.D 1.88 and the post test mean score of practice was 33.83 with S.D 3.82. In level of practice hand washing is only 37% adequate practice after giving demonstration. The calculated paired t value =7.826 was found to be statistically significant at p <0.001 level and calculated r value =0.4 shows a positive correlation. This clearly indicates that when the knowledge on neonatal care among primi gravid mothers increases their practice level also increases. The findings proved that Neonatal care package was very effective and had a significant effect on knowledge and practice regarding neonatal care. 6

Conclusion

The structure planned teaching programme on knowledge regarding newborn care among primi mothers was effective. Since, mother plays a vital role in newborn care, they should have necessary knowledge in all the aspects of newborn care, thereby the complications and mortality related to newborn can be effectively prevented.

References

1. Margaret EB, Desouza A, Tesline. Effectiveness of an awareness programme on care of newborn for mothers of neonate. Nightingale Nursing Times:Aprl2009;5(1).
2. Marlow DR, Redding BA.Text book of Pediatric Nursing. 6th ed, New Delhi:Elsevier publication; 2007.
3. National Neonatology forum. Essential Newborn care. The nurses journal of India 2007 Nov; 6 (1).
4. AIIMS New Delhi. Essential Newborn care. Module VII, Nightingale Nursing Times 2007 Aug; 3 (5); 66-67.
5. https://www.ejmanager.com/mnstemps/157/157-1466662329.pdf
6. http://repository-tnmgrmu.ac.in/370/1/3002045punithavathikj.pdf.

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Effectiveness Of a Multimedia Educational Programme Regarding Preparation For Hospitalisation On Anxiety, Pain Intensity And Selected Post-Operative Complications Among Children Undergoing Elective Abdominal Surgery

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Abstract

Surgery creates a series of traumatic and stressful events in children. The present study evaluated the effectiveness of a multimedia educational programme on anxiety, pain intensity and selected post-operative complications among children undergoing elective abdominal surgery. The study was conducted in a Tertiary care Hospital, Ernakulam, Kerala. Experimental pre-test post test control group design was adopted for the study. Purposive sampling was adopted and the children between the age group of seven and fifteen years were randomly and equally assigned to control (n=50) and experimental (n=50) conditions. Multimedia educational programme was given to each of the parent- child dyad in the experimental group and the control group received routine care. Tools used were anxiety rating scale, numeric pain rating scale, respiratory and wound assessment scales. Findings of the study revealed that the baseline variables were homogeneously distributed in both the groups. There was a significant reduction in anxiety (post test 1 t= 3.90 p< 0.001, post-test 2, t= -3.86 p,0.0001) and pain intensity (p< 0.0001, Mann Whitney U 124.50) of children in the experimental group. It also found a significant improvement of respiratory status (p< 0.0001, Mann Whitney U 365.50) and wound status (p< 0.0001, Mann Whitney U 345.50) of children in the experimental group. There was a significant association of pre-test anxiety of children undergoingelective abdominal surgery with gender ($\chi 2$ =7.70, p, <.05) .The results suggests that providing multimedia educational programme for children along with their parents had significantly reduced anxiety at various points of time, pain intensity and thereby preventing respiratory and wound infections.

Keywords: Anxiety; Children; Multimedia; Pain; Surgery.

Introduction

Hospitalisation and surgery have negative influences on children. It is estimated that around 60–65% of children experience pre-operative anxiety.[1] and 67% may develop postoperative negative behavioral changes.[2] People with high preoperative anxiety tend to report more pain, use more medication for pain, stay in the hospital longer and report more anxiety and depression during their recovery than patients with less preoperative fear.[3] Most common post-operative complications in children are post-operative nausea and vomiting followed by respiratory complications leading to hypoxia. The effects of surgical response provoke a negative nitrogen balance and catabolism, delay wound healing and cause post-operative immunosuppression.

Children experiencing surgical procedures require both psychological and physical preparations. Literature reveals the effectiveness of various preparation programs using filmed modelling[4], therapeutic play[5,6] three types of educational materials (a board game, a video or a booklet), [7] video distraction[8] and smart phones[9] in reducing anxiety of children undergoing surgery.

Pain and anxiety are interrelated. Anxiety reduction programs are also found to be helpful in reduction of pain perception [10]. Educational materials which includes usage of non-pharmacological pain relieving methods are found to be effective in reduction of pain in children after surgical procedures.[11]. In a study conducted to

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assess the effectiveness of play activities on post-operative outcome of children undergoing general abdominal surgery in a tertiary care centre in Kerala found that significant reduction in the pain perception, negative behavioral manifestations wound infection and respiratory complications .[12]

It is also noticed that most interventions in children are aimed at reduction of pain and anxiety. Other recovery variables are seldom studied. It is against this background the present study was conducted using multimedia educational program for children and their parents on outcome variables such as pain, respiratory status and wound status in addition to anxiety.

Statement of the problem

Effectiveness of a multimedia educational program for children and their parents regarding preparation for hospitalisation on anxiety, pain intensity and selected post-operative complications among children undergoing elective abdominal surgery in a selected hospital of Kerala.

Objectives

The objectives of the study were to assess the level of anxiety, pain intensity, respiratory status and wound status of children undergoing elective abdominal surgery, evaluate the effectiveness of multimedia educational program on anxiety, pain and selected post-operative complications and to determine the association of anxiety of children undergoing elective abdominal surgery with selected demographic variables.

Hypothesis

H1: There will be a significant difference in the mean post test anxiety scores of children undergoing elective abdominal surgery between the control and experimental group.

H2: There will be a significant difference in the mean pain scores of children undergoing elective abdominal surgery between the control and experimental group.

H3: There will be a significant difference in the mean scores of respiratory status among children undergoing elective abdominal surgery between the control and experimental group.

H4: There will be a significant difference in the mean scores of wound status among children undergoing elective abdominal surgery between the control and experimental group.

H5: There will be a significant association between pre-test anxiety scores of children undergoing elective abdominal surgery and selected variables.

Intervention

This included a multimedia education program with video, audio, text and pictures. The video is a documentary which covers the pre-operative, intra operative and post-operative period of children undergoing surgery. It emphasized how to provide care before during and after surgery and parental guidance. The content also included general information regarding hospital admissions, routines, discharge procedure and the role of parents. Specific information regarding surgery, members of surgical team, orientation to operating theatre, anaesthesia, pre-operative holding area, recovery room and post-operative ward were included. Pre-operative exercises which includes turning, deep breathing and coughing exercises, extremity exercises, pre-operative procedures including skin and bowel preparations and intravenous cannulisation are also shown in the program. The exercises are demonstrated through the program and time was allowed to perform the same by the child during the program. Post-operative care which includes immediate post-surgical events, pain management, ambulation, oral intake wound care and nutrition are also explained.

The program was developed by reviewing related literature, discussion with experts and incorporating the real life situation of children undergoing surgery and their parents. The objectives of the video sessions were identified and the outline of the content areas prepared. Further content validity was established by ten experts in the field of psychology, paediatric nursing and paediatric surgery. The video was developed in the regional language (Malayalam) and was validated by subject experts and five children and their parents (target audience). Apart from the input of the researcher, editing of the audio and video were done by technical experts in multimedia. The duration of the program was 30 minutes.

Materials and Methods

A quantitative approach experimental pre-test post test control group design was adopted for the present study. The study was conducted in a Tertiary care Hospital, Ernakulam, Kerala. After getting ethical clearance certificate from the Institutional ethical committee, a formal written permission to conduct the research study was obtained from the

Director of the concerned Hospital, Ernakulam. Purposive sampling was adopted and the children between the age group of 7 and 15 years were randomly and equally assigned to control (n=50) and experimental (n=50) conditions.

Data collection was done over a period of eleven months.Informed consent from the parents and assent from children were taken. All tools were validated by experts and reliability established. Parents were interviewed to collect the demographic data and clinical data was obtained from records. A pre measurement of anxiety was done by administering the anxiety rating scale to the child (Day 1). This tool consists of 36 items under five headings prepared by the investigator. The areas included are general anxiety, physical symptoms, separation anxiety, hospital related anxiety and surgery related anxiety. All item are marked on a 4 point scale (1-Not at all, 2-Somewhat, 3-Moderate and 4-Very much). Higher scores indicate greater anxiety.

Multimedia educational program was given to each of the parent- child dyads in the experimental group during the preoperative period (10-12 hours before surgery) for 30 minutes using laptop (Day 1). A short debriefing was done soon after the intervention. Post intervention anxiety was assessed using the same scale in children after one hour of intervention (Day 1). After the surgery when the child is fully awake after anaesthesia pain was assessed using numerical pain rating scale (Day 2). Respiratory status was assessed on the first post-operative day by using respiratory assessment scale (Day 3) which includes respiratory rate, heart rate, temperature, SpO2, use of accessory muscles, adventitious breath sounds (wheeze, rhonchi, and crackles), cough and presence of peripheral cyanosis which is observed, measured and scored on a three point rating scale. The deviations in these parameters are focused with respect to respiratory infection. Score of 1 indicates normal, 2 indicates mild to moderate deviation from normal and 3 indicates severe deviation from normal. Higher scores indicate greater deviation from normal. Anxiety was again assessed on the first post-operative day using the anxiety rating scale (Day 3). Wound assessment was performed on the eighth post-operative day (Day 10) using the wound assessment scale which includes the wound parameters such as skin colour, exudate formation, approximation, peri wound skin and necrotic tissue which is observed and scored on a five point rating scale. The deviations in these parameters are focused with respect to wound infection by observation. All these measurements are done in the control group except for the intervention. Routine care was given to the control group.

Results

Section 1 :Sample characteristics

The mean age of the sample was 10.93 ± 2.49. Most of the children were male (60%). Majority were studying in classes from 6-10 (65%). Most of them underwent appendicectomy (67%). Majority of children had previous history of hospitalisation (73%). Eighty per cent of children in both the control and experimental group had no previous history of surgery.

Section 2: Evaluation of effectiveness of multimedia educational program

Pre-test anxiety scores were tested for homogeneity using Mann Whitney u test as the distribution did not follow normality. Independent sample t test was computed to assess the significant difference in the mean post anxiety scores. For pain, respiratory status and wound status as the distribution of scores were not normal Mann Whitney U test was computed to assess the significant difference in the mean scores between the control and experimental groups.

Anxiety

Table 1 Mean, mean rank, sum of ranks and Mann Whitney U value of pre anxiety scores of children undergoing elective abdominal surgery between control and experimental group.

n=100

Group	Pretest anxiety			**Mann Whitney U Value**	**p-value**
	Mean	Mean Rank	Sum of ranks		
Control (n=50)	76.92	51.06	2553	1222.00	0.847
Experimental (n=50)	76.40	49.94	2497		

Table 1 shows that the mean pre anxiety score in the control group was 76.92 and the experimental group was 76.40. Both the group were similar as the computed Mann Whitney U value is not significant at p< .05.

Table 2:Mean, Standard deviation 't' value and p-value of post anxiety scores of children undergoing elective abdominal surgery between control and experimental group.

n=100

Group	Control (n=50)		Experimental (n=50)		df	t value	p-value
	Mean	SD	Mean	SD			
Post test 1	79.54	20.18	65.26	16.20	98	3.90	0.001
Post test 2	74.58	19.05	61.12	15.63	98	-3.86	0.0001

From table 2 it is inferred that there is a significant difference in the post test1 and post test 2 anxiety scores of children undergoingelective abdominal surgery between the control and experimental group. This indicates, Multimedia educational program is effective in reducing anxiety of children undergoingelective abdominal surgery.

Pain intensity

Table 3 Mean, Mean rank, sum of ranks and Mann Whitney U value of pain scores of children undergoing elective abdominal surgery between control and experimental group .

n=100

Group	Pain Score			Mann Whitney U Value	p-value
	Mean	Mean Rank	Sum of Ranks		
Control (n=50)	7.00	73.01	3650.5	124.50	0.0001
Experimental (n=50)	3.00	27.99	1399.5		

From table 3 it is clear that the obtained Mann Whitney test value is 124.50 showing very high significance (p= 0.0001) for pain scores. This indicates, Multimedia educational program was effective in reducing the intensity of pain in children undergoing elective abdominal surgery.

Table 4: Mean, Mean rank, sum of ranks Mann Whitney U value and p value of respiratory status scores of children undergoing elective abdominal surgery between control and experimental group.

n=100

Group	Respiratory status score			Mann Whitney U Value	p-value
	Mean	Mean Rank	Sum of Ranks		
Control (n=50)	12.66	68.19	3409.50	365.50	0.0001
Experimental (n=50)	10.44	32.81	1640.50		

Clearly depicts that the obtained Mann Whitney test value is 365.50 showing very high significance (p=0.0001) for respiratory status scores of children undergoing elective abdominal surgery between the control and experimental group. This indicates, Multimedia educational program is effective in improving the respiratory status and preventing complication among children undergoing elective abdominal surgery.

Wound status

Table 5: Mean, Mean rank, sum of ranks Mann Whitney U value and p value of wound scores of children undergoing elective abdominal surgery between control and experimental group.

n=100

Group	Wound score			Mann Whitney U Value	p-value
	Mean	Mean Rank	Sum of ranks		
Control (n=50)	6.26	68.60	3430.00	345.50	0.0001
Experimental (n=50)	5.22	32.40	1620.00		

From table 5 it is evident that the obtained Mann Whitney test value is 345.00 showing very high significance (p= 0.0001) for wound scores of children undergoing elective abdominal surgery between the control and experimental group. Therefore, it is inferred that there is a significant difference in the wound scores of children undergoing elective abdominal surgery between the control and experimental group.

Association of pre test anxiety scores of children undergoing elective abdominal surgery with selected demographic variables

Association of pre test anxiety scores of children undergoing elective surgery with selected demographic variables was computed using Pearson Chi- square test. The selected variables are gender, age, class of study, type of surgery, previous history of hospitalisation, previous history of surgery, education of parent, previous experience of parent in child's hospitalisation and previous experience of parent in child's surgery. Only gender had a influence on the pre test anxiety scores of children undergoing elective abdominalsurgery.

Table 6: Chi square value, degrees of freedom and p-value of pre test anxiety scores of children undergoing elective abdominal surgery with gender

n=100

Gender	Pre test anxiety			$\chi 2$ value	df	p-value
	Mild f	Moderate f	Severe f			
Male	35	23	2	7.70	2	0.02
Female	15	18	7			

From the table it is evident that gender has a influence on the pre test anxiety scores of children undergoing elective abdominal surgery.

Discussion

In the present study among 100 children, the pre test anxiety revealed that 47.9% had mild anxiety, 42.7% had moderate anxiety and 9.4% had severe anxiety. From researches it is estimated that around 60–65% of children experience pre operative anxiety[1]. The present study supports this finding as majority of children experienced varying levels ofanxiety. Anxiety levels may differ according to the culture, ethnic background, setting, education of parents and developmental stage of the child and the type of surgery. In the present study it was observed that older children were found anxious if they are anticipating an examination within few days after the surgery.

Findings of the current study revealed that Multimedia educational program was effective in reducing anxiety of children undergoingelective abdominal surgery. Similar results were seen in a quasi- experimental study conducted to evaluate the effect of pre-operative preparation program on anxiety level[13] and a randomized controlled trial was performed in Amirkola Pediatrics Hospital, Mazandaran on 122 children (7-12 years of age) admitted for elective surgery on preoperative program using therapeutic play intervention.[14] In the present study since the intervention was given along with the parents, they were relieved of their anxiety and were well equipped to handle the child during pre, and post operative periods. Parental anxiety directly affects child anxiety.That may be the reason for significant reduction in anxiety in the experimental group.

The present study found that there was a significant reduction in the pain perception of children in the experimental group compared to the control group. Randomized controlled trial on the effect of pre-operative digital versatile disc (DVD) on 123 parent–child dyads in a Canadian pediatric hospital day-care surgery unit, post operative pain was significantly lower among the intervention group compared with the control group.[15] Effect of play activities on post operative outcome of children undergoing general abdominal surgery showed that the mean pain perception was found to be more in control group (4.933) compared to experimental group (3.993)(t 6.640p<0.001).[12] In the present study the difference was due to the reason that the experimental group used distraction methods like deep breathing techniques and counting numbers and playing with hand held mobile games which were some of the techniques which were taught to them for managing pain. Supporting the wound while turning, coughing and also during ambulation were practiced by them. Children can be easily distracted and learning and practicing these techniques helped them to manage pain in the intervention group.

In the control group 18% had mild respiratory infection. In a study on effect of play activities on post operative outcome of children undergoing general abdominal surgery revealed that there was a significant difference in the mean respiratory infection rate in the control group (3.883,SD 0.580)

and the experiment group (3.162, SD 0.433) (t 5.546 p<0.001).[12] In the present study in the experimental group children were willing for early ambulation and practicing deep breathing and coughing hourly which were taught to them through the multimedia educational program. Therefore its effectiveness needs to be commented.

In the control group 2% had mild wound infection. Effect of play activities on post operative outcome of children undergoing general abdominal surgery found that there was a significant difference in the mean postoperative wound complications in the control (6.367) and experimental (0.248) groups (t 9.954 ,p<0.001).[12] In the present study children were discharged with the dressings on. On the eighth post operative day the dressing was opened and sutures were removed. Multimedia educational program had information on care of child at home focusing on wound care and well balanced diet for wound healing and signs and symptoms of wound infection. Mothers would have followed the instructions and that may be the reason that none of them developed wound infection in the experimental group. Therefore the effectiveness of the program could be highlighted.

Association of anxiety of children undergoing elective abdominal surgery with demographic variables showed that there was a significant association with gender. ($\chi 2 = 7.70$, $p < .05$).In a study done by Ercan[16] on children undergoing surgery revealed that girls had significantly higher anxiety than boys in the pre operative period.Anxiety states are not universal. Factors associated with anxiety of child and mother may differ in different cultures and countries.

Conclusion

The results of the present study provide empirical evidence of the benefits of incorporating multimedia educational programme in the pre-operative periods, thereby charting a path towards promoting holistic and quality care. It is anticipated that the findings will not only contribute to promoting the nurses' accountability and responsibility for caring their patients through evidence-based practice, but will also facilitate the development of more autonomy in the advancement of nursing practice.

References

1. Brophy CJ, Erickson MT. Children's self statements and adjustment to elective outpatient surgery. Developmental and behavioral Paediatrics.1990:11,13-16.Availablefrom:http://dx.doi.org/10.1097/00004703-199002000-00003
2. K.Daaboul DG. Postoperative maladaptive behavioral changes in children. Middle East J Anaesthesiol. 2011 Jun;21(2):183-9. Available from: https://www.ncbi.nlm.nih.gov/pubmed/22435270
3. Curtis AJ. Health psychology. Routledge Modular and Series, London & New York.2000.
4. Melamed B, Siegel LJ. (1975). Reduction of anxiety in children facing hospitalisation and surgery by use of film modelling. Journal of Consulting and ClinicalPsychology.1975;43(4),511-521.http://dx.doi.org/10.1037/h0076896
5. Vaezzadeh N, Douki Z E, Hadipour A, Osia S, Shahmohammadi S, Sadeghi R, The Effect of Performing Preoperative Preparation Program on School Age Children's Anxiety. Iranian Journal of Pediatrics,2011;21(4):461-466. Available from: ncbi.nlm.nih.gov PMCID:PMC3446145
6. FatemehGhabeliF,MohebN,NasabSDH,Effect of Toys and Preoperative Visit on Reducing Children's Anxiety and their Parents before Surgery and Satisfaction with the Treatment. Process Journal of Caring Sciences.2014; 3(1), 21-28.Available from:doi:10.5681/jcs.2014.003.
7. Fernandes S. C,Arriaga P, Esteves F. Providing preoperative information for children undergoing surgery: a randomised study testing different types of educational material to reduce children's preoperative worries. Health Educ Res (2014)29(6):1058-1076.DOI:https://doi.org/10.1093/her/cyu066.
8. Mifflin KA, Hackmann T, Chorney JM.Streamed video clips to reduce anxiety in children during inhaled induction of anaesthesia. Anesth Analg. 2012 Nov;115(5):1162-7. Available from: doi: 10.1213/ANE.0b013e31824d5224. Epub Oct 9 2012.[Accessed 26thDecember2017].
9. Lee JH, Jung HK, Lee GG, Kim HY, Park SG, Woo SC. Effect of behavioral intervention using smartphone application for preoperative anxiety in pediatric patients. Korean J Anesthesiol. 2013;65(6):508-18. Available from: http:// journals.tbzmed.ac.ir/ JCS.[Accessed 26thDecember2017].
10. Setoodeh G, F Sharif F, A Faramarzi A, Tabatabaee HR. Effect of Pre- Operative Psycho-educational Interventions on Anxiety and Pain in Children Undergoing Tonsillectomy in Shiraz Southern Iran. IRCMJ 2010; 12(1):52- 57.Availablefrom: https://pdfs.semanticscholar.org/.pdf[Accessed 17th December 2017].
11. Pölkki T, Vehviläinen-Julkunen K, Pietilä AM.

Nonpharmacological methods in relieving children's postoperative pain: a survey on hospital nurses in Finland.JAdvNurs. 2001May;34(4):483-92. https://www.ncbi.nlm.nih.gov/ . [Accessed December 10th 2017].

12. Thomas B, Effectiveness of play activities on the post operative outcomes of children undergoing general abdominal surgery. Unpublished Master of Nursing Dissertation, University of Calicut,2007.
13. Sabaq A.G El-Awady S. The Effect of Pre-Operative Preparation Program and Mothers Presence during Induction on Anxiety Level and Behaviour Change in Young Children Undergoing Elective Surgery. Life Sci J 2012;9(4):3798-3807. http://www.lifesciencesite.com.
14. Vaezzadeh N, Douki Z E, Hadipour A,Osia S, Shahmohammadi S,Sadeghi R, The Effect of Performing Preoperative Preparation Program on School Age Children's Anxiety. Iranian Journal of Pediatrics,2011;21(4):461-466. Available from: ncbi.nlm.nih.gov PMCID:PMC3446145.
15. Chartrand J, Tourigny J, MacCormick J. The effect of an educational pre- operative DVD on parents' and children's outcomes after a same-day surgery: a randomised controlled trial. Journal of Advanced Nursing. 2017;73(3):599-611.Available from: onlinelibrary.wiley.com / doi/10.1111/jan.2017.73.issue- 3/issuetoc.
16. Ercan S. Relationship Between Psychological Preparation, Preoperative Anxiety, and Coping Strategies in Children and Adolescents Undergoing Surgery. Master's Dissertation, Middle East Technical University 2003. Available from: citeseerx.ist.psu.edu/ viewdoc/download?doi=10.1.1.632.6492&rep=rep1..[Accessed 10th January 2012].

Original Article

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A Descriptive Study to Assess the Knowledge on Child Sexual Abuse Among Mothers of Mentally Challenged Children in a Selected Special School in Eritrea."

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Abstract

A descriptive study to assess the knowledge on child sexual abuse among mothers of mentally challenged children in a selected special school in Eritrea, Africawith the objective (1) to assess the knowledge on child sexual abuse among mothers of mentally challenged children. 2) To find out the association between knowledge of mentally challenged children's mothers regarding child sexual abuse with selected demographic variables. 3) To develop and administer an information booklet regarding child sexual abuse among mothers of mentally challenged child. Convenience sampling technique was used to select 30 samples .The questionnaire has administered on mothers regarding child sexual abuse. The findings of the study were: Majority of the samples 16.6% of respondents were in the age group of 18-25 years, 26.6% were in the age group of 25-35, 13.3% were in the age group of 35-45 years and 43.3% were in the age group of above 45 years. Then 20% of mothers had 3 child, 60% mothers had 5 children, 20% mothers had more than 5 children.43.3% mothers were illiterate,46.6% mothers were secondary, 6.6% mothers were higher secondary , and 3.3% mothers were graduate. Then 83.3% mothers were housewife, 16.6% mothers were employee. In the knowledge area36.7% samples have a poor knowledge regarding child sexual abuse and 53.3% samples have average knowledge regarding child sexual abuse and 10% samples have a good knowledge regarding child sexual abuse.

Keywords: child abuse, mentally challenged, knowledge, mothers.

Introduction

"No more, together we can end domestic violence and sexual assault."- Joyful heart foundation.

The sexual abuse has defined as forcing or enticing a child young person to have part in sexual activities knowingly or unknowingly by them. These sexual activities are4 vaginal or oral or anal sex penetration or molest the child without penetration. The non-penetrative act includes undress the child, show sexual part, a person is touch and make the child to touch, showing pornography. Most of the studies shows the difference among countries however the studies objective, type of sexual abuse, quality of data collection will influence the result of research and perspective of child abuse among the continent the African continent studies related to sexual abuse meet higher in rate. This is may due to developing country with enormous social changes in it. Overall highest prevalence rates for child sexual abuse reported in Africa from morocco, Tanzania, and South Africa. Due to this result we cannot conclude that these areas are culprit's area. May report from them state marked and from other state may not reported. From all over research 47% female child laborers in Nigeria had been sexually assaulted. The children are used for money, shelter, food and clothes in upper west,upper east,Ashanthi, western and Brong-Ahafo region. This result was shot from National Child Protection study by Government of Ghana & UNICEF in 2014. The number of studies shows that their first sexual experience

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were unwanted and forced. This statement clearly shows that the children had sexual abuse during their childhood. UNICEF report shows there is a high statistics with regard to rape and defilement common among children from West side of Africa.

Data gathered by the United Nations Children's Fund (UNICEF) show that Ghana's statistics with regard to rape and defilement are so high that they rank in certain instances alongside countries that have a recent history of violent conflict like Sierra Leone or the Democratic Republic of Congo. Mentally healthy children are affecting with child abuse more in this scenario and what about mentally challenged children. When mentally healthy children undergone such humiliation, they can communicate with their parents verbally or non -verbally. In case of mentally challenged children their way of communication regarding child abuse are always questionable. In Eritrea there is no evidence of such studies so researcher has chosen this topic and inculcate the awareness of child abuse among mentally challenged children's mother.

Statement of problem

"A descriptive study to assess the knowledge on child sexual abuse among mothers of mentally challenged children in a selected special school in Eritrea."

Objectives of the study

1. To assess the knowledge on child sexual abuse among mothers of mentally challenged children.
2. To find out the association between knowledge of mentally challenged children's mothers regarding child sexual abuse with selected demographic variables.
3. To develop and administer an information booklet regarding child sexual abuse among mothers of mentally challenged child.

Research Approachand Design

A Quantitative approach anddescriptive cross sectional design was used.

Research Setting Of The Study

The current study has conducted in DendenSchool Eritrea. Denden special school is situated in the campus of Denden secondary school. Eritrea. Denden school for mentally challenged was run by government and aided by International developmental Disability for Children Organization. Today about 35 children are studying there. There are 5 teachers and 3 office staff are working.

Sample

The sample comprised of mothers of children of DendenSchool Eritrea who had Mentally challenged children below the age of 18 yrs. and who were willing to participate

Sample Size

Sample size was 30 mothers taken under convenient sampling technique

Description Of The Tool

Demographic data, which includes age of mother in years , no. of children, educational status, occupational status of the mother, previous knowledge about child sexual abuse. A developed validated Questionnaire on mother's knowledge regarding child sexual abuse was used. The reliability was checked by split half method by spearmen's brown formula. The reliability coefficient was 0.73

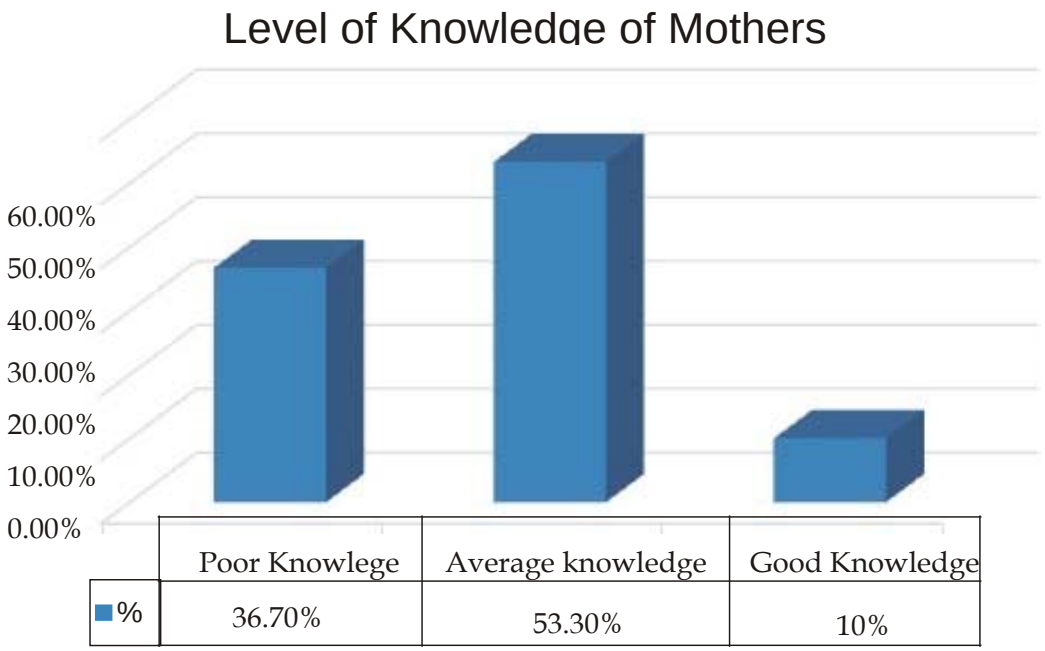
Data Collection Procedure

Developed tool after translated in to Tigrinya by language experts administered on mothers. After the informed consent from the mother the instructions were explained to the each sample about how to respond to the items given in tool. After completion of the tool they had written questionnaire to investigator. Data was collected within one week of time period. To maintain the protection of human rights, we have taken permission letter prior to go for the data collection procedure. We meet the principal and ask for the permission. We received the permission from the principal and after that we have started our data collection procedure. Before collection of data we had taken consent from sample.

Table-2 reveals that 16.6% of respondents were in the age group of 18-25 years, 26.6% were in the age group of 25-35, 13.3% were in the age group of 35-45 years and 43.3% were in the age group of above 45 years. Then 20% of mothers had 3 child, 60% mothers had 5 children, 20% mothers had more than 5 children.6.6% mothers were illiterate,46.6% mothers were secondary,43.3% mothers were higher secondary , and 3.3%mothers were graduate. Then 83.3% mothers were housewife, 16.6% mothers were employee. 43.3% mothers had enough knowledge, 33.3% mothers had medium knowledge, and 23.3% mothers had basic knowledge.

Distribution of the mothers of children below the age of 25 years according to their occupation shows that 83.3% of the mothers were housewives, 16.6% of the mothers were employees.

Demographic data of the sample	Frequency	Percentage (%)
Age		
a) 18-25 years	5	16.6%
b) 25-35 years	8	26.6%
c) 35-45 years	4	13.3%
d) above 45 years	13	43.3%
No of children		
a) 3	6	20%
b) 5	18	60%
c) More than 5	6	20%
d) More then 10	0	0%
Educational status		
a) Illiterate	2	6.6%
b) secondary	13	43.3%
c) Higher Secondary	14	46.6%
d) graduate	1	3.3%
Occupational status		
a) House wife	25	83.3%
b) Employee	5	16.6%
c) Business	0	0
d) Coolie	0	0
Previous knowledge about child sexual abuse		
a) Enough	13	43.3%
b) Medium	10	33.3%
c) Basic	7	23.3%
d) No knowledge	0	0



Discussion and Summary

The objective of the study was to assess the knowledge regarding the child sexual abuse among the mothers of mentally challenged children in selected special school of Eritrea.

Research approach selected for the study was Quantitative approach and descriptive in nature. The tool for the study was a multiple choice questionnaire. It was conducted from 4-4 2018 to 6-4-18. It was conducted taking 30 samples and study took 4 days to complete.

The major finding of the study were under section 1) assess knowledge regarding the child sexual abuse among mothers and mentally challenged children in selected special school of Eritrea. 2) Distribution of sample according to demographic characteristics of age, no. of children, educational status, occupational status, previous knowledge regarding child sexual abuse.

Objective-1 is to assess the knowledge on child sexual abuse among mothers of mentally challenged children. The dada reveals that 10% have good knowledge, 53.3% sample have average knowledge and 36.7% samples have poor knowledge regarding child sexual abuse. So, according to our findings the mothers are having average knowledge regarding child sexual abuse. A similar study conducted in Jordan in June 2007 by Alzaubi FA, Ali RA, Flah IH and AlnatourA. according to their study majority of mothers were knowledgeable about child sexual abuse. By this research study, we have find out that mothers of mentally challenged children are having average knowledge about child sexual abuse.

Objective-2 is to find out the association between knowledge of mentally challenged children's mother regarding child sexual abuse with selected demographic variable. According to our findings

- 16.6% of respondents were in the age group of 18-25 years, so because of lower age group mothers are having poor knowledge about child sexual abuse.
- 6.6% mothers were illiterate, 46.6% mothers were secondary, 43.3% mothers were higher secondary, and 3.3% mothers were graduate. So, according to educational level, mothers are having poor to average knowledge.
- 83.3% mothers were housewife, 16.6% mothers were employee.so, according their occupation, and housewives are having poor knowledge and employee mothers having basic or average knowledge about child sexual abuse.
- 43.3% mothers had enough previous knowledge, 33.3% mothers had medium knowledge, and 23.3% mothers had basic knowledge.

A similar study was conducted in Jordan in June 2017 by Fatema A., Reem Ali, Flah H., Ahlam A. According to their study, half of the mothers of 488 sample size had post-secondaryeducation and only 36% mothers were employed. Almost all mothers in the study were Muslim and married. Half of the mothers had post-secondary education and only 36% were employed. The study revealed that the majority of mothers were knowledgeable about child sexual abuse and its prevention. 74% mothers indicated that educating their children about child sexual abuse can prevent it. Only 37.7% knew about laws regarding child sexual abuse and half of the mothers knew about social organizations. Mothers who had a high income or a high level of education or were employed had a higher awareness of child sexual abuse and recognized sign and symptoms of child sexual abuse more than other mothers.

Major Findings

In findings of the personal data of the respondent's investigator find out that:

- out of 30 respondents 16.6% samples had 18-25 years, 26.6% samples had 25-35 years,13.3% samples had 35-45 years,43.3% samples had above 45years
- 20% of mothers had 3 child, 60% mothers had 5 children, and 20% mothers had more than 5 children.
- 6.6% mothers were illiterate, 46.6% mothers were secondary, 43.3% mothers were higher secondary, and 3.3% mothers were graduate.
- 83.3% mothers were housewife, 16.6% mothers were employee.
- 53.3% mothers had poor knowledge, 36.7% mothers had average knowledge, and 10% mothers had good knowledge.

Conclusion

Investigator had found knowledge level among the mothers in a selected special school in Eritrea city regarding child sexual abuse. From collected samples 36.7% samples have poor knowledge regarding child sexual abuse, 53.3% samples have average knowledge regarding child sexual abuse, and 10% samples have good knowledge regarding child sexual abuse. Thus, the investigator conducted

that the mothers of Denden school of Eritrea city had average knowledge regarding child sexual abuse.

Recommendations

The following recommendations are made on the basis of the present study.

- A similar study may be conducted in a large scale in order to broader generalization.
- A study can be carried out to assess the knowledge, attitude and practice of the health professionals regarding the child abuse among children under the age group of 18 year

References

1. A Padmaja "Textbook of child health nursing," First edition 2016, published by jaypee brothers Medical publishers (p) Ltd.
2. A Parthasarathy "IAP Textbook of Pediatrics", fifth edition 2013, Published by Jaypee brothers Medical publishers (p) Ltd.
3. Gail Stuart" Principles and practice of psychiatric nursing" 9thedition, Published by Elsevier, a division of reed Elsevier India private limited india.
4. Mary c. Townsend" Psychiatric Mental Health Nursing" 8th edition published by Jaypee brothers Medical publishers (p) Ltd.
5. Meharban Singh "Essential Pediatrics for Nurses," fourth edition, 2017, published by CBS publishers &distributors pvt.ltd.
6. ParulDatta"Pediatric Nursing"2nd edition 2009, published by Jaypee brothers Medical publishers (P) Ltd.
7. Piyush Gupta" Essential Pediatric Nursing" fourth edition 2017, published by CBS publisher & distributors Pvt Ltd.
8. RimpleSharma"Essentials of pediatric Nursing."Second edition 2017, published by Jaypee brothers Medical publishers (P) Ltd.
9. Sridhar Rao" Community Health Nursing" first edition 2017, published by AITBS Publishers, India.

Review Article

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Protecting The Little Angels From Covid—19

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Abstract

Novel coronavirus is a new strain of coronavirus that emerged from zoonosis of Coronaviridae family which causes severe disease in humans among all the nations of the world. The virus can spread from humans to humans through either droplet or contact transmission. An individual can show symptoms after exposure within 1-14 days with an average of around 5-6 days. Some of the manifestations are fever, dry cough, aches and pains, sore throat and severe breathing difficulty. There is no vaccine available at present but the treatment should be focused upon managing symptoms. Without proper drugs or vaccines to treat, preventive measures such as proper hand washing, respiratory etiquette, social distancing and other WHO recommended methods of community care have become mandatory to fight the pandemic. It has led all the nations around the world to lock down the cities and towns demanding the citizens to stay at home. This article throws emphasis on the preventive measures of COVID - 19 in children.

Keywords: COVID – 19; Severe Acute Respiratory Syndrome Coronavirus-2; Child care; Hand washing; Respiratory etiquette; Social distancing.

Introduction

Coronaviruses are a large family of RNA viruses resulting in an ongoing pandemic all over the globe.[1] The outbreak of COVID – 19 was identified in Wuhan, Hubei province, China in December, 2019 for the first time and the cases are no longer limited to Wuhan.[2] The outbreak has been declared as a public health emergency of international concern (PHEIC) by the World Health Organization (WHO) on 30 January 2020, and recognised it as a pandemic on 11 March 2020.[3]

Continuous tracing and monitoring its outbreak, trends and changes have to be followed up. Mitigation with this epidemic threat is very crucial. At the same time, obtaining and analysing the existing information at the global level is essential so as to foresee what course of action this coronavirus might take place in the future.[1]

Coronavirus is zoonotic in nature and is one among the seven known coronaviruses in humans that include HCoV-229E, HCoV-OC43, SARS-CoV, HCoV-NL63, HCoV-HKU1 AND MERS-CoV. Corona virus has spikes on its molecular structure which helps in adhering the virus to bind to the host cells that results in the transmission of COVID – 19 through human contact.[4]

Coronavirus disease (COVID - 19) is an infectious disease caused by a new strain of coronavirus.[5] The acronym of COVID – 19 is

'CO' – CORONA

'VI' - VIRUS

'D' – DISEASE

'19' – 2019.

Earlier, COVID - 19 was referred as '2019 novel coronavirus' or '2019-nCoV'.[6]

The causative organism of COVID – 19 is a novel coronavirus.[7] It was called as Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-

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CoV-2 or 2019-nCoV) officially declared by the World Health Organization (WHO) on February 11, 2020. The taxonomy of Human coronavirus is described as

Order	:	Nidovirales
Family	:	Coronaviridae
Genus	:	Alphacoronavirus or Betacoronavirus.[8-9]

Coronavirus can spread through either droplet or contact transmission. The Corona virus is transmitted through direct contact (human-to-human) mostly via small respiratory droplets of an infected person through sneezing and coughing. It can even spread by interacting with each other for some period of time in close proximity. The droplets can be inhaled when the surfaces are contaminated by the virus via touching their nose, mouth or eyes. The SARS-CoV-2 virus lands on different surfaces that an infected person may touch and can survive on them for a few hours to several days.[7,10,11]

The "incubation period" is referred to as the time between exposure to the virus and onset of symptoms of the disease. The incubation period for COVID-19, range from 1-14 days, most commonly around five days.[7] Children with SARS-CoV-2 infection may be asymptomatic or usually mild and begins gradually developing fever, cough and fatigue with a few upper respiratory tract and gastrointestinal infections. The child may suffer with the following symptoms:[12-17]

- Nasal congestion
- Nasal discharge (watery mucus)
- Sore throat
- Shortness of breath
- Diarrhea
- Nausea or vomiting
- Fatigue
- Headache
- Myalgia
- Poor feeding or poor appetite

In severe cases, COVID – 19 may lead to pneumonia or breathing difficulties. More rarely, it can be life-threatening in children.[6]

At this point of time, there are no specific vaccines or treatments available for coronavirus disease. Symptomatic care is provided to treat the manifestations accordingly as they differ in each child. Hospitalization is necessary if the children have serious illness. Moreover, there are many continuing clinical research trials evaluating prospective treatments.[5]

Covid – 19: Newborn and Infancy

Breastfeeding plays a most significant role in the child's survival, nutrition and development as well as for the maternal health.[18] Breastmilk safeguards a neonate from getting unwell and also helps to secure them all over their infancy and childhood. It is effective in reducing the risk of infectious diseases.[18-19] There are most abundant protective elements in human milk, comprising of the immunoglobulins, antiviral factors, cytokines and leucocytes that boosts up the new-born's immune system by killing the microbes which are detrimental.[18]

To date there is no evidence that COVID-19 can be transmitted through breast milk.[20-21] Nevertheless, the mothers suspected or confirmed with SARS-CoV-2 who are breastfeeding or practicing skin-to-skin contact (Kangaroo mother-care) should be isolated and appropriate preventive measures must be taken.[22]

In fact; the health professionals should recognize the importance of advising the mothers to wash hands thoroughly with soap and water or with an alcohol-based hand rub frequently for at least two minutes. It is also mandatory to perform handwashing before and after contact with the neonate or an infant. If available, use of a mask while breastfeeding or caring the child is suggested. Movement in the house and surroundings is unavoidable by any person and there is no exception for a mother. She will have to move around even in the lockdown at home but the rooms or places that she has moved in or out will definitely be contaminated with the virus. Therefore, it is mandatory to regularly clean the places that she moves by disinfectants or alcohol-based hand rub or other means. Thus, this prevents the baby coming in contact with the virus stricken place.

Mother along with the child should practice physical distancing from other people (at least 1.5 m). Also, advise the mother not to avoid touching eyes, nose and mouth. Instruct the mother to perform cough etiquette by covering with a tissue and to be discarded in the bin immediately. Mothers need to be re-assured that it is safe to breastfeed their children.[14,15]

In case of severe illness with COVID-19 or other health complications, the mother can discontinue direct breastfeeding to the child instead she should express the breast milk. The family members should be encouraged and supported to safely provide expressed breastmilk to the infant by applying appropriate hygiene measures. The appropriate hygiene measures include: caretakers washing their hands prior to feeding; cleansing the feeding bottle in boiling water thoroughly; cleansing the breast pump properly after each use. The expressed breastmilk should be fed to the child using a clean cup and/or spoon, preferably by a person who has no signs or symptoms of illness.[23-24]

Apart from breastfeeding keep on track with the vaccinations so as to safeguard the child from various infectious bacterial and viral agents.[5]

Covid – 19: Older Children

Prevention is the best key to avoid the risk of being affected with the harmful pathogens. Hence, the older children must be taught regarding the importance of carrying out the preventive measures such as frequent hand washing, and respiratory etiquette. It is very much essential for the parents to instruct the children to perform handwashing regularly as it destroys the unseen microbes especially before and after eating; after blowing the nose, coughing, or sneezing. In addition, after playing with the toys or other playing devices or electronic gadgets, hand washing has to be done strictly and the parents have to have an eye on the children round the clock.

Handwashing must be practised by using soap and water if readily available. If not available, instruct the child to use an alcohol-based hand sanitizer. The parents also must make sure that the alcohol-based sanitizer should have at least 60% alcohol. A child touches many surfaces at home and can pick up the viruses. As their hands get contaminated with virus, they themselves can transfer the virus to their eyes, nose or mouth. Thus the virus enters into the body which leads to lowered immune system in the child. So, it is the responsibility of the parents to safeguard the child especially in tough times.

Instruct the child to practice respiratory or cough etiquette by covering the mouth and nose with flexed elbow or tissue when coughing or sneezing. If the child uses a tissue, ask him/her to discard the used tissue immediately into the bin. Also command the child to close the bin after disposal. Advise the child to avoid in contact with anyone who has cold or flu-like symptoms.[6]

Use of mask if available is also advisable in case if any of the family members have flu-like symptoms such that the virus cannot be transmitted to the children or other persons. Ensure that the mask is kept properly (snugged tightly) covering the nose and mouth. Soon after the mask gets soiled, it has to be discarded in a closed bin. It is necessary being parents to keep an eye on the child regarding the usage of mask and proper disposal to avoid transmission of the virus to others. Make sure that the disposable masks can be used only for a single time. Explain the child putting a mask is alone not enough to fight COVID – 19. Following a regular and thorough handwashing as well as cough etiquette with flexed elbow or a tissue is quite essential. Also instruct the child strictly to avoid a close contact with others who suffer with flu-like symptoms (coughing, sneezing and fever).

Social distancing plays a significant role apart from all the necessary preventive measures. Insist the child to maintain at least 1 metre (3 feet) distance between him/her and others who have the manifestations of coughing or sneezing. Avoid the child to go outdoors unnecessarily and to stay away from a large group of people. It is also necessary for the child to be known the rationale behind this - if someone coughs or sneezes, they release small liquid droplets from their nose or mouth that may contain virus. If you are too close, you can breathe in the droplets, including the COVID-19 virus if the person coughing has the disease.

If the child has respiratory infections such as symptoms of flu, seek medical treatment. Good bed rest is essential. Avoid the child to go out of the home to prevent spread to others. Seek medical attention, if the child develops fever, cough or difficulty in breathing, in advance without being neglected. It may sometimes lead to the deterioration of the condition of the child. As parents are the only primary caregivers; repeatedly instruct the child to follow all the necessary precautions to fight against COVID – 19.

Furthermore; it's quite significant for the parents to clean and disinfect the frequently touched surfaces such as phones, remotes, doorknobs, light switches and countertops to prevent the transmission of virus. A healthy diet is essential for good health and nutrition to protect against the risk of developing infections and disorders. Ensure that all the fruits and vegetables must be washed thoroughly before washing your hands with soap and water.[5]

In conclusion; as COVID - 19 is one of the deadliest disorders surrounding all the nations in the world. Taking care of the future generations amidst covid-19 is the need of the hour in this difficult circumstances. It is a great responsibility of the parents in handling and caring of the children being affected. Hence, it is also quite significant to continue to teach the children all the precautionary measures to fight against coronavirus.

References

1. Al Hasan SM, Saulam J, Kanda K & Hirao T. The novel coronavirus disease (COVID-19) outbreak trends in mainland China: a joinpoint regression analysis of the outbreak data from January 10 to February 11, 2020. [Submitted]. Bull World Health Organ. E-pub:17February2020.doi: http://dx.doi.org/10.2471/BLT.20.253153
2. Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y et.al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. The Lancet 2020. doi:10.1016/S01406736(20) 30183-5.
3. WHO Director-General's opening remarks at the media briefing on COVID-19 – 11 March 2020. World Health Organization, 11 March 2020. Retrieved11 March 2020.
4. Dhastagir Sheriff. Health care in India in the prevailing COVID-19 pandemic scenario. Eubios Journal of Asian and International Bioethics,30 (3) (April 2020): 91-93.
5. Coronavirus disease (COVID-19) outbreak. Available from:who.int/health-topics/coronavirus
6. Coronavirus disease (COVID-19): What parents should know. How to protect yourself and your children. Available from:https://www.unicef.org/stories/novelcoronavirus -outbreak-what-parents-should-know
7. European Centre for Disease Prevention and Control (ECDC). COVID-19 Solna, Sweden: ECDC; 2020 [updated 07.04.2020]. Availablefrom: https://http://www.ecdc.europa.eu/en/covid-19-pandemic.
8. Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, et al. Early transmission dynamics in Wuhan, China, of novel coronavirusinfected pneumonia. The New England Journal ofMedicine 2020. https://www.nejm.org/doi/10.1056/NEJMoa2001316.
9. Munster VJ, Koopmans M, van Doremalen N, van Riel D, deWit E. A novel coronavirus emerging in China d key questions for impact assessment. The New England Journal of Medicine 2020;382:692e4.
10. World Health Organisation. Pneumonia of unknown cause – China Geneva: WHO; 2020 [updated 07.04.2020]. Available from: https://http://www.who.int/csr/don/05-january-2020-pneumonia-of-unkown-cause-china/en/.
11. World Health Organisation. Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV) Geneva: WHO; 2020 [updated 07.04.2020]. Available from: https://http://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov).
12. Cai, J., et al., A Case Series of children with 2019 novel coronavirus infection: clinical and epidemiological features. Clinical Infectious Diseases, 2020.
13. Centers for Disease Control and Prevention. Coronavirus. 2020; Available from: https://www.cdc.gov/coronavirus/2019-ncov/index.html; accessed 6 Mar 2020.
14. Chen, F., et al., [First case of severe childhood novel coronavirus pneumonia in China]. Zhonghua Erke Zazhi, 2020. 58(0): p. E005.
15. Memish, Z.A., et al., Middle East respiratory syndrome coronavirus disease in children. PediatricInfectious Disease Journal, 2014. 33(9): p. 904-6.
16. Monto, A.S., J.S. Koopman, and I.M. Longini, Jr., Tecumseh study of illness. XIII. Influenza infection and disease, 1976-1981. The American Journalof Epidemiology, 1985. 121(6): p. 811-22.
17. Pan, X., et al., Asymptomatic cases in a family cluster with SARS-CoV-2 infection. The Lancet Infectious Diseases, 2020.
18. UNICEF. Infant feeding during the COVID-19 outbreak 2020 [updated 01.04.2020]. Available from: https://http://www.unicef.org.uk/babyfriendly/infant-feeding-during-the-covid-19-outbreak/.
19. World Health Organisation. Guideline: Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services Geneva: World Health Organisation; 2017:1-120. Available from: https://http://www.who.int/nutrition/publications/guidelines/breastfeeding-facilities-maternity-newborn/en/.

20. Chen H, Guo J, Wang C, Luo F, Yu X, Zhang W. Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records. The Lancet. 2020;395 (10226):809-15.

21. Fan C, Lei D, Fang C, Li C, Wang M, Liu Y, et al. Perinatal Transmission of COVID-19 Associated SARS-CoV-2: Should We Worry? Journal of Clinical Infectious Diseases. 2020; ciaa226.

22. UNICEF, Global Nutrition Cluster. Infant & young child nutrition in the context of COVID-19. In: UNICEF, editor. New York: UNICEF; 2020. p. 1-9.

23. World Health Organisation. Breastfeeding advice during the COVID-19 outbreak Geneva: WHO; 2020 [updated 01.04.2020]. Available from http://www.emro.who.int/ nutrition/ nutrition-infocus/ breastfeeding-advice-during-covid-19-outbreak.html.

24. Centers for Disease Control and Prevention. Pregnancy & Breastfeeding-Information about Coronavirus Disease 2019. In: CDC, editor. Coronavirus Disease 2019 (COVID-19): CDC; 2020.

Review Article

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Surveillance of Central Line associated blood stream infections (CLABSI) in NSICU

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Abstract

A central line-associated bloodstream infection (CLABSI) is a laboratory-confirmed bloodstream infection (BSI) in a patient who had a central line within the 48 hour period before the development of the BSI, and that is not related to an infection at another site.Datas are collected by visiting concerned ICUs on daily basis and are reported. Dataanalyzed are reported as CLABSI rate. CLABSI can be prevented by adhering to infection control protocols such as hand hygiene and use of care bundles in ICUs.

Keywords: Surveillance; Central line associated blood stream infections.

Introduction

Central line associated blood stream infection is the major cause of mortality and morbidity in any health care facility. Babies in NSICU are at higher risk of developing CLABSI as majority of them require long term access to central lines for various procedures such as administration of fluids, drugs and blood products. Therefore surveillance of CLABSI is atmost importance.

Common Terminologies

Infection window period

The Infection Window Period (IWP) is defined as the 7-days during which all site-specific infection criteria which includes the collection date of the first positive diagnostic test that is used as an element to meet the site-specific infection criterion, the 3 calendar days before and the 3 calendar days after.

Date of Event

The Date of Event (DOE) is the date the first element used to meet an NHSN site-specific infection criterion occurs for the first time within the seven-day infection window period.

Repeat Infection Timeframe

The Repeat Infection Timeframe (RIT) is a 14-day timeframe during which no new infections of the same type are reported.

Secondary BSI Attribution Period

The Secondary BSI Attribution Period (SBAP) is the period in which a blood specimen must be collected for a secondary bloodstream infection to be attributed to a primary site infection.

Location of Attribution (LOA)

The inpatient location where the patient was assigned on the date of event is the location of attribution.

Greater vessels considered for central line surveillance

The following vessels considered for Purpose of Central line surveillance

Commonly used vessels are:

Subclavian vessels

Internal Jugular veins

Femoral veins

Other vessels

Aorta & Pulmonary artery

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Superior & Inferior vena cava

Brachicephalic veins

External & common iliac veins

In neonates,umbilical artery or umbilical vein

Devices not considered for central line

The following devices not considered central line for surveillance purposes includes:

Arterial catheters,arteriovenousfistula,arteriovenous graft

Atrial catheters

Extracorporeal membrane oxygenation(ECMO)

Hemodialysis reliable outflow dialysis catheters

Intra-aortic balloon pump devices

Ventricular assist device

Peripheral IV or midlines

Pacemaker wires and other non-luminated devices.

Types of Central Lines

There are three types of CL for CLABSI Surveillance

Permanent Central Lines

Temporary Central Lines

Umbilical catheter

Laboratory confirmed blood stream infection (LCBI)

It is classified as three types;

LCBI-1: Isolation of a pathogen from single blood culture regardless of symptoms (in any age)

LCBI-2: Isolation of a commensal from two blood cultures with associated symptoms (in any age).

LCBI-3: Isolation of a commensal from two blood cultures with associated symptoms, for age group≤ 1 year.

Data Collection of CLABSI

Infection control nurse visits the respective NSICU and collects daily data's related to CLABSI in a data collection form.Data are reported in another reporting form based on data collected.

Reporting Instructions regarding CLABSI

- Catheter tip cultures cannot be used in place of blood specimens for meeting LCBI criteria.
- Blood specimens drawn through central lines can have a higher rate of contamination than blood specimens collected through peripheral venipuncture.
- The following Pathogens are not included in NHSN LCBI Pathogen are Campylobacter species, C.difficile, enterohemmorhagic E.coli, Salmonella Species, Listeria Species, yersenia species.

Data Analysis

The data analysis related to CLABSI is as follows:

CLABSI rate=The number of CLABSIs for a location/The number of Central Line Days for that location) ×1000.

DUR=Central Line Days for a location/The Patient Days for that location.

Conclusion

Central line associated blood stream infections can be prevented by safe hygiene practices such and Hand hygiene and adherence to care bundles.

References

1. Centres for Disease Control and Prevention. The National Healthcare Safety
2. Network (NHSN) Manual: Patient Safety Component. Atlanta, Available at: www.cdc.gov/nhsn
3. Guidelines for Environmental Infection Control in Health-Care Facilities Available from: www.cdc.gov/infectioncontrol/guidelines/environmental/
4. Guideline for Disinfection and Sterilization in Healthcare Facilities Available from: https://www.cdc.gov/infectioncontrol/guidelines/disinfection/
5. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings https://www.cdc.gov/infection control/guidelines/isolation
6. Essentials of H0spital Infection control, Apurba S Sastry&Deepashree R
7. Manual of Infection Prevention & control , NizamDamani

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Standard journal article

[1] Flink H, Tegelberg Å, Thörn M, Lagerlöf F. Effect of oral iron supplementation on unstimulated salivary flow rate: A randomized, double-blind, placebo-controlled trial. J Oral Pathol Med 2006; 35: 540–7.

[2] Twetman S, Axelsson S, Dahlgren H, Holm AK, Källestål C, Lagerlöf F, et al. Caries-preventive effect of fluoride toothpaste: A systematic review. Acta Odontol Scand 2003; 61: 347–55.

Article in supplement or special issue

[3] Fleischer W, Reimer K. Povidone-iodine antisepsis. State of the art. Dermatology 1997; 195 Suppl 2: 3–9.

Corporate (collective) author

[4] American Academy of Periodontology. Sonic and ultrasonic scalers in periodontics. J Periodontol 2000; 71: 1792–801.

Unpublished article

[5] Garoushi S, Lassila LV, Tezvergil A, Vallittu PK. Static and fatigue compression test for particulate filler composite resin with fiber-reinforced composite substructure. Dent Mater 2006.

Personal author(s)

[6] Hosmer D, Lemeshow S. Applied logistic regression, 2nd edn. New York: Wiley-Interscience; 2000.

Chapter in book

[7] Nauntofte B, Tenovuo J, Lagerlöf F. Secretion and composition of saliva. In: Fejerskov O,

Kidd EAM, editors. Dental caries: The disease and its clinical management. Oxford: Blackwell Munksgaard; 2003. pp 7–27.

No author given

[8] World Health Organization. Oral health surveys - basic methods, 4th edn. Geneva: World Health Organization; 1997.

Reference from electronic media

[9] National Statistics Online—Trends in suicide by method in England and Wales, 1979–2001. www.statistics.gov.uk/downloads/theme_health/HSQ20.pdf (accessed Jan 24, 2005): 7–18. Only verified references against the original documents should be cited. Authors are responsible for the accuracy and completeness of their references and for correct text citation. The number of reference should be kept limited to 20 in case of major communications and 10 for short communications.

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