

A Study to Assess the Effectiveness of Video Assisted Teaching Programme on Knowledge and Beginning Skills Regarding the First Aid Management of Selected Minor Injuries in Children Among the School Teachers Working in the Selected Primary Schools of Narmada, Gujarat

Sangita C. Panchal

Associate Professor Cum Incharge Principal, Shree Swaminarayan Nursing College, Kevadia Colony, Ta-Garudeshwar, District Narmada, State Gujarat

How to cite this article: Sangita C. Panchal. A Study to Assess the Effectiveness of Video Assisted Teaching Programme on Knowledge and Beginning Skills Regarding the First Aid Management of Selected Minor Injuries in Children Among the School Teachers Working in the Selected Primary Schools of Narmada, Gujarat, International Journal of Nursing Care 2022;10(2):13-17.

Abstract

Background: School age children are active youngster, have more interest in playing, attempt to get mastery over new motor skills and these age group children can be naughty, deficient and impulsive from time to time which is perfectly normal. So, occurrences of unexpected injuries are more common especially among primary school children. It is important for the school teachers to have knowledge and equipped with relevant skills of first aid management to deal with any emergency situation occur in school premises.

Aim: To assess the effectiveness of Video assisted teaching programme on knowledge and beginning skills regarding FAM of selected common conditions in children among school teachers.

Methods: Pre-experimental one group pre-test post-test design was used for the study. Population of the study was school teachers of two selected schools. Sample comprises of 40 school teachers convenient sampling technique was used to select the sample. Structured knowledge questionnaire, observation checklist and lesson plan were used as instruments.

Results: In the pre-test regarding knowledge score out of 40 primary school teachers 35(87.5%) had inadequate knowledge, 5(12.5%) of them had moderate knowledge and none of them had adequate knowledge on the other hand for the beginning skills 33(82.5%) of school teachers had poor beginning skills, 5(12.5%) had moderate beginning skills and none of them had good beginning skills. In the post-test majority 33(82.5%) of school teachers had adequate knowledge, 7(17.5%) had moderate knowledge and none of them had inadequate knowledge. With regards to beginning skills 33(82.5%) of the school teachers had good beginning skills and 7 (17.5%) had moderate beginning skills and none of them had poor beginning skills after the administration of video assisted teaching programme.

Corresponding Author: Sangita C. Panchal, Associate Professor Cum Incharge Principal, Shree Swaminarayan Nursing College, Kevadia Colony, Ta-Garudeshwar, District Narmada, State Gujarat.

Conclusion: VATP was found to be an effective teaching strategy in improving knowledge and beginning skills of school teachers regarding first aid management of selected minor injuries in children.

Keywords: First aid management, Effectiveness, Video assisted teaching programme, knowledge and beginning skills, naughty, deficient and impulsive, Selected minor injuries, school premises.

Introduction

School age children are active youngsters, have more interest in playing, attempt to get mastery over new motor skills and these age group children can be naughty, deficient and impulsive from time to time which is perfectly normal. So, occurrences of unexpected injuries are more common especially among primary school children. It is important for the school teachers to have knowledge and equipped with relevant skills of first aid management to deal with any emergency situation occur in school premises.³

Objectives

1. To assess the knowledge regarding the first aid management of selected minor injuries in children among the school teachers before and after Video Assisted Teaching Programme.
2. To assess the beginning skills of school teachers regarding first aid management of selected minor injuries in children before and after Video Assisted Teaching Programme.
3. To compare the pre-test and post-test knowledge and beginning skills of school teachers regarding first aid management of selected minor injuries in children.
4. To correlate the knowledge and beginning skills scores of school teachers regarding first aid management of selected minor injuries in children.
5. To find out the association between the post-test knowledge and beginning skills score with selected socio-demographic variable of school teachers such as age, gender, marital status, educational qualification etc.

Hypothesis

H₁- There will be a significant difference between pre-test and post- test knowledge scores of school teachers regarding the first aid management of selected minor injuries in the selected primary

schools of Narmada District, Gujarat.

H₂- There will be a significant difference between pre-test and post- test beginning skills scores of school teachers regarding the first aid management of selected minor injuries in the selected primary schools of Narmada District, Gujarat.

H₃- There will be a significant correlation between pretest and post test knowledge and beginning skill scores of the school teachers regarding first aid management of selected minor injuries in children.

H₄- There will be a significant association between the post test knowledge and beginning skill scores of school teachers regarding first aid management of selected minor injuries in children with selected socio-demographic variables.

Background Of Study

(A) Studies related to incidence and prevalence of injuries in children.

A study to assess child school injury incidence, severity and risk factor in Lebanon (2020). Chi-square comparisons were conducted to determine the significance of any differences in injury rates between boys and girls for each category of school. Boys demonstrated a significantly higher injury rate for all mechanisms of injuries. Bumps/hits and bruises were most common – almost 3 times more likely than all other injury types. Injuries were mainly minor or moderate in severity – severe injuries were about 10 times less likely. Most injuries were unintentional, with rates nearly 5 times higher than those with unclear intent and 12 times higher than intentional injuries¹¹.

(B) Studies related to knowledge and skill or practice regarding first aid management.

A Descriptive Study to Assess the Level of Knowledge Regarding the First Aid Management among School Teachers in Selected Schools of District Mohali, Punjab (2017). The results of the study

showed that most of the teachers (77.5%) were having average knowledge regarding First Aid Management and 12.5% were having good knowledge and 10% were having poor knowledge.¹²

2. A study to assess knowledge and attitudes to first aid among school children of dehradun 2017.

In this study Fifty primary school teachers were selected by non-probability convenient sampling. This concludes that the training program was effective in significant improvement of knowledge and practice score regarding first aid management of selected minor injuries among study participants. Data were collected by knowledge questionnaire (maximum possible score (42) and self-reporting checklist (maximum possible score 23). Majority (94%) of the teachers were female. Paired sample t-test revealed that the mean posttest knowledge score regarding first aid management of selected minor injuries was significantly higher (34.76 ± 4.35) than that of mean pretest knowledge score (27.32 ± 5.73) ($P < 0.005$); mean posttest practice score was significantly higher (18.52 ± 2.63) than mean pretest practice score (14.52 ± 2.39) ($P < 0.005$).¹³

(C) Studies related to effectiveness of intervention on knowledge and beginning skill regarding first aid management

A study to assess the effectiveness of programmed teaching on levels of knowledge and expressed practice regarding first aid management among primary school teachers at selected schools vellore (2016). The study adopted quantity approach and the research design preexperimental one group pre and post test design. Nonprobability convenient sampling technique was used to selected 30 primary school teachers in Anaicut. It reveals that resides, sex, teaching experience, are statistically significant at $p < 0.05$ level. The finding of the study concluded that there was significant increase in the level of knowledge and good expressed practice of primary school teachers. After programmed teaching using video on first aid management among primary school teachers. The level knowledge increased and expressed practices improved due to effectiveness of programmed teaching.³⁰

Material and Methods

A research design selected was one group pre-test and post-test design which belongs to the pre-experimental design. The main focus of the study was to assess the effectiveness of Video Assisted Teaching Programme on knowledge and beginning regarding the first aid management of selected minor injuries in children among the school teachers through one group pre-test and post-test method which were depicted as $0_{1(\text{pretest})}$ and $0_{2(\text{post test})}$ respectively and the independent variables was Video Assisted Teaching Programme regarding first aid management of selected minor injuries.⁵

Sampling Technique

The sampling techniques adopted for the study was non probability convenient sampling technique.⁵

Findings:

1. Data were analyzed and hypothesis were tested using descriptive (frequency, percentage, mean, median, mode, standard deviation) and inferential statistics (paired "t" test and chi square).
2. In the pre-test regarding knowledge score out of 40 primary school teachers 35(87.5%) had inadequate knowledge, 5(12.5%) of them had moderate knowledge and none of them had adequate knowledge on the other hand for the beginning skills 33(87.5%) of school teachers had poor beginning skills, 5(12.5%) had moderate beginning skills and none of them had good beginning skills.
3. In the post-test majority 33(82.5%) of school teachers had adequate knowledge, 7(17.5%) had moderate knowledge and none of them had inadequate knowledge. With regards to beginning skills 33(82.5%) of the school teachers had good beginning skills and 7 (17.5%) had moderate beginning skills and none of them had poor beginning skills after the administration of video assisted teaching programme.
4. The knowledge mean score of pre-test was 13.85, standard deviation was 2.61 and post-test knowledge mean score was 33.95 and standard deviation was 2.18. Whereas for

the beginning skills pre-test mean scores was found 9.275 and standard deviation was 1.88. In the post-test mean beginning skills score was 34.275 and standard deviation was 2.044.

5. The video assisted teaching programme improved knowledge and beginning skills score on an average of 13.40 and 15.31 respectively. The calculated "t" value for the knowledge was found to be 40.83 which were higher than the tabulated value 2 and for the beginning skills "t" value was 52.33 which was also greater than the tabulated value at 0.05 level of significance. There was poor correlation between knowledge and beginning skills score of school teachers in pre-test and it was found to be fair correlation between knowledge and beginning skills score after the administration of video assisted teaching programme. There was significant association between post-test knowledge and beginning skills score with demographic variables (age in years and working experience in school) at $p < 0.05$ level of significant.

Conclusion

In pre-test lack of adequate knowledge and beginning skills of school teachers regarding first aid management but after the administration of video assisted teaching programme there was significant improvement in knowledge and beginning skills of school teachers. So, it can be concluded that structured teaching programme is found to be an effective and feasible method of teaching strategy to improve knowledge and beginning skills of school teachers.

Conflict Of Interest: NIL

Source of Funding: By myself

Ethical clearance: It is ethically approved by our college faculties working under ethical committee for research.

References

1. Research method and research approach, "University of Nottingham", <http://www.nottingham.ac.uk/research/training>.
2. Basawanthappa B. T, "Nursing Research" 2nd Edition, New Delhi: published by Jaypee brothers Medical Publishers; 2007. Page No- 24, 34,4.
3. Gulani K. K. "Community Health Nursing" 2nd Edition, New Delhi: published by Jaypee Brothers Medical Publishers; 1995.
4. Park K. "Preventive and social medicine" 20th edition, Jabalpur India: published by Banarsidas Bhanot Publication; 2012.
5. Sharma K Suresh. Nursing research & Statistics. 2nd Ed. New Delhi: Reed Elsevier India Private Limited publication; 2014:138-311.
6. Raj Bhaskara Elakkuvana D. "Nursing Theories a Practical View", 1st Edition, New Delhi: Jaypee Brothers Medical Publishers; 2011;120-125.
7. V. Bhatia, S. Puri, C. Mangat, Kaur AP. An intervention study to strengthen first aid care in schools of Chandigarh, India. The International Journal of Family Practice. Nov 2010;185(10):562-64. Available from ispub.com/.../an-intervention-study-to-strengthen-first-aid-care-in-schools-of-chandigarh-india.html. [Accessed 12 Mar 2012].
8. Prakash H. B. A study to assess the knowledge and practice of primary school Teachers regarding management of minor ailments of school children of selected government schools in Bangalore, Rural District with a view to develop self-instructional module .Nov 2007; 1-5. Available from: http://www.rguhs.ac.in/.../05_N076.doc. [Accessed 19 Aug 2012].
9. Sonmez Y, Uskun E, pehlivan "A. knowledge levels of preschool teachers related with basic first aid practices", Is Purata sample. Turk pediatric Ars. 2014;49; 238-46(PMC Free article) (pub med) (google scholar)
10. Kumar SD, Kulkarni P, Srinivas N, Prakash B, Hagara S, Ashok NC. "Perception and practices regarding first-aid among school teachers in Mysore", National Journal of Community Med. 2013;4(2):349-352.
11. Samar A, Ricardo N, Firas H. Child school injury in Lebanon: A study to assess injury incidence, severity and risk factors. Journal of Community. 2020; 15 (6) Available from: <https://pubmed.ncbi.nlm.nih.gov/32530949/>
12. Navjot Kaur, Savitri and Mandeep Kaur. A Descriptive Study to Assess the Level of Knowledge Regarding the First Aid Management among School Teachers in Selected Schools of District Mohali, Punjab. Journal of Health & Medical Informatics. 2017; 8 (4);2-4. Available from: <https://www.hilarispublisher.com/open-access/a-descriptive-study-to-assess-the-level-of-knowledge-regarding-the-firstaid-management-among-school-teachers-in-selected-schools-o-2157-7420-1000288.pdf>
13. Jayanti Semwal, Ravleen Kaur Bakshi, Ruchi Juyal, Deepshikha ., Shaili Vyas, SD Kandpal. Study of

- knowledge and attitudes to first aid among school children of Doiwala block, Dehradun. 2017;4 (8): 200-210. Available from: <https://www.ijcmph.com/index.php/ijcmph/article/view/1213/0>
14. Olympia RP, Wan E, Avner JR. The preparedness of schools to respond to emergencies in children: a national survey of school nurses. *Journal of Pediatrics*. 2005;116(6):738-45.
 15. Barrett LC. Teaching teachers about school health emergencies. *Journal of Sch Nurs*. 2001;17(6):316-322.
 16. Spinks AB, McClure RJ, Bain C, Macpherson AK. First aid facilities in the school settings: Are schools able to manage adequately? *Journal of Pediatrics*. 2006; 118(1):43-50.
 17. Aarti, Faizan, *International Journal of Community Medicine and Public Health* | October 2018 | Vol 5 | Issue 10. (<https://www.ijcmph.com/index.php/ijcmph>)
 18. Shaima S. M., Dr. Afkar R. M., Dr .Sanaa M. A. First Aid Program For Nursery School Teachers . *Journal of Nursing and Health Science*. 2018; 7 (4) : 01-09. Available from: <https://www.iosrjournals.org/iosr-jnhns/papers/vol7-issue4/Version-10/A0704100109.pdf>
 19. Prakash C. "First aid handbook" 2nd edition, prabhat prakashan publisher;2006, Page No.-3-5.
 20. Singer A.J, Janet Gulla, Thod H.C and Cronin k.A. Pediatric first aid knowledge among parents pediatric emergency care. 2004;20(12):808-11.
 21. Khatabe,M,"First aid knowledge among university students", Jordan: *International journal of preventive medicine*. 2016;7(24):1-5.
 22. World Health Organization, UNICEF. World Report on Child Injury Prevention. Geneva, Switzerland: World Health Organization; 2008. Available from: http://www.apps.who.int/iris/bitstream/10665/43851/1/9789241563574_eng.pdf. [Last accessed on 2016 Nov 10].
 23. Guru Raj G. Injuries in India: "A National Perspective In: Burden of Disease in India. National Commission on Macroeconomics and Health". Ministry of Health and Family Welfare. New Delhi: Government of India; 2005; 325, 47.
 24. Tagan, Myanmar training of trainees in KHO (first aid action world health organization; 2005;40(5):271-3.
 25. Khan U: et al, school based injury outcomes in children from a low income setting results from the pilot injury surveillance in Rawalpindi city Pakistan *BMC res notes*;2013: 6-86.
 26. Wikipedia <http://en.wikipedia.org/wiki/knowledge> (assessed November 30, 2017.)
 27. First aid manual, 9th edition, Kindersley 2009 15 BN 978 | 4053-353-9.
 28. Definition of Action Imogene King's Theory of Goal Attainment. Available from: http://currentnursing.com/nursing_theory/goal_attainment_theory.html Retrieved on: 20/2/2019.
 29. Al-Hajj S, Nehme R, Hatoum F, Zheng A, Pike I (2020) Child school injury in Lebanon: A study to assess injury incidence, severity and risk factors. *PLoS ONE* 15(6): e0233465. <https://doi.org/10.1371/journal.pone.0233465>.
 30. <http://repository-tnmgrmu.ac.in/2084/1/3002236sumithram.pdf>
 31. <https://www.jfmpc.com/article.asp?issn=2249-4863;year=2020;volume=9;issue=3;spage=1370;epage=1375;aulast=Habeeb>
 32. <https://pharmascope.org/ijrps/article/view/1530/1954>
 33. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5954363/>
 34. <https://www.jmedsoc.org/article.asp?issn=0972-4958;year=2018;volume=32;issue=1;spage=27;epage=32;aulast=Hemalatha>
 35. https://www.researchgate.net/publication/280876136_Fractures_in_childhood
 36. <https://www.longdom.org/open-access/prevalence-of-traumatic-injuries-and-knowledge-regarding-emergency-care-among-years-government-school-children-in-kangra-2247-2452.1000648.pdf>
 37. https://www.researchgate.net/publication/228484316_OneYear_Incidence_Rate_of_Injuries_among_Primary_School_Pupils_in_an_Iranian_Community
 38. <https://www.analesdepediatria.org/en-knowledge-attitudes-on-first-aid-articulo-S2341287920300594>
 39. <https://www.avicennajmed.com/article.asp?issn=2231-0770;year=2019;volume=9;issue=1;spage=1;epage=7;aulast=Midani>
 40. https://www.researchgate.net/publication/332920065_Assessment_of_Knowledge_Regarding_First_aid_among_Primary_School_Teachers
 41. <https://www.gov.hk/en/residents/culture/recreation/activities/firstaid.htm>.
 42. http://shodhganga.inflibnet.ac.in/bitstream/10603/39231/11/11_chapter%20iii%20research%20methodology.