

A Study to Assess the Effectiveness of Self-Instructional Module on Knowledge Regarding Respiratory Viral Diseases and its Prevention Among Adolescents in Selected Schools at Perinthalmanna

Dilna Mp¹, Fathima Haneena², Fathima Hiba³,
Fathimath Shahana Jasmin⁴, Sasikala Arumugam⁵

^{1,2,3,4}3RD Year Bsc.Nursing, Alshifa College Of Nursing

⁵Professor, Hod Of Obg Nursing

ABSTRACT

Introduction:

Respiratory viral diseases are disease of respiratory system caused by respiratory viruses. Respiratory viruses are the most frequent causative agents of diseases in humans with significant impact on morbidity and mortality worldwide. In present study we assessed the effectiveness of self-instructional module on knowledge regarding respiratory viral diseases and its prevention among adolescents in selected schools at Perinthalmanna.

Methodology:

Quantitative one group pre-test post-test approach was used in this study. 60 samples were selected by using non probability convenient sampling technique. Structured knowledge questionnaire including demographic variables was used for the study.

Result:

Pre-test result shows that 29(48.33%) of adolescents had good knowledge, 27(45%) of adolescents had average knowledge and 4(6.67%) of adolescents had poor knowledge. Post-test knowledge shows that 38(63.34%) had excellent knowledge, 20(33.33%) had good knowledge, 2(3.33%) had average knowledge and none of the adolescent had poor knowledge. The effectiveness of self-instructional module was assessed by paired 't' test. The calculated value was ($t=19.3047$) higher than the table value ($t_{59}=2.0010$), it shows the self-instructional module was effective. There was no association between pre-test knowledge score of adolescents with selected demographic variables such as age, gender, class, religion, education of mother, education of father, occupation of father, occupation of mother. There was a significant association found between pretest knowledge score of adolescents with values of previous source of knowledge. The mean post-test score (15.03) was higher than the mean pre-test knowledge score (9.17).

Conclusion:

The present study revealed that the self-instructional module was effective as it improved the knowledge

--level of post-test.

Keywords: Knowledge, Self-instructional module, Respiratory viral diseases, Adolescents.

REFERENCES

1. VOA Learning English. (2020, March 14). An ounce of prevention is worth a pound of cure. VOA - Voice of America English News. <https://learningenglish.voanews.com/a/an-ounce-of-prevention-is-worth-a-pound-of-cure-/5326585.html>
2. Library Guides: What is Public Health?: This is Public Health. (2015). <https://guides.lib.berkeley.edu/publichealth/whatisph>
3. Mourya, D., Yadav, P., Ullas, P. T., Bhardwaj, S., Sahay, R., Chadha, M., Shete, A., Jadhav, S., Gupta, N., Gangakhedkar, R., Khasnobis, P., & Singh, S. (2019). Emerging/re-emerging viral diseases & new viruses on the Indian horizon. *The Indian Journal of Medical Research*, 149(4), 447. https://doi.org/10.4103/ijmr.ijmr_1239_18
4. Denny, F. W., & Loda, F. A. (1986). Acute respiratory infections are the leading cause of death in children in developing countries. *The American Journal of Tropical Medicine and Hygiene*, 35(1), 1–2. <https://doi.org/10.4269/ajtmh.1986.35.1>
5. Waghmode, R., Jadhav, S., & Nema, V. (2021). The burden of respiratory viruses and their prevalence in different geographical regions of India: 1970–2020. *Frontiers in Microbiology*, 12. <https://doi.org/10.3389/fmicb.2021.723850>
6. Collins, A. S. (2018) Preventive health care associated infection, Agency For Health Care Research And Quality.
7. Respiratory infectious diseases on the rise across WHO European Region. (n.d.). Who.int. Retrieved December 21, 2023, from <https://www.who.int/europe/news/item/15-12-2023-respiratory-infectious-diseases-on-the-rise-across-who-european-region>
8. Zimmerman, R. K., Balasubramani, G. K., D’Agostino, H. E. A., Clarke, L., Yassin, M., Middleton, D. B., Silveira, F. P., Wheeler, N. D., Landis, J., Peterson, A., Suyama, J., Weissman, A., & Nowalk, M. P. (2022). Population-based hospitalization burden estimates for respiratory viruses, 2015–2019. *Influenza and Other Respiratory Viruses*, 16(6), 1133–1140. <https://doi.org/10.1111/irv.13040>
9. Mlinaric-Galinovic, G., Vilibic-Cavlek, T., Ljubin-Sternak, S., Drazenovic, V., Galinovic, I., Tomic, V., & Welliver, R. C. (2019). Eleven consecutive years of respiratory syncytial virus outbreaks in Croatia. *Pediatrics International: Official Journal of the Japan Pediatric Society*, 51(2), 237–240. <https://doi.org/10.1111/j.1442-200x.2008.02723.x>
10. Sheikh, M. A., & Kumar, H. (n.d.). Descriptive study to assess the knowledge regarding prevention of respiratory tract infections among mothers of under 5 children in. *Ijcr.org*. Retrieved December 19, 2023, from <https://ijcr.org/papers/IJCRT2211241.pdf>
11. *TheLancet.com*. Retrieved December 21, 2023, from [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(22\)00478-0/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)00478-0/fulltext)
12. Cilloniz, C., Luna, C. M., Hurtado, J. C., Marcos, M. Á., & Torres, A. (2022). Respiratory viruses: their importance and lessons learned from COVID-19. *European Respiratory Review: An Official Journal of the European Respiratory Society*, 31(166), 220051. <https://doi.org/10.1183/16000617.0051-2022>

13. Uncw.edu. Retrieved December 21, 2023, from https://arcmit01.uncw.edu/hpl0346/links/food_pyramid_mod.pdf
14. Drack, M., & Pouvreau, D. (2015). On the history of Ludwig von Bertalanffy's "General Systemology", and on its relationship to cybernetics – part III: convergences and divergences. *International Journal of General Systems*, 44(5), 523–571. <https://doi.org/10.1080/03081079.2014.1000642>
15. Suresh S. Nursing research and statistics. Elsevier Health Sciences;2018 Jun 9.
16. Juhn, Y. J., Wi, C.-I., Takahashi, P. Y., Ryu, E., King, K. S., Hickman, J. A., Yao, J. D., Binnicker, M. J., Natoli, T. L., Evans, T. K., Sampathkumar, P., Patten, C., Luyts, D., Pirçon, J.-Y., Damaso, S., & Pignolo, R. J. (2023). Incidence of respiratory syncytial virus infection in older adults before and during the COVID-19 pandemic. *JAMA Network Open*, 6(1), e2250634. <https://doi.org/10.1001/jamanetworkopen.2022.50634>
17. Researchgate.net. Retrieved December 19, 2023, from https://www.researchgate.net/publication/334005648_Prevalence_of_acute_respiratory_infection_in_children_less_than_2_years_in_rural_and_urban_population_in_and_around_Chennai_Tamil_Nadu
18. Anand, M., & Nimmala, P. (2020). Seasonal incidence of respiratory viral infections in Telangana, India: utility of a multiplex PCR assay to bridge the knowledge gap. *Tropical Medicine & International Health: TM & IH*, 25(12), 1503–1509. <https://doi.org/10.1111/tmi.13501>
19. Falsey, A. R., Hennessey, P. A., Formica, M. A., Cox, C., & Walsh, E. E. (2019). Respiratory syncytial virus infection in elderly and high-risk adults. *The New England Journal of Medicine*.
20. Teoh, Z., Conrey, S., McNeal, M., Burrell, A., Burke, R. M., Mattison, C., McMorrow, M., Payne, D. C., Morrow, A. L., & Staat, M. A. (2023). Burden of respiratory viruses in children less than 2 years old in a community-based longitudinal US birth cohort. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, 77(6), 901–909. <https://doi.org/10.1093/cid/ciad289>
21. Akkoc, G. (2021). Evaluation of viral respiratory pathogens in children aged under five hospitalized with lower respiratory tract infections. *Northern Clinics of Istanbul*, 9(2), 162. <https://doi.org/10.14744/nci.2021.69923>
22. Zhu, G., Xu, D., Zhang, Y., Wang, T., Zhang, L., Gu, W., & Shen, M. (2021). Epidemiological characteristics of four common respiratory viral infections in children. *Virology Journal*, 18(1). <https://doi.org/10.1186/s12985-020-01475-y>
23. Hassan, D. A., Rachid, S. K., & Ziebuhr, J. (2018). A single-center study of viral respiratory tract infections in hospitalized children from the Kurdistan region of Iraq. *Global Pediatric Health*, 5, 2333794X1878499. <https://doi.org/10.1177/2333794x18784996>
24. Yadav, S., Koul, P., Shokeen, J., Associate Professor, Assistant Professor, & Assistant Professor. (n.d.). A study to assess the knowledge regarding respiratory tract infections among the mothers of under five children admitted in selected hospitals of gurugram". *Ijcr.org*. Retrieved December 19, 2023, from <https://ijcr.org/papers/IJCRT2303060.pdf>
25. Sheikh, M. A., & Kumar, H. (n.d.). Descriptive study to assess the knowledge regarding prevention of respiratory tract infections among adolescents in. *Ijcr.org*. Retrieved December 20, 2023, from <https://ijcr.org/papers/IJCRT2211241.pdf>
26. Kumar, P., Patra, P., Paul, R., Roy, M., Khatun, S., Ghosh, L., Dutta, S., Roy, R., Sadhu, D., Setara, A., Naiya, S., Routh, S., Thoki, S., Bomzan, S., & Barman, M. (2022). A study to assess the level of

- knowledge regarding prevention and management of acute respiratory infection among adults in selected hospital in Siliguri. *International Journal of Research in Medical Sciences*, 10(9), 1979. <https://doi.org/10.18203/2320-6012.ijrms20222276>
27. Researchgate.net. Retrieved December 20, 2023, from https://www.researchgate.net/publication/281334943_A_Study_to_assess_the_effectiveness_of_Structured_Teaching_Programme_on_Knowledge_Regarding_Acute_Respiratory_Tract_Infection_among_Mothers_of_Under_Five_Children_at_Piparia_Vadodara
28. Lakshmi, A. (2018). A study to assess the knowledge on acute respiratory tract infection among mothers of under five children in a selected hospital, Chennai. *International Journal of Midwifery Nursing*, 1(1), 20–25. <https://nursing.journalspub.info/index.php?journal=ijmn&page=article&op=view&path%5B%5D=641>
29. Raja, R., Kumar, S., Kumar, S., Joseph, L., Kumar, S., Kumar, S., Kumar, S., & Kumar, S. (n.d.). A study to assess the effectiveness of structured teaching programme regarding knowledge on acute respiratory tract infections among the school going children in semi urban area at Sasaram. *Iaimjournal.com*. Retrieved December 20, 2023, from https://www.iaimjournal.com/storage/2021/09/iaim_2021_0809_05.pdf
30. Kavungal, T. (2021). Assess the Knowledge and Effectiveness of Structured Teaching Programme regarding the Acute Respiratory Tract Infection among mothers of under five children. *International Journal of Advances in Nursing Management*, 9(2), 127–130. <https://doi.org/10.5958/2454-2652.2021.00031.7>
31. Published thesis: IJAR. (2020, May 26). *International Journal of Advanced Research*. <https://www.journalijar.com/thesis/32171/mr.-prabhat-kumar/>
32. Raju, J. (2019). Effectiveness of structured teaching programme on knowledge regarding respiratory therapy among the patients with respiratory disorders. https://www.academia.edu/35403403/Effectiveness_of_structured_teaching_programme_on_knowledge_regarding_respiratory_therapy_among_the_patients_with_respiratory_disorders
33. Article detail. (2019, August 9). *International Journal of Advanced Research*. <https://www.journalijar.com/article/31964/a-study-to-assess-the-effectiveness-of-structured-teaching-program-on-knowledge-regarding-prevention-of-upper-respiratory-tract-infection-among-adults-at-eras-lucknow-medical-college-&-hospital,-lucknow,-u.p/>
34. Published thesis: IJAR. (2019, June 26). *International Journal of Advanced Research*. <https://www.journalijar.com/thesis/32171/mr.-prabhat-kumar/>
35. Joshy, A., Baisel, A., Francis, A., Baiju, B. M., Oustrin, L., & Jayims, B. K. (2019). Effectiveness of information booklet on knowledge of mothers regarding home management of respiratory tract infection among under five children in pallithottam at kollam. *Asian Journal of Nursing Education and Research*, 8(1), 167. <https://doi.org/10.5958/2349-2996.2018.00035.6>
36. Kalpana, R. K. (2018). Evaluate the effectiveness of video assisted teaching programme on selected respiratory problems in terms of knowledge and respiratory status among workers in spinning mill, at tirupur dist. *Asian Journal of Nursing Education and Research*, 8(1), 57. <https://doi.org/10.5958/2349-2996.2018.00013.7>
37. Sujata, Kumar, R., & Kumari, R. (2015). Effectiveness of structured teaching programme on knowledge regarding acute respiratory tract infections among adults in selected rural area.

International Journal of Community Medicine and Public Health, 9(3), 1318.
<https://doi.org/10.18203/2394-6040.ijcmph20220689>

38. A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Prevention of Acute Respiratory Infection Among Mothers of Under Five Children at Selected Urban Area, Jaipur. (n.d.). Slideshare.net. Retrieved December 21, 2023, from <https://www.slideshare.net/IJSRED/a-study-to-assess-the-effectiveness-of-planned-teaching-programme-on-knowledge-regarding-prevention-of-acute-respiratory-infection-among-mothers-of-under-five-children-at-selected-urban-area-jaipur>
39. Bansal, A. (n.d.). A study to assess the knowledge regarding acute. Communitynursing.net. Retrieved December 21, 2023, from <https://www.communitynursing.net/article/view/110/4-1-27>
40. Taylor, A., & Whittaker, E. (2022). The changing epidemiology of respiratory viruses in children during the COVID-19 pandemic: A canary in a COVID time. *The Pediatric Infectious Disease Journal*, 41(2), e46–e48. <https://doi.org/10.1097/inf.00000000000003396>
41. The European respiratory virus surveillance summary (ERVISS). (2023, October 25). European Centre for Disease Prevention and Control. <https://www.ecdc.europa.eu/en/publications-data/european-respiratory-virus-surveillance-summary-erviss>