

Awareness on health and hygiene among elementary school children of fisher folk

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ABSTRACT

The present study intends to find the awareness on health and hygiene among elementary school children of fisher folk in Ramanathapuram district, Tamil Nadu. In this survey study, population consists of 100 elementary students of fisher folk of 10 schools of coastal villages and towns. Health and Hygiene Awareness Scale used as the tool for the present study, which consists of 50 statements of two parts. Necessary instructions were given to each one before they were asked to fill-up the four-point rating scale. The scoring was done according to the scoring scheme and the formulated hypotheses were tested using appropriate statistical techniques like percentage analysis, 't' test ANOVA and Pearson's product moment correlation. The findings indicate that the level of awareness on health and hygiene of the elementary school children of fisher folk in Ramanathapuram district is below average and there is no significant difference in the awareness on health and hygiene among elementary school children of fisher folk with regard to gender and locality of school.

1. Introduction

The quality of life is important in reference to effective living because it implies that a person utilizes it to the fullest of his innate powers, and all his capacities for living. The product effective living, results from the individual's functioning in a variety of life activities including physical, mental, social and spiritual experience. This means that his daily experiences serve to mould his health. Also his actions of today assist in building his future health status, or conversely tend to impair effective living.

There is a popular saying in Sanskrit "Aarogyam Parmo Lavah", i.e. health is the greatest blessing of all but it is a matter of regret that many of us do not know what it means. We know it only by its reverse as disease, ill health and misery. Historically, the term health is derived from an old Anglo-Saxon word "Health" meaning the condition of being safe and sound or whole. For many years this historical definition was lost because of the common belief that health was in essence, freedom from disease. It has been only in recent years that a fuller, richer meaning has evolved. The WHO defined "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (Callahan, 1973). According to J. F. William "Health is the quality of life that enables the individual to live most and serve best" (Sharma, 2016, p. 93).

It is important to remember that health means complete physical, mental and social well-being. Health refers also to a sound efficient mind and wholesome emotions. A healthy person has good relations with his family and associates health as quality of life which enables a person to "live most and serve best".

The health of an individual depends on what he/she does, not on what he/she knows. Most of us are born with sound body and mind which must be maintained by healthy living, by

practicing safe and sound health habits every day, by doing the things that build and maintain a healthy body and sound mind. Before progress can be made in the health of the people, prejudice and superstition, the real enemies of health must be replaced by an understanding of scientific truths about the creation of life, maintenance of health, and protection against disease and accident.

Hygiene is the set of practices in order to maintaining health and preventing disease, especially through cleanliness. According to the WHO, "Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases". Hygiene is also the name of a branch of science that deals with the promotion and preservation of health, also called hygienic (NIOS, 2013). Hygiene practices vary widely, and what is considered acceptable in one culture might not be acceptable in another (Magana, n.d).

The school is a miniature society, where health and hygiene principle is brought clearly into focus. Even though technological developments have improved the quality and standard of life today, they have created a number of health and hygiene hazards in the form of accident, risk of danger, etc in the school. The teachers and the parents can provide necessary instructions to the children to protect themselves from the day-to-day health and hygiene hazards. Modern health hazards are usually created mainly from the various situations such as (i) environment, (ii) technological development, (iii) population explosion, (iv) food adulteration, (v) explosives, and (vi) dampness. According to Sarkar (2013), poor health among school children is resulted from the lack of awareness of the health benefits of personal hygiene. Diarrhoeal diseases, skin diseases, worm infestations and dental diseases are most commonly associated with poor personal hygiene. One of the major problems faced by school children are infections. The primary causes of infections are contaminated water and poor sanitation, as well as poor hygienic practices.

2. Need for the Study

Ramanathapuram is one of the backward districts in the state and it has the largest percentage of fisher folk involved in marine fishing. Since, the environment gets polluted by the marine waste the fisher folk community are forced to live in that polluted environment which makes them most vulnerable to various types of infections. These conditions speed up the spread of diseases and cause of epidemic. There have been many instances of epidemic of cholera in various coastal villages at different times. Additionally, the sites they live around accumulates stagnant water, waste of marine product and cleaning of marine product readily support microbial growth and becomes primary reservoirs of infection. Thus when circumstances combine, people become exposed, either directly or via food or water, and can develop an infection (NICER, n.d.). Moreover, there is no medical college hospitals in Ramanathapuram and also has government hospital with very limited facilities. There are few private hospitals serving in the district, but too costly for the poor people to get treated. People living in towns at least have access to their hospitals but the fisher folk community does not enjoy even this privilege. The difficult situations of inaccessibility lead to loss of lives in case of emergency.

On the other hand, there are several temporary settlements along Ramanathapuram district coastline besides 99 coastal villages. These settlements are the result of seasonal fishing. People from Kanyakumari, Tirunelveli and Tuticorin districts come over here for seasonal fishing. They make their temporary settlements along the coastline of this district. Ramanathapuram has a very long coastline that is 270 kms in length. There are a few temporary permanent settlements such as Dhanushkodi, Arichal Munai, Munthal and so on. That may be called as 'temporary-permanent', because they live in prohibited area of coastline which comes under forest department. They are temporary because they could be evacuated at anytime and they are permanent because they are living there for the last 25 years without basic facilities such as water, road and electricity, etc. They live in huts because they are not allowed to build brick houses. This temporary settlement also makes their surrounding more unhygienic and vulnerable to epidemics such as cholera and other diseases. There are 36 middle schools and 85 primary schools situated in the coastal villages of the district. Since the numbers of schools were more and area is being vast we decided to take 10 schools from 4 blocks for this present study. These unhygienic and unhealthy living conditions of fisher folk community of their district forced the investigators to conduct a study on below title.

3. Title of the Study

Awareness on Health and Hygiene among Elementary School Children of Fisher Folk

4. Operational Definition of Key Terms

- **Awareness** means alertness or knowledge about health and hygiene of elementary school children.
- **Health** means a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

- **Hygiene** means practices that prevent spread of diseases and its infections.
- **Elementary School Children** are the students who are studying from first standard to eighth standard in the coastal villages and towns.
- **Fisher Folk:** The investigator defines the term fisher folk as the people of fishing communities living along the shoreline of Ramanathapuram district which stretches up to 270 kms in Tamil Nadu.

5. Methods and Procedures

The present study intends to find the awareness on health and hygiene among elementary school children of fisher folk in Ramanathapuram district. The investigator has adopted the survey method which suggests the gathering of evidences relating to current conditions in the present study. The population consists of the elementary students of fisher folk of 10 schools of coastal villages and towns. The investigator selected 100 students, 10 students each from 10 schools. As the study aims at assessing the level of health awareness of elementary school children of fisher folk in Ramanathapuram district, the investigators have developed the Health and Hygiene Awareness Scale as their tool for the present study. The Health and Hygiene Awareness Scale consists of two parts. In the first part, it had personal data such as name, gender, location, parents' education and parents' income. And in the second part, the statements were prepared so as to assess their opinion and attitude towards health and hygiene. The four-point rating scale consists of 50 statements to be read and filled by respondents. The personal data were requested for the purpose of studying the impact of gender differences, locality differences, and parents' qualification differences and parents' income differences with regard to the level of health and hygiene awareness. In order to establish content validity, the tool was given to three experts in the field of education. After getting their opinion, the investigator eliminated and modified some items on the basis of the suggestions offered by them. After establishing the content validity, the reliability of the tool was established among 50 students with test-retest method in an interval of three weeks. Their responses were analyzed and reliability of the tool was established. After the completion of the research tool, the investigators personally visited all the ten schools at coastal villages, in Ramanathapuram district. The investigators explained the purpose of the study to the students who are to fill-up the rating scale. Necessary instructions were given to each one before they were asked to fill-up the rating scale. The scoring was done according to the scoring scheme and the formulated hypotheses were tested using appropriate statistical techniques like percentage analysis, 't' test ANOVA and Pearson's Product Moment Correlation.

6. Objectives

1. To find the level of awareness on health and hygiene among elementary school children of fisher folk with regard to gender, locality, parent's educational qualification, and parent's income.
2. To find out whether there is any significant difference in the awareness on health and hygiene among elementary school children of fisher folk with regard

to gender, locality, parent’s educational qualification, and parent’s income.

7. Hypotheses

1. There is no significant difference in the awareness on health and hygiene among elementary school children of fisher folk with regard to gender.
2. There is no significant difference in the awareness on health and hygiene among elementary school children of fisher folk with regard to locality of school.
3. There is no significant association between the awareness on health and hygiene among elementary school children of fisher folk and parents’ educational qualification.

4. There is no significant association between the awareness on health and hygiene among elementary school children of fisher folk with regard to parents’ income.
5. There is no significant relationship between the awareness on health and hygiene among elementary school children of fisher folk and the background variables i.e. gender and locality of school.

8. Analysis of Data

Objective Testing

To find the level of awareness on health and hygiene among elementary school children of fisher folk with regard to gender, locality, parent’s educational qualification, and parent’s income.

Table 1: Level of awareness on health and hygiene among elementary school children of fisher folk with regard to background variables

Background Variable	Categories	Low		Average		High	
		Count	%	Count	%	Count	%
Gender	Boys	10	21.3	25	53.2	12	25.5
	Girls	13	24.5	28	52.8	12	22.6
Locality of School	Village	18	24.7	41	56.2	14	19.2
	Town	5	18.5	12	44.4	10	37.0
Parents’ Educational Qualification	Primary	14	25.0	32	57.1	10	17.9
	Middle	9	22.5	19	47.5	12	30.0
	High	0	0	2	50.0	2	50.0
Parents’ Income	Rs. 16000 & below	6	22.2	17	63.0	4	14.8
	Rs. 16001-18000	17	25.0	33	48.5	18	26.5
	Above Rs.18000	0	0	3	60.0	2	40.0

The above table reveals that 21.3%, 53.2%, 25.5% elementary school boys and 24.5%, 52.8%, 22.6% elementary school girls have low, average and high level of awareness on health and hygiene respectively.

24.7%, 56.2%, 19.2% village elementary school students and 18.5%, 44.4%, 37.0% town elementary school students have low, average and high level of awareness on health and hygiene respectively.

It is observed from the above table that 25.0%, 57.1%, 17.9% the children of primary school completed parents, 22.5%, 47.5%, 30.0% the children of middle school completed parents, and 0.0%, 50.0%, 50.0% the children of high school

completed parents have low, average, and high level of awareness on health and hygiene respectively.

22.2%, 63.0%, 14.8% elementary school students whose father’s income is Rs. 16000 and below, 25.0 %, 48.5 %, 26.5 % elementary school students whose father’s income is between Rs.16001 to 18000, and 0.0 %, 60.0 % 40.0 % elementary school students whose father’s income is above Rs.18001 have low, average and high level of awareness on health and hygiene respectively.

Hypotheses Testing:

H₀1: There is no significant difference in the awareness on health and hygiene among elementary school children of fisher folk with regard to gender.

Table 2: Difference in the awareness on health and hygiene among elementary school children of fisher folk with regard to gender

Gender	Mean	S.D.	N	Calculated 't' value	Table 't' value	Remarks at 0.05 LoS
Boys	107.23	18.56	47	0.649	1.96	NS
Girls	104.92	16.83	53			

It is inferred from the above table that the mean score of boys and girls were found to be 107.23 and 104.92. The calculated 't' value (0.649) is lesser than the table value (1.96) at 5% level of significance. Therefore, the null hypothesis is

accepted and it is concluded that there is no significant difference in the awareness on health and hygiene among elementary school children of fisher folk with regard to gender.

H₀₂: There is no significant difference in the awareness on health and hygiene among elementary school children of fisher folk with regard to locality of school.

Table 3: Significant difference in the awareness on health and hygiene among elementary school children of fisher folk with regard to locality of school

Locality of School	Mean	S.D.	N	Calculated 't' value	Table 't' value	Remarks at 0.05 LoS
Village	104.82	18.15	73	1.17	1.96	NS
Town	109.22	15.93	27			

It is inferred from the above table that the mean score of village and town elementary school students were found to be 104.82 and 109.22. The calculated 't' value (1.17) is lesser than the table value (1.96) at 5% level of significance. Therefore, the null hypothesis is accepted and it is concluded that there is no significant difference in the awareness on

health and hygiene among elementary school children of fisher folk with regard to locality of school.

H₀₃: There is no significant association between the awareness on health and hygiene among elementary school children of fisher folk and parents' educational qualification.

Table 4: Significant association between the awareness on health and hygiene among elementary school children of fisher folk and parents' educational qualification

Categories	Low	Average	High	Total	df	Calculated 'χ ² ' value	Table 'χ ² ' value	Remarks at 0.05 LoS
Primary	14 (12.9)	32 (29.7)	10 (13.4)	56	4	4.04	9.488	NS
Middle	9 (9.2)	19 (21.2)	12 (9.6)	40				
High	0 (0.9)	2 (2.1)	2 (1.0)	4				

It is inferred from the above table that there is no significant association between the awareness on health and hygiene among elementary school children of fisher folk and parents' educational qualification.

H₀₄: There is no significant association between the awareness on health and hygiene among elementary school children of fisher folk with regard to parents' income.

Table 5: Significant association between the awareness on health and hygiene among elementary school children of fisher folk with regard to parents' income

Categories	Low	Average	High	Total	df	Calculated 'χ ² ' value	Table 'χ ² ' value	Remarks at 0.05 LoS
Rs.16000 & below	6 (6.2)	17 (14.3)	4 (6.5)	27	4	3.73	9.488	NS
Rs. 16001 - 18000	17 (15.6)	33 (36.0)	18 (16.3)	68				
Rs. 18000 & above	0 (1.2)	3 (2.7)	2 (1.2)	5				

It is inferred from the above table that there is no significant association between the awareness on health and hygiene among elementary school children of fisher folk and parents' income.

H₀₅: There is no significant relationship between the awareness on health and hygiene among elementary school children of fisher folk and the background variables.

Table 6: Relationship between the awareness on health and hygiene among elementary school children of fisher folk and the background variables

Background variables	Categories	N	Calculated 'γ' value	Table 'γ' value	Remarks at 0.05 LoS
Gender	Boys	47	0.059	0.288	NS
	Girls	53	0.059	0.273	
Locality of School	Village	73	0.437	0.232	S
	Town	27	0.437	0.381	

There is no significant relationship between the awareness on health and hygiene among elementary school children of fisher folk and gender, whereas there is a significant relationship between the awareness on health and hygiene among elementary school children of fisher folk and locality of school.

The findings indicate a general impression that the level of awareness on health and hygiene of the elementary school children of fisher folk in Ramanathapuram district is below average. The result shows that there is no significant difference in the awareness on health and hygiene among elementary school children of fisher folk with regard to gender. When compared with the means scores boys (107.23) are better in the awareness on health and hygiene than the girls

9. Findings and Discussion

(104.92). This finding contradicts the finding of Ratnaprabha, Kumar & Kumar (2018) and Sarkar (2013). The investigators also found that there is no significant difference in the awareness on health and hygiene among elementary school children of fisher folk with regard to locality of school. When compared with the means score town students (109.22) are better in the awareness on health and hygiene than the village students (104.82).

It is inferred from the findings that there is no significant association between the awareness on health and hygiene among elementary school children of fisher folk and parents' educational qualification. The investigators also found that there is no significant relationship between the awareness on health and hygiene among elementary school children of fisher folk and gender, whereas there is a significant relationship between the awareness on health and hygiene among elementary school children of fisher folk and locality of school.

10. Conclusion

Health is recognized as a fundamental issue in community development and a factor that promotes equity. The present study on the awareness of health and hygiene certainly throws lots of light on the degrading living conditions of the fisher folk community in Ramanathapuram district. After

this study, the investigators found that the degree of level of awareness on health and hygiene differs from people to people. There are people who have higher level of awareness but majority of them have very lower level of awareness on health and hygiene and some have moderate level of awareness. The finding shows that there are several factors contributing to this difference in the degree of level of awareness.

On completion of the study, investigations found that follow-up programme for awareness on health and hygiene would bring about a significant change in the attitude of the children of fisher folk community on general health and hygienic practices. These children in return would build a healthy and hygienic fisher community in future. Since children in their primary schooling age can learn specific health-promoting behaviors, even if they do not fully understand the connections between illness and behavior (Richmond & Kotelchuck, 1984), various health education programmes should be undertaken by the schools in order to develop awareness among students in this period. This would lead this community to economical prosperity and to the total development of the society at large. They will be able to save a lot of money from their little catch of fish that is otherwise spent on medicine and treatment.

References

- Callahan, D. (1973). The WHO definition of 'health'. *The Hastings Center Studies*, 1 (3), 77-87. doi: 10.2307/3527467.
- Magana, R. (n.d.). Hygiene is an old concept related to cleanliness. Retrieved from <https://www.scribd.com/document/279350930/Hygiene-is-an-Old-Concept-Related-to-Cleanliness>
- NICER (n.d.) Cleanliness. Retrieved from <http://nicer.ind.in/ourwork.html>
- NIOS (2013). Personal Hygiene. Retrieved from http://oer.nios.ac.in/wiki/index.php/Personal_Hygiene
- Ratnaprabha, G. K., Kumar, A., & Kumar A. (2018). Practices regarding personal hygiene among government high school students of a rural area in Central Karnataka. *International Journal of Medical Science and Public Health*, 7(6), 457-461. Retrieved from <https://www.ejmanager.com/mnstemp/67/67-1519617967.pdf?t=1560921468>
- Richmond, J. B., & Kotelchuck, M. (1984). Personal health maintenance for children. *The Western journal of medicine*, 141(6), 816-823. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1011216/>
- Sarkar, M. (2013). Personal hygiene among primary school children living in a slum of Kolkata, India. *Journal of preventive medicine and hygiene*, 54(3), 153-158. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4718376/>
- Sharma, V. K. (2016). *Physical Education*. New Delhi, India: New Saraswati House Pvt. Ltd.