



Implementation of school health programmes to promote health awareness among primary school students

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Abstract

Mindfulness is about being fully awake or presence of consciousness in our lives. Various school health programmes implemented at school levels for enhancement of health & wellbeing and promote better health. The present study is focused on the implementation of school health programmes to promote Health Awareness of primary school students in Bangalore District. The investigator used descriptive survey method for the study. A total of 300 primary school students were selected by stratified random technique from 15 primary schools of Bangalore District, Karnataka during the year 2015-16. In each school 20 students studying in 7th standard were selected by lottery method. Further the researcher interviewed school heads where the in-charge of School Health Programmes from above said 15 primary schools. The School Health Programme Rating Scale developed by the researcher Asma Parveen and Kulsum (2014) and Interview Protocol was utilized to know about school health programme and also used Health Awareness Test developed by researcher Asma Parveen and Kulsum (2014) were used for data collection. For the present study, percentage analysis, 't' test, 'F' test and Pearson's Product Moment Coefficient of Correlation were applied as statistical techniques. From the present study, 49.1% of the schools are moderate level and only 22.60% schools are made good quality of school health programmes. From the correlation result shows that there was a positive significant relationship between School Health Programme with Health Awareness of primary school students and also the 't' test result shows that higher level of school health programmes have more health awareness. That is, schools availed better school health programmes had reported more health awareness. The school health programmes is an important aspect of health delivery system necessary to monitor the health of school students in order to keep them healthy and optimize their learning. The 't' test revealed that gender and locality affect on the Health Awareness among primary school students. The girls and students from urban locality had better awareness when compared with boys and students from rural locality. From the One-way Analysis it was found that there was significant difference in the Health Awareness of primary school students in relation to their type of management. The students studying in private aided schools had better health awareness compared with private unaided and government schools. Regular monitoring and evaluation programme done at regular intervals so that the physical health of students is maintained. Strengthening school based management and inter-sectoral collaboration to implement responsive, quality school health programmes and also increase the health awareness among the students.

Keywords: health awareness, school health programmes, primary school students, quality of provision

1. Introduction

The middle years of childhood are extremely sensitive times for a number of health issues, especially when it comes to adopting health behaviour that can have lifelong consequences. Our children might be exposed to a variety of health themes in school: nutrition, disease prevention, physical growth and development, mental health, safety. The goal of this education is not only to increase child's health knowledge and to create positive attitudes toward his own well-being but also to promote healthy behaviour. By going beyond simply increasing knowledge, schools are asking for more involvement on the part of students than in many other subject areas. Various school health programmes implemented at school levels for enhancement of health and wellbeing and promote better health. Primary education is the foundation on which the entire educational structure is to be built. It moulds the personality of the child. It is very important to target the children for health awareness and demonstration of correct methods for personal hygiene at primary level. In the present

paper researcher explored the importance of school health programmes and its role on Health Awareness among the primary school students.

Health Awareness

Health is a multi dimensional concept because it is shaped by biological, social economic and cultural factors. It is not merely the absence of disease but it is influenced and shaped by the access to basic needs like food security, safe water supply, housing and health services. Within this broader definition of health, individual health is intrinsically interrelated with social factors. Therefore, while individual health is important it is necessary to delineate its linkages with the physical, social and economic environment in which people live.

Health is usually defined as the quality of a person's physical, psychological and sociological functioning that enables him/her to deal adequately with self and others in a variety of situations. According to the Sanskrit word 'Swasthaya'

meaning, health is made of two parts. 'Swa' means 'self' and 'Stha' meaning 'stability'. The stability within self is the best understanding of the word health.

Health is the level of functional and metabolic efficiency of a living organism. The WHO defined health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (Grad, 2002) [4]. Mindfulness is about being fully awake or presence of consciousness in our lives. Awareness means knowledge or perception of a situation or fact. The main objective of Health Awareness is to provide health related knowledge to the people for preventing and curing disease. Health is basically considered as a holistic concept that is related to a person as a whole. For providing health awareness, programmes are organized that can help in promoting a healthy environment.

Children's Health is an important concern for all societies, since it contributes to their overall development. Health, nutrition and education are important for the overall development of the child and these inputs need to be addressed in a comprehensive manner. Health and education are seen more in terms of the role that the latter plays in creating health awareness and health status improvements. It is easy to underestimate the importance of this health education for child. Before long he will be approaching puberty and adolescence and facing many choices about his behavior that, if he chooses inappropriately, could impair his health. Studies have shown that poor health and nutritional status of children is a barrier to attendance and educational attainment and therefore lays a crucial role in enrollment, retention and completion of school education (NFGHPE, 2006).

School Health Programmes

School is the place where health education regarding important aspects of hygiene, environment and sanitation, as well as social customs is being imparted (Dongre, Deshmukh, Boratne, Thaware and Garg 2007). Health is a key factor in school entry, as well as continued participation and attainment in school. The teacher is the guardian of the child in school and plays a pivotal role in the whole process of primordial prevention (Deb, Dutta, asgupta and Misra, 2010) [2]. Bearing in mind that school children have been consistently implicated in the spread of communicable diseases and that the school has been recognized as a vital setting for health promotion (Varu, 2008) [11].

The School Health Program is defined as "the school procedures that contribute to the maintenance and improvement of the health of pupils and school personnel including health services healthful living and health education". A comprehensive health education programme is an important part of the curriculum. Starting in kindergarten and continuing through high school, it provides an introduction to the human body and to factors that prevent illness and promote or damage health.

Health promoting schools focus on caring for oneself and others, making healthy decisions and taking control over life's circumstances, creating conditions that are conducive to health sedentary lifestyle, violence and injuries, unhealthy nutrition and influencing health-related behaviors: knowledge, beliefs, skills, attitudes, values, support.

The objectives of school health education are

- The promotion of positive health;
- The prevention of diseases;
- Early diagnosis, treatment and follow up of defects;
- Awakening health consciousness in children:

However, the objectives of school health service can be achieved through a comprehensive School Health Programme comprising the following activities:

- Health appraisal of school children and school personnel;
- Healthful school environment;
- Prevention of communicable diseases;
- Nutritional services;
- First aid and emergency care;
- Psychological services;
- Use of school health records;
- Remedial measures and follow up and
- Health instruction.

The School Health Appraisal should cover not only the students but also the teachers and other school personnel. Health appraisal consists of periodic medical examinations and observation of children by the class teacher. The results from the study will help to understand the factors influencing the health awareness in primary school children and to overcome barriers in acquisition of proper knowledge and practices.

School Health Programme in Karnataka

1. Midday meals programme
2. Ksheera Bhagya
3. Weekly Iron Folic Acid Supplementation (WIFS)
4. Suvarna Arogya Chaitanya Programme
5. Provision for physical activities
6. National Deworming Drive.

Methods of Evaluating School Health programmes

The methods of evaluation of school health programmes are observation, health reports, interview, checklist, surveys, health test, health records, questionnaire and Rating scale. In the present study the researcher evaluated the quality of provision made for school health programmes at primary schools.

Review of Related Literature

Research studies proved the importance of school health programmes and health education for students. Pondey (2004) reported that education and attractive environment of school have positive impact on students' educational achievement. Singh (2009) [10] conducted a study of health awareness among students of government and aided schools and concluded that there was significant difference in health awareness of students of government and private aided primary schools and also concluded that boys and girls differ significantly in their Health Awareness. Toma *et al.* (2015) [1] evaluated a study of school health instruction in primary schools in Jos, North-Central Nigeria and concluded that, the status of school health instruction in primary schools was generally poor, especially in the public schools. Singh (2016) [5] compared the study of health awareness among secondary school students in relation to their gender

and locale and concluded that urban and rural secondary school students differ significantly on their attitude towards health awareness; and boys and girls of secondary schools do not differ significantly on their attitude towards health awareness. Kuponiyi; Amoran; and Kuponiyi (2016) [7] determined school health services and its practice among public and private primary schools in Western Nigeria and concluded that, the practice of the various components of school health services was poor but better in private primary schools in Nigeria. Alice; Joan and Cheruto (2016) [6] evaluated a study of school health promoting programmes and the implementation of child friendly schools initiative in primary schools in Uasin Gishu County, Kenya and established that there was a significant positive relationship between school health promoting programmes and implementation of child friendly schools initiative. Schools still experienced challenges in relation to provision of adequate nutrition, clean and safe drinking water as well as access to proper healthcare within the reach of children and communities. Research suggests that children with health problems are at a disadvantage in school both academically and socially.

2. Need and Importance of the Study

Childhood is the age of learning and it is the time when a child start developing practices and attitude towards health. It is very important to target the children for health awareness. School is considered as place for learning where children learn not only subjective knowledge but also life style practices and health seeking behaviors. It has been proven that schools can provide an ideal platform for the promotion of health. A feeling of total Well-being plays critical part in attaining any lasting success or happiness in life. To achieve this state of health and wellbeing, one must attain a level of fitness, which enables to perform the best at all times. The relationship between health status and educational achievement will be evident in the policies and programmes of the school. The school's health emphasis will be integrated across all activities.

School Health Programme comprises of all activities in the school environment for the promotion of health and development of the school & the community. Establishing healthy behaviours during childhood and maintaining them is easier and more effective than trying to change unhealthy behaviors during adulthood. In addition, school-age children (6-15 years) are in their formative years and are more impressionable and receptive to new ideas and concepts. Hence the present study conducted to know the relationship of school health programmes & health awareness and also to find out the health awareness among primary school students with reference to their gender, locality and type of institution.

3. Statement of the Problem

The present study is focused on the quality or provision made for school health programmes to promote Health Awareness among primary school students in Bangalore District of Karnataka State.

4. Objectives

1. To realize the implementation of School Health

Programmes at primary school level.

2. To assess the level of health awareness among primary school students.
3. To expose the significant relationship between school health programmes and health awareness at primary school level.
4. To discover the significant difference in the Health Awareness of primary school students due to their gender, locality and type of management.
5. To find out the significant difference in the Health Awareness of primary school students studying in schools practicing different levels of quality of provision made for School Health Programmes.

5. Statement of Hypotheses

1. There is no significant relationship between School Health Programmes and Health Awareness of primary school students.
2. There is no significant difference in the Health Awareness of primary school students with reference to their gender, locality and type of institution.
3. There is no significant difference in the Health Awareness of primary school students studying in schools practicing different levels of quality of provision made for School Health Programmes.

6. Methodology

Research Method and Sampling Procedure

The study was elected as descriptive survey method. A total of 300 primary school students were selected by stratified random technique from 15 primary schools of Bangalore District, Karnataka during the year 2015-16. Each school 20 students studying 7th std. were selected by lottery method. Further the researcher interviewed school heads where the in-charge of School Health Programmes from above said 15 schools.

Description of Tools

Health Awareness Test for Students (HATS) (2014) developed and standardized by the researcher (Asma Parveen) and guide (Dr. Umme Kulsum) was used to measure the health awareness of students. The health awareness test to check the knowledge and awareness of health and it contains components such as knowledge about personal hygiene, balance diet, physical activities, communicable diseases, importance of cleanliness, importance of proteins, carbohydrates, lipids and vitamins, importance of foods and nutrition, first aid, correct posture, healthy habits, importance of health checkups, importance of fresh air, ventilation, importance of rest, sleep, importance of yoga & meditation, importance of water, importance of unadulterated food, importance of fruits, vegetables and pulses in the diet, awareness about body temperature its measuring instrument, iron iodine, vitamin deficiency disorders, knowledge of the functions of taste buds, lacrimal gland, olfactory nerves and knowledge of health quotes. A two point scale was employed to score the data namely True, False. All items of the tryout form were scored from 0 to 1 and the total score ranged from 0 to 62. The reliability was found to be 0.90 with a gap of one month between the two administrations by test-retest method.

School Health Programme Rating Scale (SHPRS) (2014) developed and standardized by the researcher (Asma Parveen) and guide (Dr. Umme Kulsum) was used to measure the quality of School Health Programme for primary school heads. This scale was developed to know the quality of provision of school health programmes at primary school education for perception from primary school heads. It contains eighteen areas, namely Healthful School Environment, Nutritional Services, Health Appraisal, Physical Activities, Lighting and Ventilation Facilities, Infrastructure related to Posture, Health Instruction, Health Club, Health Records, Health Camp, Psychological Service, Safety Measures, First Aid Facilities, Health Committees, Follow-up Service, Continuous Evaluation of School Health Programme, Health Awareness Programmes through Co-curricular Activities and Cooperation from parents, community and local health Department. A five point scale was employed to score the data namely Provision not made (0), poor (1), fair (2), good (3), excellent (4). All items of the tryout form were scored from 0 to 4 and the total score ranged from 0 to 220. The reliability was found to be 0.85 with a gap of one month between the two administrations by test-retest method.

Statistical Procedures

For the present study, percentage analysis, Pearson's Product Moment Coefficient of Correlation, 't' test, 'F' test along with Scheffe's Post Hoc Analysis were applied as statistical techniques. The significance level was set at 0.05 and 0.01 level.

Table 3: Results pertaining to Correlation analysis pertaining to Quality of Provision made for School Health Programmes and Health Awareness.

Dependent	Independent	'r' value and Sig. Level
Quality of Provision for School Health Programmes	Health Awareness	0.331**

N=300; df=298; **Significant at 0.01 level (r value @ 0.01 =0.148)

From the table-3 revealed that, the obtained 'r' value 0.331 is greater than the table value 0.148 at 0.01 level of confidence. Therefore, the stated hypothesis i.e. "there is no significant relationship between Quality of Provision made for School Health Programmes and Health Awareness among primary school students" was rejected and an alternate hypothesis has been accepted that "there is a significant relationship between

7. Results of the Study

Table 1: Quality of Provision made for School Health Programmes

Implementation of School Health Programmes	No. of Schools	Percentage (%)	Cumulative Percentage (%)
Not Satisfactory	2	13.3	13.3
Moderate	10	66.7	80.0
Satisfactory	3	20.0	100.0
Total number of schools	15	100.0	-

The table-1 illustrates that 20.0% schools are made quality of provision for school health programmes satisfactorily and 66.7% schools are made moderately and only 13.3% schools are not satisfactorily made quality of provision.

Table 2: Health Awareness among primary school students

Health Awareness	No. of School Students	Percentage	Cumulative Percentage
High	104	34.70	34.70%
Average	185	61.70	96.4%
Low	11	3.70%	100.0%
Total number of students	300	100.0	-

The table-2 demonstrates 61.70% students articulated moderate level of awareness of health, 34.70% students were uttered high level of awareness and only 3.70% students expressed low level awareness of health.

Table 4: Health Awareness of students due to variation in their gender and locality

Variable	Groups	No.	Mean Scores	Standard Deviation	't' value and sig. level
Gender	Boys	120	42.766	12.306	4.76**
	Girls	180	48.616	6.724	
Locality	Urban	107	49.551	6.05	5.19**
	Rural	193	44.461	10.924	

**Significant at 0.01 level (Table Value 2.59)

It is evident from Table-4, the obtained 't' values of 4.76 and 5.19 with regard to Health Awareness related to gender and locality are greater than table value 2.59 at 0.01 level of confidence. Hence, the stated hypotheses for the said variables are rejected and an alternate hypotheses has been accepted that

"there is significant difference in the Health Awareness of primary school students with regard to gender and locality. The girls had more awareness when compared with boys and likewise the students from urban locality had more awareness when compared with rural locality.

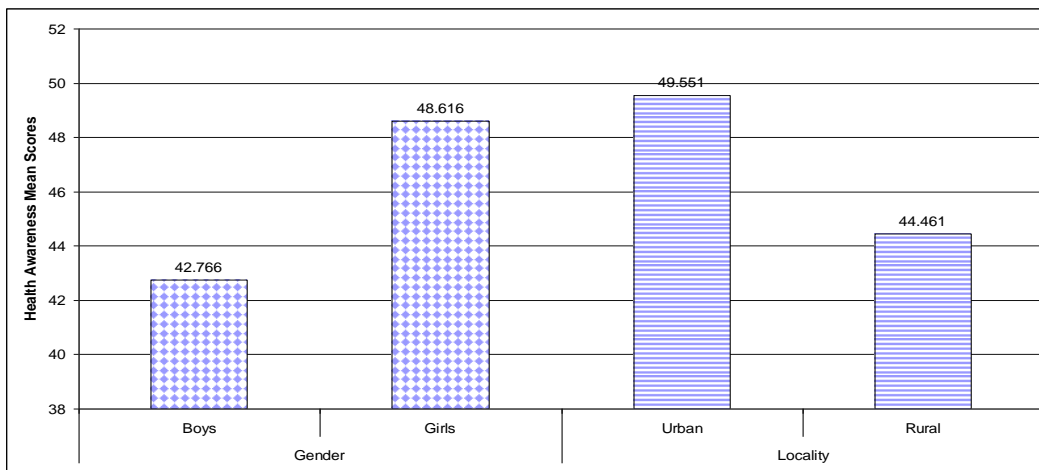


Fig 1: Bar graph shows comparison of Health Awareness of students in relation to their gender and locality.

Table 5: Health Awareness of primary school students due to variation in their type of institution.

Group	N	Mean	SD	Source	Sum of Squares	df	Mean Squares	F Value (Sig.)
Govt.	100	43.070	13.676	Between Group	2704.027	2	1352.013	15.52**
Private Aided	100	50.290	6.325	Within Group	25878.010	297	87.131	
Private Unaided	100	45.470	5.861	Total	28582.037	299		

*Table value at 0.05(df-2,297) =3.03; **Table value at 0.01(df-2, 297) =4.68

The table-5 shows that, the obtained ‘F’ value 15.52 is greater than the table value of 4.68 for df ‘2 and 297’ requested for significance at 0.01 level of significance. The results of the study indicated that “there is a significant difference in the Health Awareness of primary school students studying in

government, private aided and private unaided schools. To determine the significant difference in the Health Awareness among these paired mean scores, the ‘Scheffe’s post hoc test was applied and the results are presented in Table-5(a).

Table 5a: Scheffe’s Post Hoc Analysis on Health Awareness scores of primary school students studying in different type of institution.

Type of Institution			Mean Difference
Government	Private Aided	Private Unaided	
43.070	50.290	-	7.220*
-	50.290	45.470	4.820*
43.070	-	45.470	2.400

*Significant at 0.05 level.

Table-5(a) shows significant paired mean differences in the Health Awareness between government & private aided and private aided & private unaided school students and the mean differences are 7.220 and 4.820 respectively which are greater than the critical difference value. It concludes that “there exists significant difference in the Health Awareness between primary school students studying in government & private

aided and private aided & private unaided schools. The Health Awareness of primary school students studying in government and private unaided school students had similar and it was not proved statistically, since the mean difference 2.400 is less than the value of critical difference. The private aided school students had more health awareness when compared with private unaided and government school students.



Fig 2: Bar graph shows comparison of Health Awareness among primary school students studying in different type of institution.

Table 6: Health Awareness of primary school students due to variation in Quality of Provision made for School Health Programmes.

Group	N	Mean	SD	Source	Sum of Squares	df	Mean Squares	F Value (Sig.)
Not Satisfactory	50	33.940	14.226	Between Group	9951.534	2	4975.767	79.32**
Average	161	47.397	6.721	Within Group	18630.503	297	62.729	
Satisfactory	89	51.179	4.108	Total	28582.037	299		

Table value at 0.05(df-2,297) =3.03; Table value at 0.01(df-2, 297) =4.68

The table-6 shows that, the obtained ‘F’ value 79.32 is greater than the table value of 4.68 for df ‘2 and 297’ requested for significance at 0.01 level of significance. The results of the study indicated that “there is a significant difference in the Health Awareness of primary school students studying in

different levels of quality of provision made for school health programmes. To determine the significant difference in the Health Awareness among these paired mean scores, the ‘Scheffe’s post hoc test was applied and the results are presented in Table-6(a).

Table 6(a): Scheffe’s Post Hoc Analysis on Health Awareness scores of primary school students studying in schools with different levels of quality of provision made for school health programmes.

Quality of Provision made for School Health Programmes			Mean Difference
Not Satisfactory	Moderate	Satisfactory	
33.940	47.397	-	13.457*
-	47.397	51.179	3.782
33.940	-	51.179	17.239*

*Significant at 0.05 level.

Table-6(a) shows significant paired mean differences in the Health Awareness between not satisfactory & moderate and not satisfactory & satisfactory level of quality of provision made for school health programmes and the mean differences are 13.457 and 17.239 respectively which are greater than the critical difference value. It concludes that “there was significant difference in the Health Awareness between not satisfactory & moderate and not satisfactory & satisfactory level of quality of provision made for school health

programmes. The Health Awareness of moderate & satisfactory level of quality of provision made for school health programmes had similar and it was not proved statistically, since the mean difference 3.782 is less than the value of critical difference. The schools where satisfactory level of quality of provision made for school health programmes had more health awareness when compared with moderate and not satisfactory implemented.

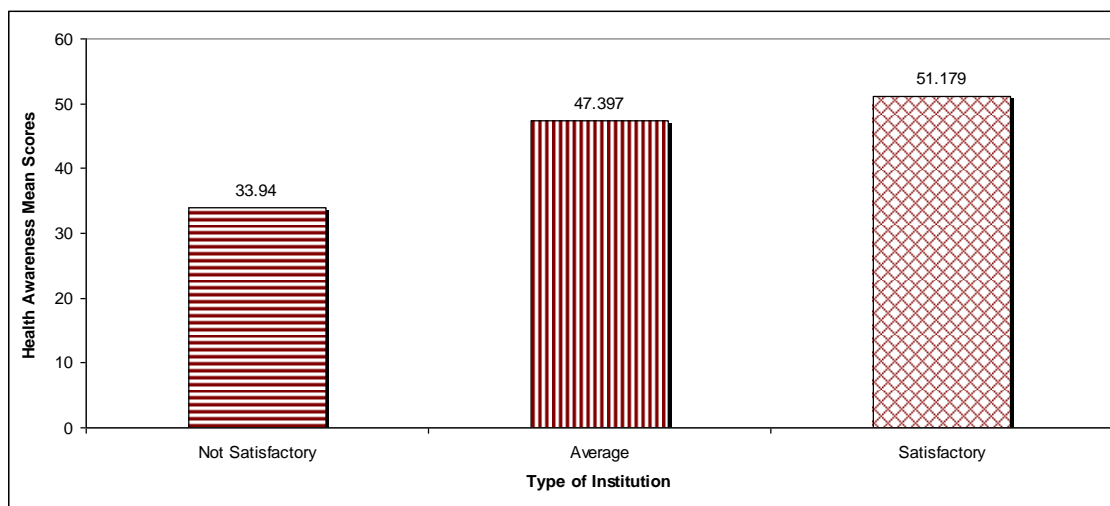


Fig 3: Bar graph shows comparison of Health Awareness among Students studying in schools with different level of quality of provision made for school health programmes.

8. Major Findings of the Study

1. There was a significant relationship between school health programmes and health awareness among primary school students.
2. There is a significant difference between Health Awareness of primary school boys and girls.
3. There was a significant difference between Health Awareness of urban and rural primary school students.
4. There is a significant difference in the Health Awareness of primary school students studying in government, private aided and private unaided schools.
5. There was a significant difference in the Health Awareness of primary school students studying in varied schools with different levels of quality of provision made for school health programmes.

9. Conclusion

From the present investigation it was demonstrated that, health awareness was positively related with school health programmes. Health Awareness and School Health Programmes are connected with each other. The study additionally found from the 't' test analysis that there was significant difference in the Health Awareness of primary school boys and girls and also from urban and rural schools. The girls and students from urban locality had better awareness when compared with boys and students from rural locality and from the 'F' test analysis it was also found significant difference in the Health Awareness of primary school students with regard to type of institution and different levels of quality of provision made for school health programmes. The schools where satisfactorily practiced quality of provision made for school health programmes had more health awareness when compared with moderate and not satisfactory practiced. Regular monitoring and evaluation programme done at regular intervals so that the physical health of students is maintained. Strengthening school based management and inter-sectoral teamwork to implement responsive, quality school health programmes and also increase the health awareness among the students. It is advised to teachers to raise awareness on the importance of health among their students.

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