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S A N E Campaign Sanitation, Addiction, Nutrition, Environment Conservation

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Abstract

Introduction: SANE stands for sanitation, addiction, nutrition and environment conservation awareness campaign, it is a community driven project mainly conducted for the adolescents from 10-19 years in the Medhar block area, Mysuru.A systematic combination of all these components into a single campaign will be required to associate all of these components of health to spread awareness among the adolescents and promote healthy behaviour.

Aim: Our aim is to spread health awareness among adolescents regarding Nutrition, Sanitation, environment conservation and addictions.

Methods: This study is a community based study and we did outdoor presentations and demonstrations as intervention. The intervention was done on laptop with a presentation and specimens for demonstration were included. For 8 days we covered a total of 103 kids and conducted 12 group demonstrations.

The field practise area was of JSS, UHC and sample size is 42.

Results: Among the 42 participants we have found that there is an increase in knowledge, attitude and practices among the participants though none of them were significant it may be attributable to the small sample size. Knowledge, attitude and practices have all shown an increase after the intervention.

Conclusion: We can conclude from the above study that intervention campaigns like the above SANE is one of the most simplest and effective ways to spread health awareness among adolescents. With targeted groups and by combining components of health we can make significant progress in increasing the health status of the community.

Keywords: Sanitation; Addictions; Nutrition; Environmental Conservation; Health Awareness campaign.

Introduction

SANE stands for sanitation, addiction, nutrition and environment conservation awareness campaign, it is a community driven project mainly conducted for the adolescents from 10-19 years in the Medhar block area, Mysuru.

Adequate sanitation, together with good hygiene and safe water, are fundamental to good health and to social and economic development.[1]

Empirical evidence shows that more than 33% of the disease burden and almost 60% of premature deaths among adults can be associated with behaviour or conditions that began or occurred during adolescence.[2] Similarly the environment is one of the most important component for mankind if not the most important. There is continuous interaction between man and the environment and our behaviour is highly influenced by our surrounding environment. Human attitudes and behaviour will

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determine the good condition of an environment. The way we treat our environment will have an impact on the quality of human life itself.[3]

Overweight and obesity are main problems associated with the adolescents which leads to chronic diseases like cardiovascular diseases in the future. Efforts to reduce the rates of overweight and obesity have largely focused on nutrition and physical activity due to the relationship between diet, exercise and weight. As a result, behavioural programmes have been implemented in the community, schools and the workplace; locations in which food and activity choices are made on a daily basis. Studies have shown that prevalence of obesity and overweight found by Greenfield was about 6% among the general population, while Scherer found it to be 14% among the college-based population, clearly indicating adolescents are more prone to unhealthy eating patterns[4] Approximately 45% of adult bone mass and 20% of total height develops during adolescence. This developmental period serves as the final window of opportunity to reduce stunting. Improvements in disease environment, sanitation, and resource availability may stimulate remedial growth in middle and later childhood.[5] Currently, UNICEF and WHO estimate that 1.1 billion people lack access to improved water supplies and 2.6 billion people lack adequate sanitation. Providing safe water and basic sanitation to meet the MDGs will require substantial economic resources, sustainable technological solutions and courageous political will.[6] India is a vast country of 243 million adolescents aged between 10 to 19 years. Nutritional status is a very critical issue during this phase because the growth rate among adolescents during this is much quicker.[7] India's flagship program on sanitation and hygiene the Swachh Bharat Mission (Clean India Campaign, henceforth SBM) is mainly focused on the front end of sanitation, i.e., increasing access to, and the use of, toilets. This is a necessity for a country in which over 500 million people still defecate in the open but the emptying of pits and the handling of waste, also a necessity, remain largely undiscussed in policy documents.[8]

A systematic combination of all these components into a single campaign will be required to associate all of these components of health to spread awareness among the adolescents and promote healthy behaviour. The main objective being spreading awareness, at this tender age, our study introduces a much more holistic approach to healthier habits and lifestyle changes which will lead to environmental conservation.

Aim

To spread health awareness among adolescents regarding Nutrition, Sanitation, environment conservation and addictions.

Objectives

To determine the impact of the SANE intervention campaign on the knowledge, attitude and practices of Sanitation, nutrition, addiction and environment conservation.

Methodology

- Study type: Community intervention based study.
- Instruments required: Laptop with a Power point presentation, Specimens for demonstration including moong dal, rice, groundnut, recyclable bins, jute bags, closed dustbins.
- Study method: The campaign was in the form of small group demonstrations of not more than 15 kids at a time, in Medhar block field practise area of Mysore, which had a total population of 9000 residents. The campaign ran for a total of 8 days, where we covered most of the blocks in the area. With the help of locals and medical field worker from the health centre, we set up makeshift demonstration centres in the locality and gathered all the kids who were interested and willing to participate. Once the members gathered, we handed them our structured questionnaire to assess their knowledge, attitude and practices regarding Sanitation, Nutrition, addictions and Environment conservation. All the kids read and wrote English, while for the ones who didn't understand it was translated and given. Once they had filled the forms. We proceeded with our demonstrations, which was based on audio-visual as well as interaction with the children. Slides were based on knowledge and how sanitation, nutrition practices could help in environment conservation. As it was an open campaign, all the children who were interested joined us for the demonstrations. The demonstrations were conducted under the buildings and the colonies where the residents resided. The basic setup for the demonstrations was somewhat similar for all sessions, we used a stool or a table, provided by the residents to place our laptops and the demonstrable materials. The kids gathered would usually stand around the laptop and the demonstrator. There were times, when we conducted more than one demonstrations simultaneously, in different areas.

The demonstrations though protocolised had a free air about it, considering the kids were comfortable in known surroundings and closer to their homes. The demonstrable items were pulses including, moong dal, white rice, groundnuts, eco-friendly waste papers, bananas, jute bags were kept for demonstration and were passed along to be felt by the students. They were explained about dry waste and wet waste, and how segregating wastes would help in easier recycling. The importance of using jute bags was stressed upon when they went to buy anything from the shops. We stressed upon the time to keep their toilets clean and keep their spaces around their houses clean. We said that they could also engage in composting of waste outside their houses. It was an open demonstration and some student did pose questions about how they could help in conserving nature. Most, if not all had a very positive response to conservation and waste disposal. They even said they would include more vegetables and fruits in their diet which some of them did when we went for post intervention interview.

For the next 8 days we covered a total of 103 kids and conducted 12 group demonstrations, out of which 42 participants were selected and willing for the study based on their voluntary effort.

The post questionnaire was conducted two weeks later, when we visited the same participants and asked them to fill the same questionnaire again to see any impact of our campaign. We went back to the same localities and asked the kids to reassemble again. Then we handed them the questionnaire and asked to recall what they practiced from our demonstrations.

- *Study location:* Field practise area of JSS UHC, Medhar block, Mysuru.
- *Sample Size*: 42.
- *Sampling technique*: Purposive sampling method. Not all those who were present for the campaign were taken into the study.
- *Inclusion criteria*: Children (10-19yrs) who are willing to participate in the area.
- *Exclusion criteria*: Children who were not able to read and write.

Statistical analysis: The data collected was entered in Microsoft Excel 2019 spreadsheet followed by analysis using SPSS version 23 (Licensed to JSS AHER). The demographic characteristics such as age, gender, education etc. were represented using standard deviation and percentages. Paired sample t test was used to compare the means of the test values. The statistical significance between the two paired groups and the socio demographic factors was compared using Wilcoxon test andMcnemers. The data distribution was represented using appropriate tables. A p-value of less than 0.05 was considered statistically significant.

Results

Table 1: Pre and Post levels of knowledge, attitude and practices among adolescents.

	Pre (42)	Post (n=42)	Standard deviation		P value
			Pre	Post	
Knowledge	7.97	8.58	1.86	1.94	0.066
Attitude	4.18	4.34	0.80	.87	0.295
Practice	3.34	3.55	.87	.76	0.198

Table 2: Frequency chart.

Variables	Category	Frequency	Percentage (%)
Age	10-14	35	83.3
	15-19	7	16.7
Gender	Female	19	45.2
	Male	23	54.8
Class	Primary school	27	64.3
	High school	13	31
	College	2	4.8

Table 3: Pre and Post levels of knowledge, attitude and practices among adolescents in age, gender and class categories.

Variables	Category	Knowledge (Mean)		Attitude (Mean)		Practice (Mean)	
		Pre	Post	Pre	Post	Pre	Post
Age	10-14	7.68	8.48	4.11	4.29	3.37	3.54
	15-19	8.42	9	4.57	4.57	3.42	3.57
Gender	Female	7.63	9.44	4.58	4.56	3.74	3.81
	Male	7.96	7.95	3.87	4.18	3.09	3.36
Class	Primary	7.33	8.43	4.18	4.39	3.41	3.48
	High	8.54	8.69	4.15	4.15	3.38	3.69
	College	9.5	9.5	4.5	5	3	3.5

Table 4: Knowledge.

Variables	Category	Pre test Median (IQR)	Post test Median (IQR)	P-value
Age	10-14	8(6-9)	9(7-10)	0.137
	15-19	9(6-10)	10(8-10)	0.480
Gender	Female	8(6-10)	10(9-10)	0.005
	Male	8(6-9)	8.50(6.75-9.25)	0.709
Education	Primary	8(6-9)	9(7-10)	0.068
	High	9(7-10)	10(7.50-10)	0.831
	College	9.50(9-9.50)	9.50(9-9.50)	1.000

Table 5: Attitude.

Variables	Category	Pre test Median (IQR)	Post test Median (IQR)	P-value
Age	10-14	4(4-5)	5(4-5)	0.360
	15-19	5(4-5)	5(4-5)	1.000
Gender	Female	5(4-5)	5(4.25-5)	0.516
	Male	4(3-4)	4(3.75-5)	0.085
Education	Primary	4(3-5)	5(4-5)	0.361
	High	4(4-5)	5(3-5)	1.000
	College	4.5(4-4.5)	5(5)	0.317

Table 6: Practice.

Variables	Category	Pre-test (IQR)	Post test (IQR)	P-value
Age	10-14	4(3-4)	4(3-4)	0.276
	15-19	3(3-4)	4(3-4)	0.564
Gender	Female	4(3-4)	4(4)	0.317
	Male	3(3-4)	4(3-4)	0.347
Education	Primary	4(3-4)	4(3-4)	0.655
	High	4(3-4)	4(3-4)	0.157
	College	3(3)	3.50(3-3.50)	0.317

Among the 42 participants included in the study, we have found an increase in knowledge, attitude and practices among the practices, though none of them were significant it may be attributed to the small sample size. Overall, the intervention has helped to increase the knowledge, attitude and practices. Knowledge which was scored out of 12, has increased the mean score by 0.61, attitude by 0.16, practices by 0.21. Overall the intervention has shown good promise an could be implemented for a larger population.

On association of the components separately, we arrive at the following conclusion. Knowledge; with regards to age, both groups of 10-14 and 15-19 have shown an increase after the intervention; with respect to gender bother groups have an increase in knowledge, with respect to education primary and high school have shown an increase in knowledge while college kids have no increase in their knowledge.

Attitude; with attitude all the socio-demographic factors and their groups have shown an increase in the attitude.

Practices; with age, 10-14 years age group have shown no increase in practices while 15-19 have shown, with gender females have shown no improvement while males have shown an increase, in education, primary and high school have shown no improvement while college kids have some improvement.

Discussion

It can be seen from this study that with this campaign there is evidence that overall their knowledge, attitude and practices have increased among the participants.

Their overall knowledge regarding sanitation, addiction, nutrition and environment conservation has increased by 0.61 which is in line with an intervention study done by Chattopadhyay et al which shows that their awareness about sanitation practices has helped in increasing the nutritional status among adoloscents.[1]

Similarly attitude and practices also seem to have increased by 0.16 and 0.21 respectively in line with studies done by Patel et al and Palupi et al.[2,3]

This study is first of its kind with four health components namely sanitation, addiction, nutrition and environment conservation being introduced into a single campaign with the main intention being that the participants are able to correlate all of them into one, and there is evidence that there is an improvement in the overall KAP among adolescents and can be implemented on a large scale.

The main drawback would be the small sample size taken and the small area which this was conducted. But with sufficient evidence to back it up, we can implement this on a large scale.

Conclusion

We can conclude from the above study that intervention campaigns like the above SANE is one of the most simplest and effective ways to spread health awareness among adolescents. With targeted groups and by combining components of health we can make significant progress in increasing the health status of the community. More such integrated health awareness campaign can be the key to improving health of the adolescents and move them up socio-economic ladder.

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