

Impact of Awareness Programs on the Knowledge of College Students about Lifestyle Diseases

A.M Ganai, I.A Bhat, A.H Zargar*, S.R Masoodi*, K Aslam**, A Mustafa[†]

Departments of Community Medicine, *Endocrinology, **Cardiology and [†]Hospital Administration, SKIMS, Srinagar

ABSTRACT

Background & Objectives: Lifestyle diseases emerged as an important public health problem during the past few decades due to unhealthy practices adopted by the people and a definite increase in life expectancy as a result of improved living standards and control over most of the infectious diseases. These diseases account for a very major chunk of morbidity and mortality at the global level. However, they can be prevented if healthy lifestyles are adopted in early life. With this objective in mind, we started a program under the name of AASH at SKIMS.

Material & Methods: One thousand three hundred and sixty nine college students were selected from different colleges of Srinagar and they were given a pretested close-ended proforma to assess the level of their knowledge about some of the lifestyle diseases. Then a series of lectures were given and their knowledge was again checked at the end by using the same proforma.

Results: It was found that there was a 12,16, 65 and 12 percent increase in the level of awareness about the basic knowledge about Hypertension, Obesity, CAD and Diabetes respectively. Break up wise the impact level was also significant.

Conclusion: The results showed that the level of knowledge before and after the intervention had increased very significantly. Hence such awareness programmes are needed more and more. *J Med Sci* 2009;12(2):58-60

Key Words: Lifestyle diseases, Awareness, Students, Impact ratio.

Introduction

Lifestyle diseases are those diseases which are associated with the peoples' adoption of living practices and behaviour like smoking, indulging in less physical activity, practicing unhealthy dietary habits and living stressful life etc. They are different from other diseases in the sense that these are potentially preventable and can be reduced by avoiding the risk factors and risky behaviour.¹

Reprint request:

Dr. A.M. Ganai

Department of Community Medicine

S.K.I.M.S., P.B. No. 27, Srinagar-190 011

E-mail:drmajid2007@rediffmail.com

Lifestyle diseases kill more people than communicable diseases. By 2030, deaths due to cancer, cardiovascular diseases and road traffic accidents will together account for 75% of all deaths. Globally deaths from cancer will increase from 7.4 million in 2004 to 11.8 million in 2030 and deaths from cardiovascular diseases will rise from 17.1 million to 23.4 million in the same period. These figures are based on data collected from 193 member states of World Health Organization.²

Lifestyle diseases emerge as a silent killer and most of them come from China, India, Pakistan and Indonesia. Urbanization and Industrialization forced people to adopt a different lifestyle, which was unhealthy and was responsible for many diseases.³ Today an average Indian

has a chance of four percent of suffering from lifestyle diseases. 68% of working women suffer from it due to skipping of lunch and switching over to junk food. Lifestyle diseases shall cost 237 billion dollars to India by 2015.⁴ The role of eating habits and dietary factors has an important contribution towards healthy lifestyle.⁵

The role of lifestyle factors in hypertension has been found by other studies in India.⁶ The role of lifestyle and dietary pattern in relation to Type 2 Diabetes mellitus has also been studied in India.⁷ WHO has identified India as one of the nations that is going to have most of the lifestyle diseases in near future. Already the diabetic capital of the world, India shall be the lifestyle diseases capital of the world soon. There is a shift of these diseases from plus 40 and plus 30 years to the younger age due to change in lifestyle.

The rapidly increasing magnitude of four diseases of public health importance (Obesity, Diabetes, Hypertension and Ischemic Heart disease) is mainly attributed to change in lifestyle. Since the change in behaviour and adoption of /or exposure to risk factors starts very early in life where more and more people accept this way of life and the impact is seen later in the life. It is here where behavioural modification is required. It is with this background that we decided to assess the knowledge about lifestyle diseases among young students and then provide them with the necessary knowledge.

Material & Methods

The study sample comprised of some 1369 college students taken by a stratified sampling technique by selecting five colleges out of ten from Srinagar city and then taking a proportionate sample from each college. These students were assessed on awareness about most prevalent lifestyle diseases like hypertension, obesity, coronary artery disease and diabetes. They were called in batches of around 150-180 on fixed days and the purpose of the study was explained to them before collecting the information. Their level of knowledge was assessed by administering them a pretested close-ended proforma which had questions pertaining to these four diseases. This was followed by giving various lectures to these students by the experts in the concerned field in common understandable language. Then another set of proforma having same questions was given to the students and their level of knowledge was again assessed. The data thus obtained was analyzed on knowledge, causes, dangers/complications, treatment and prevention. The impact of the awareness was assessed by the difference in the level of knowledge in the two proformas by calculating the impact ratio.

This was the basis for starting an awareness programme on lifestyle diseases at SKIMS under the name

of AASH: the acronym stands for Awareness, Advocacy and Sensitization on Health. This programme is different from other health education programmes in that it has a component of advocacy in it, which makes the students not only aware about the disease but also makes them ambassadors to propagate this message in their local areas. It has a component of mission spirit too. It also has an element of capacity building in it as the desirous students are given further and further advanced information in a step ladder fashion.

Results

In the present study some 1369 students participated

Table 1: Percentage distribution of students and impact of awareness on knowledge about hypertension

	Before Inter-Vention	After inter-vention	Level of impact	Impact ratio
What is Hypertension	85%	97%	12%	14.11
Basic causes	45%	80%	35%	77.77
Dangers / complications	45%	95%	50%	111.12
Treatment	75%	100%	25%	33.34
Prevention	75%	100%	25%	33.34
What is obesity	80%	96%	16%	20
Basic Causes	74%	98%	14%	18.9
Treatment	62%	94%	32%	51.6
Prevention	76%	100%	24%	31.5
What is obesity	80%	96%	16%	20
Basic Causes	74%	98%	14%	18.9
Treatment	62%	94%	32%	51.6
Prevention	76%	100%	24%	31.5

Table 2: Obesity

	Before Inter-Vention	After inter-vention	Level of impact	Impact ratio
What is obesity	80%	96%	16%	20
Basic Causes	74%	98%	14%	18.9
Treatment	62%	94%	32%	51.6
Prevention	76%	100%	24%	31.5

Table 3: Coronary artery disease

	Before Inter-Vention	After inter-vention	Level of impact	Impact ratio
What is CAD	20%	85%	65%	325
Basic Causes	15%	87%	72%	480
Treatment	8%	72%	64%	800
Prevention	18%	76%	58%	323.23

Table 4: Coronary artery disease

	Before Inter- Vention	After inter- vention	Level of impact	Impact ratio
What is diabetes	85%	97%	12%	14.117
Basic Causes	62%	88%	26%	41.93
Treatment	27%	68%	41%	151.85
Prevention	20%	84%	64%	320

and the proforma of only 1250 students were complete for final analysis as some proformas were not completely answered. The results showed that the level of information regarding hypertension before giving the lectures was high and there was a high level of impact after imparting awareness. This is because students also felt interested in those diseases which they found in their families. Highest level of impact was seen in the knowledge about dangers of hypertension (50%), causes (45%) Prevention (30%) and finally the meaning of hypertension (12%). This seems to be a significant level of impact.

Regarding obesity level of impact was 16, 14, 32 and 24% respectively for these four question sets.

Regarding coronary artery disease, the level of knowledge was very low before the lectures because the disease is less common than hyper-tension. After lectures there was 72%, 65%, 64% and 58% increase. In diabetes these results were 12, 20, 41 and 64% respectively. Impact ratio was also calculated for these diseases break-up wise, which was very significant.

The impact of awareness in various variables of coronary artery disease and diabetes is depicted in table 3 and 4. A sustained increase in awareness was seen across board in all the diseases after the intervention.

Discussion

The total way to prevention has been discussed in depth by R. Kumar and M. Kumar⁴ by way of three levels of prevention i.e. primary, secondary and tertiary directed towards various aspects of lifestyle. In our study we assessed the level of knowledge before and after the intervention about causes, meaning, treatment and prevention of Hypertension, Obesity, CAD and Diabetes respectively.

Lot of information existed about diabetes and obesity already among students because these two problems are very common, emerging and students knew something about them. There was a 64% increase in knowledge about prevention of Diabetes and 12% increase in basics about it as the earlier level was already high. A peculiar observation was made about obesity wherein the level of knowledge was almost 100% in different aspects as many students were keenly interested in it. Similar results have been found by different workers in different

awareness programmes in India.^{6,7,8}

Hence the results show that awareness programmes are very useful as a preventive tool against these lifestyle diseases. We used the programme named Awareness, Advocacy and Sensitisation on Health (AASH) approach to impart these awareness programmes. These programmes are different from conventional Health education in that we sensitize the students and they in turn act as ambassadors in their respective areas and work towards reducing the load of lifestyle diseases and they became a part of the campaign and mission because they are not only made aware, they are sensitized to the social importance of these diseases and the social fabric of causes operating at the grass-root level in the genesis of these diseases. In short, the students were exposed to the root cause analysis of these diseases at the community level.

Conclusion

In the fight against lifestyle diseases people have a major role in avoiding them. They can do so only and only when proper awareness is given to them in a sustained and suitable manner in the local understandable language. Hence such programmes are the need of the hour.

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