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ORIGINAL RESEARCH

A Study To Assess The Knowledge Regarding Prevention Of Selected Lifestyle Diseases Among Adolescents In Higher Secondary School of District Fatehgarh Sahib, Punjab With A View To Develop Informational Booklet

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Abstract

Introduction: A descriptive study to assess the knowledge of prevention of selected lifestyle diseases among the adolescent girls of selected senior secondary school of district Fatehgarh Sahib, Punjab with a view to develop informational booklet.

Material and methods: A descriptive study research design was used for the present study. A study sample of 100 adolescents of age 15-18 years was selected by non-probability purposive sampling technique. The data was collected by self-structured questionnaires to assess the knowledge of adolescent from government senior secondary girl's school and senior secondary boy's school Amloh district Fatehgarh Sahib. The Data was analyzed in terms of objective of the study using descriptive and inferential statistics in terms of frequency, percentage distributes, mean, median, standard deviation, 't' value and chi-square.

Result: The findings of the present study revealed that maximum no. of adolescents had average lifestyle (61%), followed by poor lifestyle (39%) and good lifestyle (0%). The Chi Square value showed that there was a significance association ($p \leq 0.05$) between the levels of knowledge with demographic variables (i.e. age, gender, education of father, occupation of mother, area of residence). On the hand, there was no significance association ($p \geq 0.05$) of level of knowledge with other selected demographic variables (education, type of family, education of mother, occupation of father and family income).

Conclusion: Based on the findings of the study it was concluded that majority of adolescent had average knowledge regarding prevention of lifestyle diseases.

Introduction

"Prevention is better than cure"

Adolescence is a transitional phase of growth and development between childhood and adulthood. The World Health Organization defines an adolescent as any person between ages 10 to 19. Adolescence is one of the most rapid phases of human development. The lifestyle changes in adolescence have health consequence not only in adolescence but also over the life-course.

Adolescence is a transitional stage of physical and psychological development that generally occurs during the period of puberty to legal adulthood. Adolescence is usually associated with teenage years, but its physical, psychological or cultural expressions may begin earlier and later. For example, puberty now typical begins during preadolescence, particularly in females. The word adolescence is Latin in origin, derived from the verb adolescence, which means "to grow into adulthood". Some adolescence is able to negotiate the biological,

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cogitative, emotional and social transitions of adolescence successfully. Some adolescence, however, are at risk of developing certain problems such as obesity. Adolescence is critical periods for developing and forming healthy lifestyle habits and behaviors that can last by lifetime. However, an unhealthy lifestyle is still a concern among adolescent populations. Some studies reported that more than 30% adolescent's watches watched TV and played video or computer game. Also other studies have shown that more than 60% of adolescent did not meet recommended levels of physical activities and engaged in sedentary behaviors that may contribute to the prevalence of coronary heart diseases, hypertension, diabetes, obesity, and associated health risks. Lifestyle is the nature in which a person or a group of people live, including where they live, what they own, type of employment, and activities they enjoy. One's lifestyle can be healthy or unhealthy based on nutrition, physical activity levels, and overall personal behaviors. A positive lifestyle can bring health and happiness, while a negative lifestyle can leads to illness and depression. A lifestyle has different components which include: nutrition, physical participation, safety and health awareness, and these components contribute to an individual's health. Lifestyle disease can be simply defined as any disease associated with the way a person lives. Lifestyle diseases are diseases that appear to become ever more widespread as countries become more industrialized. Such diseases are different from others because they are potentially preventable, and can be controlled with changes in diet, lifestyle, and environment. They include following diseases: - Obesity, also called corpulence or fatness, excessive accumulation of body fat, usually caused by the consumption of more calories than the body can use. The excess calories are then stored as fat, or adipose tissue. Hypertension is the systematic condition accompanying abnormally high arterial blood pressure that is usually indicated by an adult systolic blood pressure of 140 mm Hg or greater or a diastolic blood pressure of 90 mmHg or greater due to unknown cause but may be attributable to a preexisting conditions such as renal and endocrine disorders.

Diabetes mellitus is a chronic disease associated with abnormally high level of blood glucose level due to inadequate production of insulin or inadequate sensitivity of cells to the action of insulin. Cardiovascular diseases are a group of disorders of the heart and blood vessels such as heart attack. A heart attack occurs when the blood flow to a part of heart is blocked by blood clot.

Need of the Study

A huge proportion of the world's population – more than 1.75 billion is young, aged between 10 and 24 years. Adolescents (aged 13 to 18 years) have specific health and development needs, and many face challenges that hinder their well-being, including poverty, a lack of access to health information and services, and unsafe environments. Many boys and girls in developing countries enter adolescence become more vulnerable to disease and early death. Conversely, overweight and obesity another form of malnutrition with serious health consequences that is lifestyle diseases such as cardiovascular diseases, diabetes, food poisoning etc. are increasing among other young people in both low- and high –income countries. The school setting is a perfect place for learning new attitudes and behaviors, thus adolescents may comply with targeted lifestyle interventions offered through schools more than with those offered in a health care setting. The biggest killer in the world today accounting for almost 80% deaths worldwide is mainly due to Lifestyle changes. Coronary Heart Disease (CHD) is one of the major causes of mortality and morbidity in the elderly and middle aged populations of both the developed and developing countries. In India, the incidence of Coronary Heart Disease is 6-23%. Prevalence of Coronary Heart Disease in India is twice (10%) in urban than in rural areas. At the global lifestyle diseases increased from 0.5%-2.0% in boys and 3.0% in girls. Lifestyle diseases like hypertension, diabetes

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mellitus and overweight /obesity are the major cause of cardiovascular diseases. There is a strong linear relationship high blood pressure (BP) levels and the risk of CVD. Today's busy lives have left very little time in our life to devote to our Health. We have turned our bodies into machines. And machines are working 365X24X7 without any stop. But have we ever realized that this machine which might look fine from outside is being ruined from inside. We ever realized if we continue this way, it might even stop working someday.

An official Census 2011, figured that Fatehgarh Sahib had population of 600,163 of which male and female were 320,795 and 279,368 respectively and most of adolescents are at risk of developing lifestyle diseases due to poor health status, less knowledge about healthy lifestyle practices.

A study estimated 1.1 million people died from diabetes. WHO projects that diabetes will double between 2005 and 2030. The article also states that 1 of 3 adults in US is likely to have diabetes by 2050.Currently 1 in 10 US adults have diabetes. India has the highest number of diabetic patients in the world. The International Diabetes Federation (IDF) revealed that India is the diabetes capital of the world, 50.8 million people suffering from the condition.IDF also states that the number of diabetic patients is expected to go up to 84% of adult population by 2030.

Arun Pratap Singh conducted a cross sectional study on Adolescents lifestyle in India and Prevalence of Risk and Primitive Factors of Health among adolescents. A sample was comprised of 1,500 adolescents (750 boys, 750 girls) collected from 17 schools. Based on the total sample (N = 1,500), the prevalence percentages were obtained. Regarding eating habits more than half of sample reported to eat in a hurried manner (58.6 per cent) and about three quarters of eating without appropriate hunger (74 per cent). Results indicated higher consumption of bakery items (46.9 per cent), fast foods (47.4 per cent) and cold drinks (44 per cent) in contrary to healthy food items like fruits (17.5 per cent), milk (25.2 per cent), green vegetables (10.9 per cent) and green salads (19.5 per cent). It was revealed that late sleeping is emerging as common phenomenon among more than three-quarters of adolescents (77.5 per cent). Engagement in inactive sedentary habits (i.e. mobile chatting, Internet, fast music, video games) was reported by more than half of the adolescents studied. About one-third of participants accepted some kind of engagement in relaxing positive leisure activities (i.e. cultural event, listening classical music). The study documents the multiple concerns related to inappropriate dietary practices, irregular sleeping habits, less religiosity, mild activity pattern, unhealthy daily routine and pursuance of different forms of risk behaviors.

Tanu Anand, Jugal Kishore, G K Ingle (2011) conducted a cross sectional study on knowledge about Lifestyle Diseases and their Associated Risk Factors in School Going Children in Delhi. A sample of 293 children was enrolled in the study. The study found that around 50% children were consuming soft drinks, chocolates and chips at least 3 times per week. Awareness regarding healthy and harmful eating was high amongst the school children. The physical activity was being practiced by 55% of the students though more than 90% knew that physical activity is good for health. Almost 90% of the school children were also aware about the addictive nature of smoking and alcohol and that they are harmful to health. Though the awareness level is high, it does not reflect in their eating habits. The study concluded that imparting knowledge and increasing awareness is not sufficient to prevent the onset of lifestyle diseases amongst school children.

Hence, a descriptive study to assess the knowledge regarding prevention of selected lifestyle diseases among adolescents of selected senior secondary school of district Fatehgarh Sahib, Punjab with a view to develop informational booklet.

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Materials and Methods

Research design

Descriptive Research Design

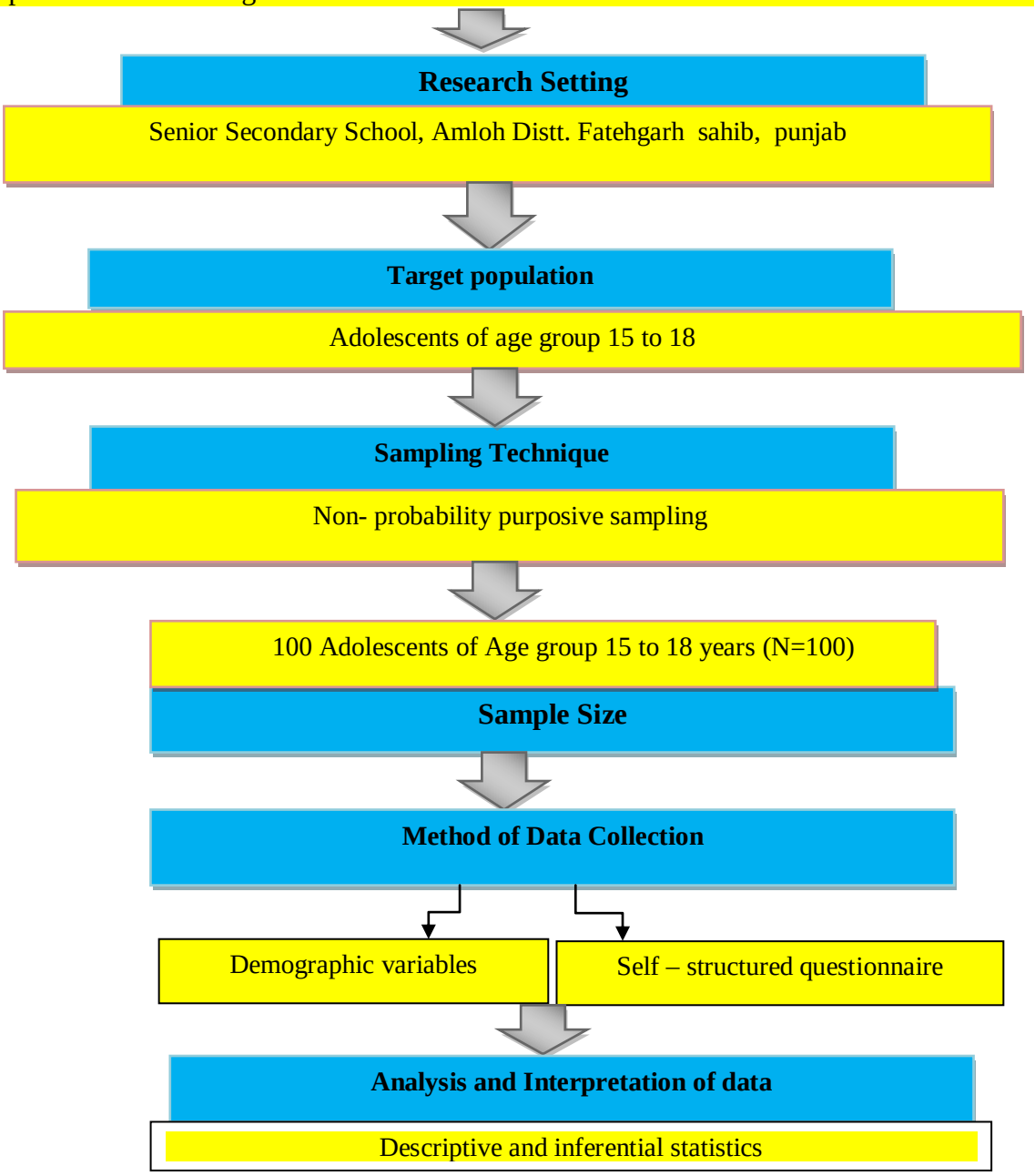

Figure 1 Schematic Representation of Research Methodology

Results and Findings

Analysis and interpretation of data is the most important phase of research process, which involves the Computation of certain measures along with searching for patterns of relationship that exist among the data group. Data collection is followed by analysis and interpretation of data in accordance with study objectives.

Based on the frequency and percentage distribution of Demographic characteristics of Adolescents of Government Senior Secondary School (N =100) Hence, it was concluded that majority of adolescents were from rural areas and belongs to nuclear family. The majority of education of mothers of adolescents had matriculation schooling; on the other hand, father's education was up to matriculation. Maximum father of adolescents was on private job.

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Whereas most of mothers of adolescents were housewife's maximum no of adolescents were from the family having monthly income from Rs. 5000-10,001.

Based on assessment of knowledge regarding prevention of selected lifestyle diseases of Adolescents

Level of knowledge among Adolescents (N=100)

Level of knowledge	Frequency (f)	Percentage
GOOD (21 - 30)	00	00
AVERAGE (11 - 20)	61	61
POOR (0 - 10)	39	3

Maximum score 30

Minimum score 0

Above table depicts that a majority of adolescents had average knowledge (61%), followed by poor knowledge (39%)

Descriptive Statistics table N=100

Descriptive Statistics	Mean	Median	S.D.	Maximum	Minimum	Range	Mean %
Knowledge Score	14.40	16	4.09	20	8	12	48.00
Maximum=30 Minimum=0							

The above table showing descriptive statistics reveals that median score was (16) followed by mean score was (14.40). Moreover, S.D. score was only (4.09). apart from it, maximum mean percentage was (48%).

Association of scores of knowledge with selected demographic variables.

This section deals with the findings related to association between the knowledge with selected demographic variables. The Chi Square test was used to determine the association between the level of knowledge with selected demographic variables. The Chi Square values showing the association between level of knowledge regarding prevention of lifestyle diseases with their demographic variables of adolescents is given in table 5.

Chi square showing association of selected demographic variables of adolescents with knowledge

Demographic Data		Levels (N=100)			Association with knowledge Score			
Variables	**Options**	Good	Average	Poor	**Chi Test**	**df**	**Table Value**	**Result**
Age	i) 15	00	6	16	20.1337	6	12.59	Significant
	ii) 16	00	22	19				
	iii) 17	00	25	3				
	iv) 18	00	8	1				
Gender	Male	00	45	5	35.351	2	5.99	Significant
	Female	00	16	34				
Education	10+1	00	34	23	0.102	2	5.99	Not Significant
	10+2	00	27	16				
Type of Family	Nuclear	00	25	9	7.450	6	12.59	Not Significant
	Joint	00	26	26				
	Extended	00	4	0				
	Separated	00	6	4				
Education of Father	Illiterate	00	2	17	41.379	6	12.59	Significant
	Matriculation	00	24	21				

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	Higher secondary	00	22	1				
	Above Graduate	00	13	0				
Education of Mother	Illiterate	00	9	12	5.678	6	12.59	Not Significant
	Matriculation	00	26	18				
	Higher secondary	00	19	6				
	Above Graduate	00	7	3				
Occupation of Father	Government job	00	10	2	3.059	6	12.59	Not Significant
	Private job	00	21	14				
	Self-employment	00	17	14				
	Other	00	13	9				
Occupation of Mother	Government job	00	5	1	13.599	6	12.59	Significant
	Private job	00	9	0				
	Self-employment	00	6	0				
	Housewife	00	41	38				
Area of Residence	Rural	00	29	38	26.804	4	9.49	Significant
	Urban	00	28	1				
	Suburban	00	4	0				
Family Income Monthly Basis	5,000 - 10,000	00	22	24	6.582	6	12.59	Not Significant
	10,001 - 15,000	00	14	4				
	15,001 - 20,000	00	12	5				
	Above 20,001	00	13	6				

The above table shows that the association between the level of knowledge with their socio demographic variables. The Chi Square values showed that there was a significance association ($p \leq 0.05$) the level of knowledge with demographic variables (i.e. age, gender, education of father, occupation of mother, area of residence). On the other hand there was no significance association ($p \geq 0.05$) of level of knowledge with other selected demographic variables (i.e. Education, type of family, education of mother, occupation of father, family income)

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Discussion

Maximum number of adolescent had Average knowledge (61%), poor (39%) and good (0%). Hence it was concluded that majority of adolescent of government senior school of Amloh had average knowledge. These findings were consistent with the findings of Miss. J. Kavith conduct a cross sectional study to evaluate the effectiveness of self-instructional module on knowledge regarding prevention of selected lifestyle diseases among adolescents in selected pre University in Mandya. The study results showed that the adolescent had average knowledge (70%), poor (30%) and good (0%). As per the study findings, it was concluded that a majority of adolescent had average knowledge regarding selected lifestyle diseases. So to overcome this problem a need based health action was taken and implemented among the adolescent in the form of pamphlet to educate them regarding the knowledge of selected lifestyle diseases. Adolescent were educated to adopt a healthy lifestyle to reduce the upcoming risks related to their health and lifestyle.

The findings of the study suggested that there was a significant association ($p \leq 0.05$) of the level of knowledge with their demographic variables (age, gender, education of father, occupation of mother, area of residence). There was no significance association ($p \geq 0.05$) level of knowledge with their demographic variables (occupation of father, type of family, family income, education of mother). These findings were consistent with **Jingru Cheng, Feili, Tian wang, Lingue wu** conducted a cross sectional study for the association of knowledge regarding selected lifestyle diseases. The study revealed that the knowledge was 28.8%, 55.9%, 21.5%. It was concluded that the knowledge is significantly positively correlated with demographic variables. Conversely, knowledge can improve the health Status and helps in preventing such diseases

Delimitation of Study

The study was delimited to Adolescents aged between 15 to 18 years studying in selected school of District Fatehgarh Sahib. Adolescents who were available at the time of data collection.

Nursing Implications

The findings of this study can be utilized in all domains of nursing I.e. nursing practice, nursing research, nursing education and nursing administration.

Nursing Practice

It will help to identify the level of knowledge of adolescents. Nursing interventions can be planned to enhance their knowledge regarding prevention of selected lifestyle diseases and to improve their lifestyle.

Nursing Education As a nursing educator, there are an abundant opportunity for nursing professionals to educate adolescent, family and community people knowledge regarding the lifestyle diseases and their prevention that will help to improve lifestyle. Through the information booklet information can be given to adolescent, families and community people regarding the healthy lifestyle.

Nursing Administration

The nursing administration can take part in conducting health education programs to give knowledge to adolescent regarding healthy lifestyle of adolescent, lifestyle diseases and their prevention. The nursing administration can mobilize the available resources towards health education to adolescents regarding the healthy lifestyle.

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Nursing Research

The present study may be issued for the further reference. Further large scale study can be done in different settings.

Recommendation

There is less descriptive study on assessment of health status and lifestyle of adolescents. So more study can be conducted on this topic; A comparative study can be conducted to assesses the knowledge lifestyle of adolescents of rural area and urban area.

Interpretation and Conclusion

It was concluded that a majority of adolescents have average knowledge regarding lifestyle diseases. However, a need based action was developed in the form of pamphlet on healthy lifestyle.

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