



Health Awareness of Undergraduate Student in Varendra University, Rajshahi

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Abstract

The aim of this survey was designed to assess and evaluate the prescription of student which has the awareness of health knowledge. In this study we show that a total of 750 both male and female young people with an age of ≤ 24 years are the undergraduate student of "Varendra University". Which maximum home district is Rajshahi, but some of them are out of Rajshahi district. The survey findings indicate that young student have lack of awareness about the health status. Report shows that that maximum sample (66%) don't take any periodic health checkup. Only a few sample (34%) monitoring its health checkup on a regular basis. Majority of the student sample are 78% not take Smoke/ Drink/ take Tobacco, rest of the student sample are 22% take Smoke/ Drink/ take Tobacco. In our report shows that about 76% know there Blood pressure, 38% know there Glucose level, 100% know there Blood group and 98% know their Body weight. About 48% participants are taking food in time, 38% are taking food irregularly and 14% are not getting food in time. Result obtain in this survey that 44% participants undergo regular exercise or physical activity. 56% participants are not. About 8% sample people treat their disease by self medication. On the other hand 30% people treat their disease by the prescription of a doctor and 62% people follow sometime with self medication & sometime with prescription of a doctor. Almost 54% people received counseling on health awareness from health professional and about 46% people don't receiving council from healthcare.

Keywords: Health Awareness, Periodic Health Checkup, Monitoring, Sufficient Food, Treat Disease, Counseling

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Introduction

Health

Health is the ability of a biological system to acquire, convert, allocate, distribute, and utilize energy with maximum efficiency. The World Health Organization (WHO) defined human health in a broader sense in its 1948 constitution as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."^{[1][2]} This definition has been subject to controversy, in particular as lacking operational value, the ambiguity in developing cohesive health strategies and because of the problem created by use of the word "complete", which makes it practically impossible to achieve.^{[3][4][5]} other

definitions have been proposed, among which a recent definition that correlates health and personal satisfaction.^{[6][7]}

History of Health

The definition of health has evolved over time. In keeping with the biomedical perspective, early definitions of health focused on the theme of the body's ability to function; health was seen as a state of normal function that could be disrupted from time to time by disease. An example of such a definition of health is: "a state characterized by anatomic, physiologic, and psychological integrity; ability to perform personally valued family, work, and community roles; ability to deal with physical, biological, psychological, and social stress".^[8] Then in 1948, in a radical departure from previous definitions, the World Health Organization (WHO) proposed a definition that aimed higher: linking health to well-being, in terms of "physical, mental, and social well-being, and not merely the absence of disease and infirmity".^[9] Although this definition was welcomed by some as being innovative, it was also criticized as being vague, excessively broad and was not construed as measurable. For a long time, it was set aside as an impractical ideal and most discussions of health returned to the practicality of the biomedical model.^[10]

Just as there was a shift from viewing disease as a state to thinking of it as a process, the same shift happened in definitions of health. Again, the WHO played a leading role when it fostered the development of the health promotion movement in the 1980s. This brought in a new conception of health, not as a state, but in dynamic terms of resiliency, in other words, as "a resource for living". 1984 WHO revised the definition of health defined it as "the extent to which an individual or group is able to realize aspirations and satisfy needs and to change or cope with the environment. Health is a resource for everyday life, not the objective of living; it is a positive concept, emphasizing social and

personal resources, as well as physical capacities”.^[1] Thus, health referred to the ability to maintain homeostasis and recover from insults. Mental, intellectual, emotional and social health referred to a person’s ability to handle stress, to acquire skills, to maintain relationships, all of which form resources for resiliency and independent living.^[1]

Since the late 1970s, the federal Healthy People Initiative has been a visible component of the United States’ approach to improving population health.^{[12][13]} In each decade, a new version of Healthy People is issued,^[14] featuring updated goals and identifying topic areas and quantifiable objectives for health improvement during the succeeding ten years, with assessment at that point of progress or lack thereof. Progress has been limited to many objectives, leading to concerns about the effectiveness of Healthy People in shaping outcomes in the context of a decentralized and uncoordinated US health system. Healthy People 2020 give more prominence to health promotion and preventive approaches and adds a substantive focus on the importance of addressing social determinants of health. A new expanded digital interface facilitates use and dissemination rather than bulky printed books as produced in the past. The impact of these changes to Healthy People will be determined in the coming years.^[15]

Determinants

Generally, the context in which an individual lives is of great importance for both his health status and quality of their life.^[19] It is increasingly recognized that health is maintained and improved not only through the advancement and application of health science, but also through the efforts and intelligent lifestyle choices of the individual and society. According to the World Health Organization, the main determinants of health include the social and economic environment, the physical environment and the person’s individual characteristics and behaviors.^[20] More specifically, key factors that have been found to influence whether people are healthy or unhealthy include the following: ^{[20][21][22]}

- Income and social status
- Social support networks
- Education and literacy
- Employment/working conditions
- Social environments
- Physical environments
- Personal health practices and coping skills
- Healthy child development
- Biology and genetics
- Health care services
- Gender
- Culture

An increasing number of studies and reports from different organizations and contexts examine the linkages between health and different factors, including lifestyles, environments, health care organization and health policy, one specific health policy brought into many countries in recent years was the introduction of the sugar tax. Beverage taxes came into light with increasing concerns about obesity, particularly among youth. Sugar-sweetened beverages have become a target of anti-obesity initiatives with increasing evidence of their link to obesity.^[23] Such as the 1974 Lalonde report from Canada;^[22] the Alameda County Study in California;^[24] and the series of World Health Reports of the World Health Organization, which focuses on global health issues including access to health care and improving public health outcomes, especially in developing countries.^[25]

Mental health

The World Health Organization describes mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community”.^[31] Mental Health is not just the absence of mental illness.^[32] Mental illness is described as ‘the spectrum of cognitive, emotional, and behavioral conditions that interfere with social and emotional well-being and the lives and productivity of people. Having a mental illness can seriously impair, temporarily or permanently, the mental functioning of a person. Other terms include: ‘mental health problem’, ‘illness’, ‘disorder’, ‘dysfunction’.^[33]

Roughly a quarter of all adults 18 and over in the US are considered diagnosable with mental illness. Mental illnesses are the leading cause of disability in the US and Canada. Examples include, schizophrenia, ADHD, major depressive disorder, bipolar disorder, anxiety disorder, post-traumatic stress disorder and autism.^[34] Many teens suffer from mental health issues in response to the pressures of society and social problems they encounter. Some of the key mental health issues seen in teens are: depression, eating disorders, and drug abuse. There are many ways to prevent these health issues from occurring such as communicating well with a teen suffering from mental health issues. Mental health can be treated and be attentive to teens’ behavior.^[35]

Many factors contribute to mental health problems, including:

- Biological factors, such as genes or brain chemistry
- Life experiences, such as trauma or abuse
- Family history of mental health problems

Maintaining

Achieving and maintaining health is an ongoing process, shaped by both the evolution of health care knowledge and practices as well as personal strategies and organized interventions for staying healthy.

Diet

An important way to maintain your personal health is to have a healthy diet. A healthy diet includes a variety of plant-based and animal-based foods that provide nutrients to your body. Such nutrients give you energy and keep your body running. Nutrients help build and strengthen bones, muscles, and tendons and also regulate body processes (i.e. blood pressure). The food guide pyramid is a pyramid-shaped guide of healthy foods divided into sections. Each section shows the recommended intake for each food group (i.e. Protein, Fat, Carbohydrates, and Sugars). Making healthy food choices is important because it can lower your risk of heart disease, developing some types of cancer, and it will contribute to maintaining a healthy weight.^[36]

Exercise

Physical exercise enhances or maintains physical fitness and overall health and wellness. It strengthens muscles and improves the cardiovascular system. According to the National Institute of Health (NIH) there are four types of exercise; Endurance, Strength, Flexibility, and Balance. Endurance exercises are those that will elevate your heart rate including; walking, jogging, running, hiking etc.^[38]

Sleep

Sleep is an essential component to maintaining health. In children, sleep is also vital for growth and development. Ongoing sleep deprivation has been linked to an increased risk for some chronic health problems. In addition, sleep deprivation has been shown to correlate with both increased susceptibility to illness and slower recovery times from illness.^[39] In one study, people with chronic insufficient sleep, set

as six hours of sleep a night or less, were found to be four times more likely to catch a cold compared to those who reported sleeping for seven hours or more a night.^[40] Due to the role of sleep in regulating metabolism, insufficient sleep may also play a role in weight gain or, conversely, in impeding weight loss.^[41] Additionally, in 2007, the International Agency for Research on Cancer, which is the cancer research agency for the World Health Organization, declared that “shift work that involves circadian disruption is probably carcinogenic to humans,” speaking to the dangers of long-term nighttime work due to its intrusion on sleep.^[42] In 2015, the National Sleep Foundation released updated recommendations for sleep duration requirements based on age and concluded that “Individuals who habitually sleep outside the normal range may be exhibiting signs or symptoms of serious health problems or, if done volitionally, may be compromising their health and well-being.”^[43]

Role of public health

Public health has been described as “the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals.”^[44] It is concerned with threats to the overall health of a community based on population health analysis. The population in question can be as small as a handful of people or as large as all the inhabitants of several continents (for instance, in the case of a pandemic). Public health has many sub-fields, but typically includes the interdisciplinary categories of epidemiology, biostatistics and health services. Environmental health, community health, behavioral health, and healthcare also important areas of public health.

The focus of public health interventions is to prevent and manage diseases, injuries and other health conditions through surveillance of cases and the promotion of healthy behavior, communities, and (in aspects relevant to human health) environments. Its aim is to prevent health problems from happening or re-occurring by implementing educational programs, developing policies, administering services and conducting research.^[45] In many cases, treating a disease or controlling a pathogen can be vital to preventing it in others, such as during an outbreak. Vaccination programs and distribution of condoms to prevent the spread of communicable diseases are examples of common preventive public health measures, as are educational campaigns to promote vaccination and the use of condoms (including overcoming resistance to such).

Public health also takes various actions to limit the health disparities between different areas of the country and, in some cases, the continent or world. One issue is the access of individuals and communities to health care in terms of financial, geographical or socio-cultural constraints to accessing and using services.^[46] Applications of the public health system include the areas of maternal and child health, health services administration, emergency response, and prevention and control of infectious and chronic diseases.

The great positive impact of public health programs is widely acknowledged. Due in part to the policies and actions developed through public health, the 20th century registered a decrease in the mortality rates for infants and children and a continual increase in life expectancy in most parts of the world. For example, it is estimated that life expectancy has increased for Americans by thirty years since 1900,^[47] and worldwide by six years since 1990.^[48]

Self-care strategies

Personal health depends partially on the active, passive, and assisted cues people observe and adopt about their own health. These include personal actions for preventing or minimizing the effects of

a disease, usually a chronic condition, through integrative care. They also include personal hygiene practices to prevent infection and illness, such as bathing and washing hands with soap; brushing and flossing teeth; storing, preparing and handling food safely; and many others. The information gleaned from personal observation of daily living – such as about sleep patterns, exercise behavior, nutritional intake and environmental features – may be used to inform personal decisions and actions (e.g., “I feel tired in the morning so I am going to try sleeping on a different pillow”), as well as clinical decisions and treatment plans (e.g., a patient who notices his or her shoes are tighter than usual may be having exacerbation of left-sided heart failure, and may require diuretic medication to reduce fluid overload).^[49]

Personal health also depends partially on the social structure of a person's life. The maintenance of strong social relationships, volunteering, and other social activities have been linked to positive mental health and also increased longevity. One American study among seniors over age 70, found that frequent volunteering was associated with reduced risk of dying compared with older persons who did not volunteer, regardless of physical health status.^[50] Another study from Singapore reported that volunteering retirees had significantly better cognitive performance scores, fewer depressive symptoms, and better mental well-being and life satisfaction than non-volunteering retirees.^[51]

Health Care Systems in Bangladesh

Health care delivery is a daunting challenge area of the Bangladesh's healthcare systems. This paper looks at factual evidence to describe the main challenges facing health care delivery in Bangladesh, including absenteeism, corruption, shortage of doctors/nurses, inefficiency and mismanagement. This paper concludes that good governance, including training and monitoring, allowing more non-governmental involvement and the needs of the informal healthcare service providers is important in ensuring effective health care delivery, and that returns to investments in health are low, where governance issues are not addressed.^[53]

Successes of Bangladesh's Health Sector

Bangladesh has made significant improvement in health sector, which make it an example for other developing countries even though being a resource poor country. Over the last decades key health indicators such as life expectancy and coverage of immunisation have improved notably, whilst infant mortality, maternal mortality and fertility rates have dropped significantly.^[54] Bangladesh stands out as a country that has taken giant steps in healthcare. Long before the emergence of contemporary global health initiatives, the government placed strong emphasis on the importance of childhood immunization as a key mechanism for reducing childhood mortality.

The Expanded Programmed on Immunization (EPI) in Bangladesh is considered to be a health system success because of its remarkable progress over the last two decades. It provides almost universal access to vaccination services, as measured by the percentage of children under 1 year of age who receive BCG (a vaccine against tuberculosis). This increased from 2% in 1985 to 99% in 2009. Coverage of other vaccines has also improved substantially.^[55] However, poor access to services, low quality of care, high rate of maternal mortality and poor status of child health still remain as challenges of the health sector.^[54]

Challenges of Bangladesh's Health Sector

In Bangladesh, healthcare is offered either through government-run hospitals or through privately-run clinics. Bangladesh is still lagging in health care services for the poor as well as the affluent. In recent

years, our neighbors, India and Thailand have forged ahead in respect of expertise and experience of doctors, advancement of healthcare technologies and high quality hospitals and health management organizations. To achieve this in our country, technological collaboration with technologically advanced hospitals are needed and follow health management organizations in the developed countries of Asia and the advanced nations of the West. [53]

Health Systems Research

Considerable challenges remain in the forefronts in the efforts to improve the health status of the population, reduce health inequalities, improve the quality of care and public satisfaction with healthcare, and to increase the efficiency and sustainability of service-delivery agencies. These challenges point to the growing need for appropriate and applied research to enhance the knowledge about factors affecting the governance, provision, organization, financing and use of healthcare and health services as well as at the role of key multispectral players within the healthcare system. Where resources are scarce, it is vital that health system be strengthened so that every decision is the best decision. Health systems research can support that decision-making. [53]

National Health Policy

It is apparent that the method of change needs to broaden beyond the redefinition of policy objectives and discussions of the ideological orientation of the health care system. Without institutional or structural change it is expected that existing organizational structures and management systems will be able to strengthening the weak and fragile National Health Care Delivery System and improving its performance. Health sector reform will therefore be concerned with defining priorities, refining policies and reforming the institutions through which those policies are implemented. As a result, the need for creative solutions to deal with urgent and intractable problems can easily get lost in discussions about the rights and wrongs of particular strategies. There is a need for rational debate and systematic analysis. In the first instance, this requirement must be addressed by descriptive information on reforms using a taxonomy that aids the analysis of the implementation and impact of reforms. Such a framework should allow a synthesis of the benefits and drawbacks of reforms that can assist each country's attempts at producing better health from the level of investment within that country. [58]

Governance, political commitment and leadership

Apart from policy issue mentioned above, there should be good governance in health administration, both in the private and the public sector, for which political commitment should be transparent and all allocations should be demand based and balanced ones. There could be arrangements where civil society organisations and human right agencies can interact to ensure accountability and transparency in procurement, supply chain management, logistics so that well functioning services can be provided through access of quality medical products and technologies. A strong health financing structure is also important, which can ensure population's protection from health related financial crises. In addition to these aspects, a well functioning information system is also vital, which would disseminate information timely on critical health outcomes. There should be also participation of health watch groups with regular inflow of information. Existing

human resource development (HRD) plans need to be reconstructed to have long-term objective to improve the quality of healthcare services (clinical and managerial skills), and to address emerging health problems of Bangladesh. Funding on training is very much crucial for informal health providers, as well as funding for community systems that mobilize demand for services. In addition to that tailor made programmes need to be provided in line with local needs, so as delivering services to hard to reach, at-risk and vulnerable populations. There should be strategies for community engagement/involvement to increase awareness of, access to, and utilization of health services, and provision of appropriate services at the community level. Moreover, strong leadership (political, donor, and government) support & public accountability are essential to strengthen a sense of commitment & accountability of Bangladesh health care systems, especially in times when the government is exploring means of reform. [53]

Public private partnership

Based on the failures in the state run health care system identified by the Bangladesh Health Watch report there will no doubt be a significant thrust to allow more private sector or non-governmental involvement in healthcare services. The report suggests that the potential benefits of harnessing the ubiquity and the influence of the informal healthcare providers could be massive, with training and monitoring. Bangladesh needs to improve 'quality of nursing' to develop health sector. More doctors, nurses and informal health care providers are also need to be recruited. This could be explored as a public-private partnership and can greatly reduce the existing pressure on the medical infrastructure run by the government. [53]

Health Knowledge

Without knowledge concerning health-related issues and the kinds of behaviour that can lead to chronic, incurable conditions, there is no chance of persuading people to change their behaviour. By itself, however, behaviour change won't happen purely through awareness of potential risks. Health is a dynamic process because it is always changing. We all have times of good health, times of sickness, and maybe even times of serious illness. As our lifestyles change, so does our level of health. [64] In Bangladesh the health knowledge is very poor. To improve the Health Knowledge of the people we should get some step. That are-To provided Public Health Textbook, which organised in relation to the Faculty of Public Health Part A syllabus but can benefit anyone aiming to increase their public health competencies.

Text Courses involve reading provided text and then questions, answers and feedback, in epidemiology, statistical methods, sickness and health information, population health information, applications of health information at practitioner and specialist levels. Video Courses in the form of audio podcasts with animated PowerPoint slides and supporting video components, Q & As, and further resources. The subjects covered are finding and appraising the evidence, learning from stakeholders, screening, programme budgeting and marginal analysis. Management Training with PowerPoint slides, workbooks, and trainer notes in four clinical areas: diabetes, coronary heart disease, stroke and child health.

Description about Population Sample

We collected the sample information from some undergraduate student in Varendra University, Rajshahi.

Literature Review

Sereal No	Author	Topic	Year	Reference
1.	The purpose of this	The purpose of this study was to assess a range of health behaviours and lifestyle characteristics of 3,706 undergraduate students from seven universities in England, Wales and Northern Ireland. They compared differences in these parameters between males and females, and across the participating universities.	2011	[69]
2.	Khan SJ and Anjum Q, et al.	As part of the undergraduate curriculum, the Faculty of Kinesiology at the University of New Brunswick (UNB) requires all students to take an undergraduate course in physical activity, Health and wellness in their third year of study.	2005	[70]
3.	Kristina K and Pesonen T.	The University Student Health Survey 2012 was conducted to investigate students' physical, mental and social health, certain key aspects of health-related behavior. The study explored a range of factors related to health, health behaviours and study ability, such as Social relationships, studying and subsistence.	2012	[71]
4.	Kempen EL and Muller H, et al.	The primary purpose of this study was to determine the level of health awareness among university students in Jordan. The sample of the study consisted of (860) male and female students from different colleges at the Hashemite University, who were exposed to the health awareness scale.	2012	[72]
5.	Mamdouh M. Ashraah and Ahmad M Mahasneh, al.	6. Imran M The study explored the knowledge and 2016 awareness about colorectal cancer (CRC) 10 and among undergraduate students of one of the Sayedalami leading universities in Saudi Arabia, along n Z, et al. with the mode of information access.	2013	[73]
6.	The purpose of this	The study explored the knowledge and awareness about colorectal cancer (CRC) among undergraduate students of one of the leading universities in Saudi Arabia, along with the mode of information access.	2016	[74]
7.	Ann Hagell	There is very little in the way of systematic UK research on the health needs of students and their use of services, although there is a growing interest in the topic and the development of several position and policy papers. This has been driven in part by demographic changes that have led to an increase in educational participation in the 18-20 age groups in recent years.	2017	[75]
8.	Reichel KF and Spehar N, et al.	Study includes 2000 undergraduate students at the three institutions of higher education in Zagreb. The goal of our study was to determine the level of physical activity over the last seven days with the criterion of minimum of 30 minutes of physical activity per day, and if there is difference between genders of students from different faculties.	2014	[76]
9.	The purpose of this	Communicare Health Center is a comprehensive health center that serves the underserved population of San Antonio. It provides many different services to its patients including dental care, eye care, women services, and general medical services. Diabetes and hypertension are the two major chronic diseases at the center.	2016	[77]
10.	Amorha KC and Jiburu EM, et al.	Smoking incidence among youths in Nigeria is on the rise and cigarette smoking is considered one of the largest causes of preventable morbidity and mortality globally.	2017	[78]
11.	Usha Kuruganti.	As part of the undergraduate curriculum, the Faculty of Kinesiology at the University of New Brunswick (UNB) requires all students to take an undergraduate course in physical activity, Health and wellness in their third year of study.	2014	[79]
12.	Usha Kuruganti.	As part of the undergraduate curriculum, the Faculty of Kinesiology at the University of New Brunswick (UNB) requires all students to take an undergraduate course in physical activity, Health and wellness in their third year of study.	2013	[80]
13.	Teller PP and DiGenova L.	The health care field literature, clinical practice, their own internal student surveys and the availability. In order to better support our students in a holistic way, They required more information as a health check of our student population, as well as their health promotion needs and desires to better guide our efforts.	2014	[81]
14.	Jon Williamson.	the main purpose of the study was to determine if an increased "awareness" of PA-related health benefits, as contrasted with educational level alone, was associated with greater PA participation.	2013	[82]
15.	Khaldoun M. Aldiabbat d Nasir A. Matani, et al.	University students worldwide are at risk for mental health disorders because of the range of stressors they experience. The aim of this background paper is to convey salient evidence about this issue to university administrators, educators, and healthcare providers, and to offer a few illustrative examples of interventions they might consider to address it.	2014	[83]
16.	Singh J and Begum D.	The purpose of this study was to ascertain students' awareness of health information initiatives of the governments of India and Bangladesh. Fifty graduates each were randomly chosen as sample in both th Universities.	2010	[84]
17.	Omobuwa O and Alebiosu OC.	Diabetes mellitus (DM) is a disease of global public health importance whose prevention and control may be largely influenced by improved knowledge amongst populations. This study set out to examine the level of awareness, knowledge, and some risk factors for developing DM among students of the Osun State University, Nigeria.	2014	[85]

18.	Gurung Aand Priyadarshin i S, et al.	Sexual harassment is a problem that is concerned with public health and has a serious effects on the students' dignity, physical as well as mental health. Knowledge on Sexual harassment equips the students to face such situation courageously.	2016	[86]
19.	Al Junaibi RM and Khan SA.	The awareness and knowledge of female university students about breast cancer and Breast self examination. This pilot study may help in evaluating the impact of ongoing educational programs for breast cancer awareness in Oman.	2016	[86]
20.	Waheed Z and Saeed M. et al.	The aim of this study is to evaluate the extent of awareness and practices of oral hygiene among undergraduate female students in a residential college of a university at Malaysia and to assess the need for awareness programs about oral hygiene.	2016	[86]
21.	Melinda M. Varhegyi and Denise M. Jepsen.	The attitudes of undergraduate university students towards postgraduate studies and little is known about the extent of undergraduates' awareness of postgraduate degrees. Research in the careers arena has revealed inconsistencies in factors that impact on a student's decision to pursue postgraduate study.	2016	[86]
22	Rehman S and Khan M.	study showed that dental students were more likely to identify tobacco and alcohol use as the main risk factors for oral cancer. When asked about the signs of oral cancer, a greater number of medical students than dental students were able to name leukoplakia and erythroplakia.	2016	[86]

Materials and Methods

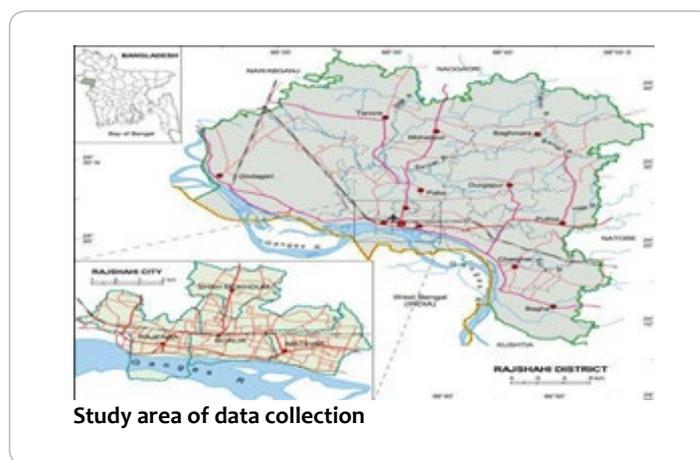
Study design

The study was area-based, cross-sectional and descriptive in nature. Literature review shows that, there was significant study at recent time to show the scenario of Health practice and knowledge in the northern area of Bangladesh. As this part of the country is a peripheral region and is derived from many of the modern facilities and education, our study was aimed to bring about the original scenario of their knowledge and practice regarding health issue. The voluntary interviewer of this study was the student of Department of Pharmacy, Varendra Univesity which is the leading private university of the Northern area of Bangladesh and is situated at Rajshahi, which is the divisional

town for the area. The interviewer was to carry the study at her own areas which is one of the major reasons for selecting the study area.

Geography and demography of the study area

Rajshahi district was established dividing by Naogaon district to the north, Kushtia district, west Bangal (India state), and the Ganga River to the south, Natore district to theeast and Chapainawabganj district to the west. The Geo position of the district is between 24007' to 24043' North latitude and between 88017' to 88058' East longitude. The area of Rajshahi is 2425.37 Sq Km.^[66]



Sample design

For the survey part of the study, age stratified sampling technique was used for selecting the study sample. Both male and female adult with an age range is 18 to 24 years were interviewed, which are the undergraduate student of Varendra University, Rajshahi. Samples were from

residence of District town, Upazila town and Village. The number of participants was selected randomly from all departments. A total of 750 participants were interviewed with asking the questions individually



Varendra University, Rajshahi.

Data collection

The research involved a qualitative research method approach involving 50 in-depth interviews from the student which maximum home district is Rajshahi and some of them are out of Rajshahi district. The residence of study sample is Rajshahi, Bagmara, Bogra, Chapainawabgonj, Durgapur, Ishwardi, Naogaon, Nator, Pabna, Puthia, Rajbarihat & Sirajgonj. The research methodology used direct interviews and discussion as the primary research instruments. Data were collected from samples whose aged ranged from 18-24 years old. Interviews were chosen as the most appropriate form of data collection. The structured format of the interviews enabled particular contextual themes that contributed to the findings of the study. Field notes taken throughout the research were used to strengthen understandings of particular contexts. Data was collected on April to May 2018. The following format was used to collect the data; all the questions were translated in Bangali while asking to the participants for their easy understanding.

Ethical consideration

All the data collected was used only for research purpose and respondents were assured that, any unauthorized use of the data that can affect the confidentially will be strongly prohibited. All the volunteers participated willingly and their own coast to collect data and interviewed only the willing participants. With written consent as the human subjects only participated in this study, this survey based research did not take any further approval from institution ethics committee.

Statistical analysis

Descriptive statistics were applied to the collected data using Microsoft Excel 2013 software.

Survey question

The following format was sued to collect the data all the questions were translated in Bengali while asking to the participants for their easy understanding.

Department of Pharmacy
Varendra University
Survey study on

Health awareness of undergraduate students in Varendra University, Rajshahi

General Information

Name: _____ Department: _____
Age: _____ Years Residence: _____
Gender: Male Female

1. Do you undergo periodic health checkup?
 Yes No
If yes, why? _____ If no, why? _____
 For normal checkup Not aware of checkup
 For chronic disease Not facing any disease in last few years
 Financial problems Service not readily available
 Others _____

2. Do you smoke/drink/take tobacco regularly?
 Yes No
If yes, what? _____
 Cigarette Tobacco Alcohol Other Narcotic

3. Do you know your -

Blood pressure	Glucose level	Blood group	Body weight
<input type="checkbox"/> Yes <input type="checkbox"/> No			

4. Do you take your food in time?
 Yes No Irregularly

5. Do you plan your diet to meet nutritional requirement?
 Yes No Irregularly

6. Do you undergo regular exercise/physical activities?
 Yes No

7. How do you treat your disease?
 By self medication By the prescription of a doctor Sometimes with self medication & sometimes with prescription of a doctor Others _____

8. Have you faced any chronic/severe disease in last 10 year?
 Yes No
If yes,
How many times? _____
Which type of disease? _____

9. Have you received any counseling on health awareness/ disease management from health professional yet?
 Yes No

Agreement

• I am willingly providing my information for the survey. _____ **Signature of the participant**

• All the information is collected for research use only and any unauthorized use that can hamper/disclose the confidentiality/personal information of the participant will be strongly prohibited.

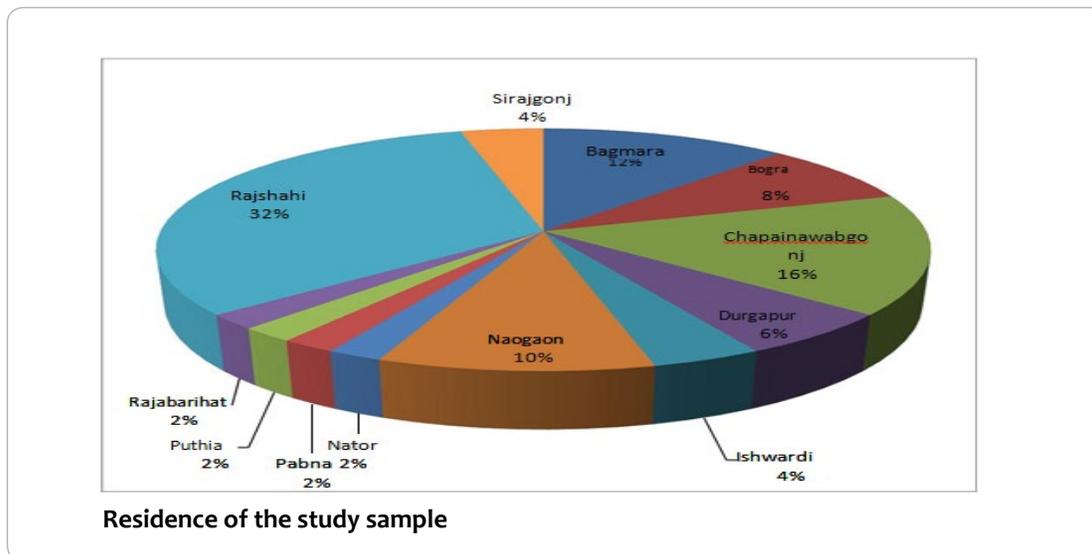
_____ **Signature of the data collector** Date: _____

Survey coordinators:
Dr. Md. Ekramul Islam, G.M. Masud Pervez, Md. Saowar Hossain, Md. Khairul Islam
Department of Pharmacy, Varendra University, Rajshahi-6204.

Results

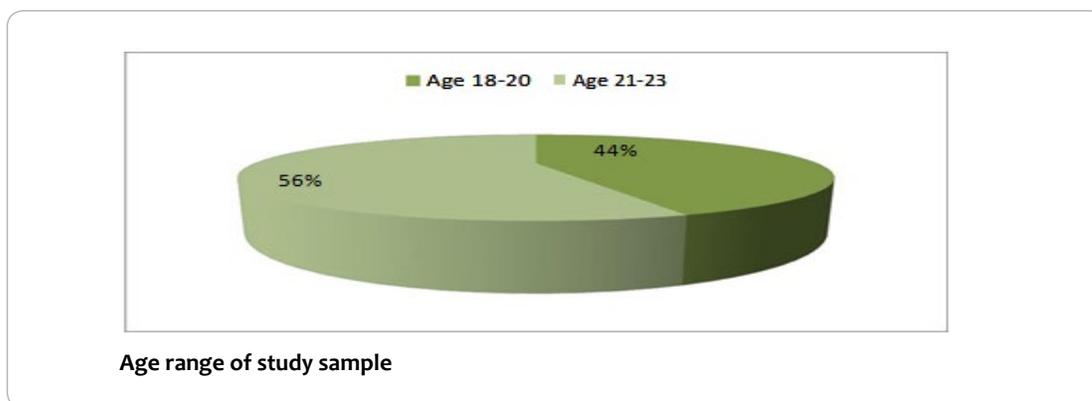
Residence of the study sample

For the purpose of this study we collect data information from the student which maximum home district is Rajshahi. But some of them are out of Rajshahi district. In this report the survey found 32% students residence is Rajshahi city. On the other hand from 16% in Chapainawabgonj, 12% in Bagmara, 10% in Naogaon, 8% in Bogra, 6% in Durgapur, 4% in Ishwardi and Sirajgonj, 2% in Nator, Pabna, Puthia and Rajabarihat.



Age range of study sample

In this study report shows that both male and female young people with an age of ≤ 24 years were interviewed. Data are collected for this study from undergraduate student of "Varendra University". A total of 750 participants are interviewed with asking the question individually. Data collected from sample whose age range is, age 18-20 is 44% and age 21-23 is 56%.

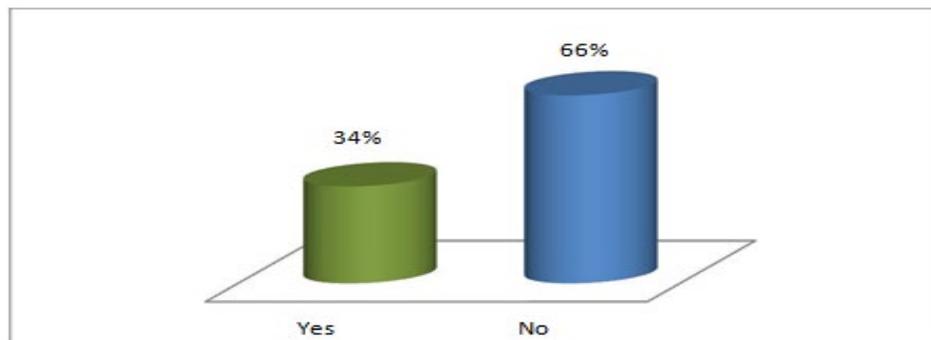


Periodic health checkup

Health is one of the basic requirements for improving in the quality of life. Periodic health checkup is important for young people. Result obtained in this report shows that that maximum sample (66%) don't take any periodic health checkup. Only a few sample (34%) monitoring its health checkup on a regular basis. The sample which results is "Yes" they go for normal checkup and which result is "No" they not go regular checkup because they not face any disease in last few years.

Smoke or Drink or take Tobacco

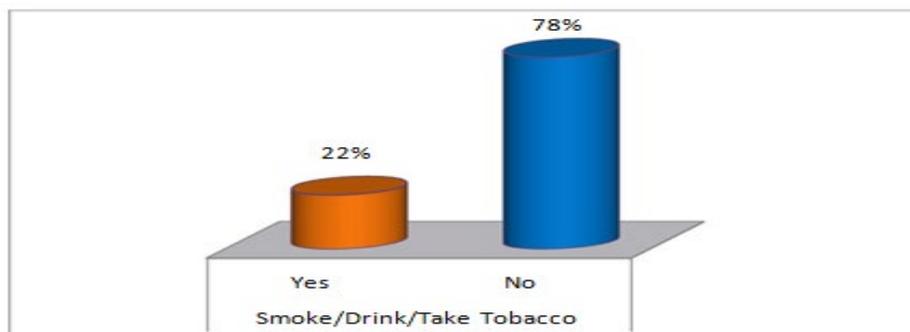
Smoking or drinking or taking tobacco negatively affects mental and physical health. In this report survey areas, found majority of the student sample are 78% not take Smoke/ Drink/ take Tobacco, rest of the student sample are 22% take Smoke/ Drink/ take Tobacco.



Smoke or Drink or take Tobacco

Knowing about

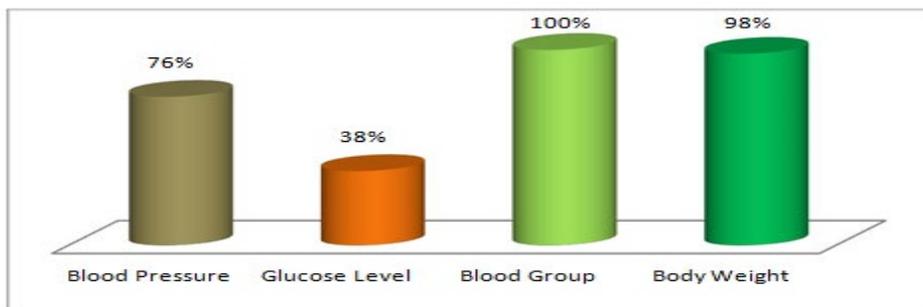
In this result shows that about 76% know there Blood pressure, 38% know there Glucose level, 100% know there Blood group and 98% know their Body weight.



Smoke or Drink or take Tobacco

Not Knowing about

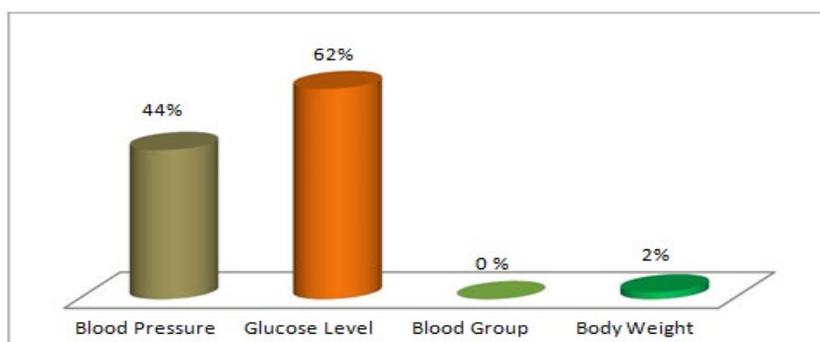
In this result shows that about 44% not know there Blood pressure, 62% not know there Glucose level, 0% not know there Blood group and 2% not know their Body weight



Knowing about blood pressure/glucose level/blood group/body weight

Not Knowing about

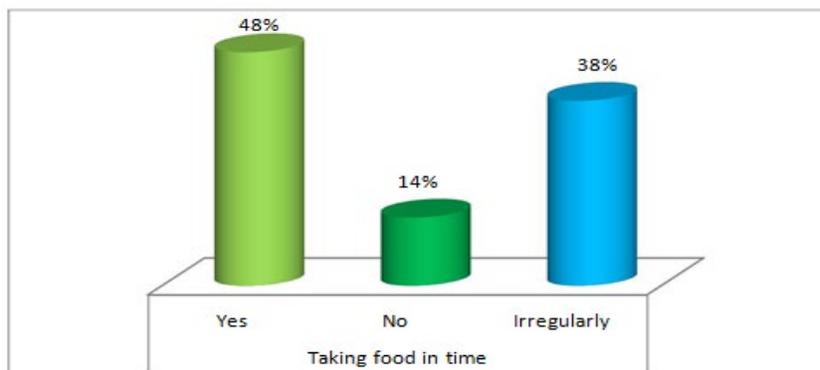
In this result shows that about 44% not know there Blood pressure, 62% not know there Glucose level, 0% not know there Blood group and 2% not know their Body weight



Not knowing about blood pressure/glucose level/blood group/body weight

Taking food in time

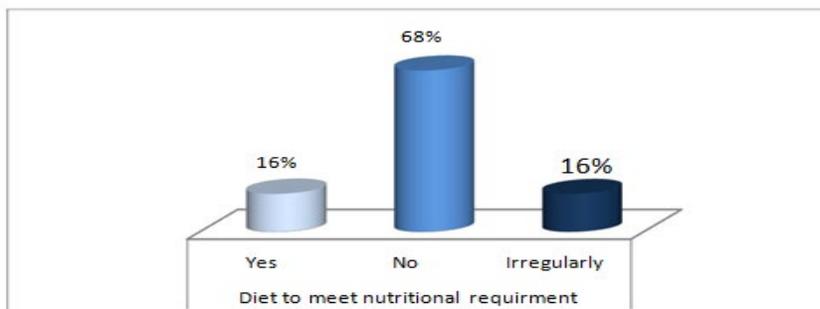
Taking regularly food are key factors that impact on the health of young people and a healthy diet and lifestyle can help prevent all chronic disease. Result obtain in this study report that 48% participants are taking food in time, 38% are taking food irregularly and 14% are not getting food in time.



Taking food in time

Diet to meet nutritional requirement

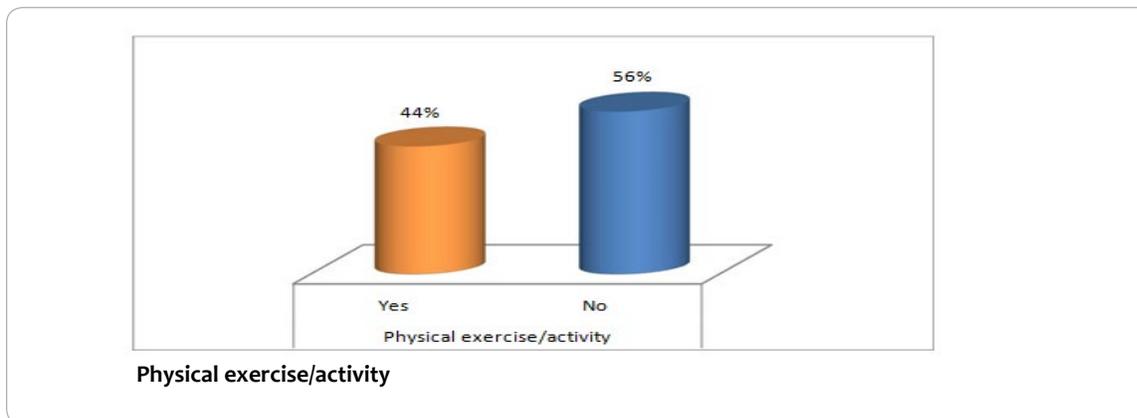
Result obtains in this survey that 16% participant diet to meet regular nutritional requirement. About 68% participants are not diet to meet regular nutritional requirement and 16% are irregular



Diet to meet nutritional requirement

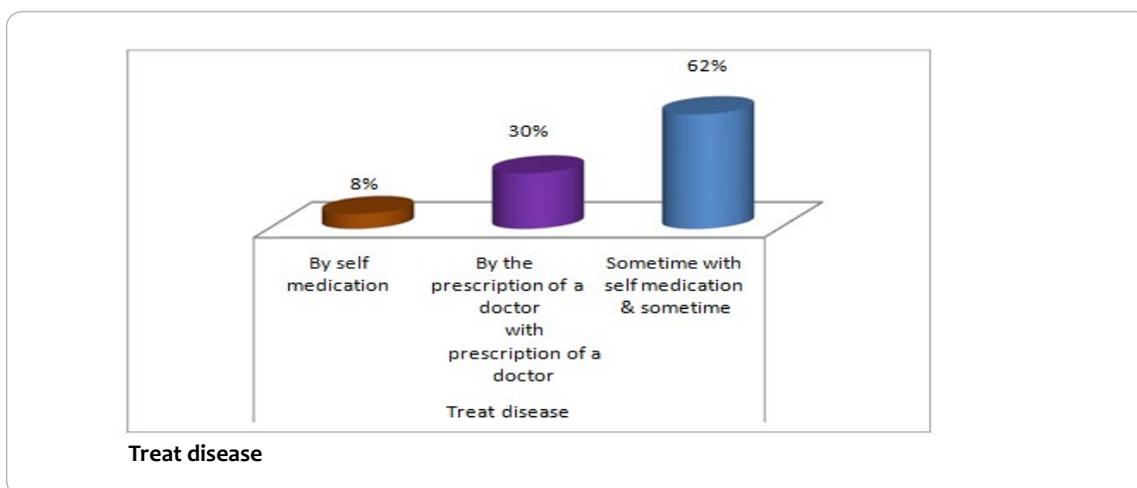
Physical exercise/activity

Result obtain in this survey that 44% participants undergo regular exercise or physical activity. 56% participants are not undergoing regular exercise or physical activity.



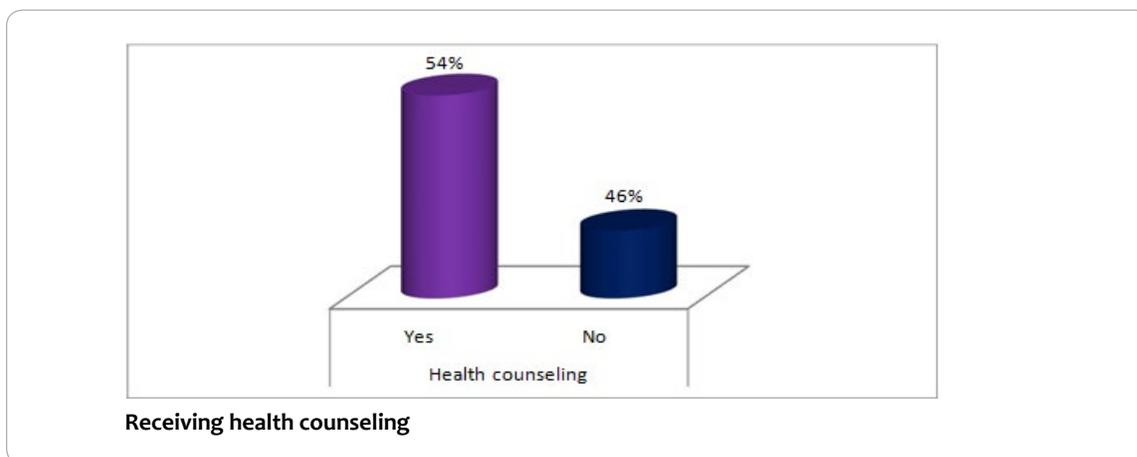
Treat disease

About 8% sample people treat their disease by self medication. On the other hand 30% people treat their disease by the prescription of a doctor and 62% people follow sometime with self medication & sometime with prescription of a doctor.



Receiving health counseling

Almost 54% people received counseling on health awareness from health professional and about 46% people don't receiving council from health-care



Discussion

This study explored health and social status of young people both male and female student of "Varendra University", Rajshahi. In order to assess the health and social status of the students, they were asked about some health and social related question such as health check-up, smoking habit, process of treating disease, counseling on health awareness etc.

Result has obtained in our report that participants of young undergraduate student don't take any periodic health checkup. Only a few participants undergo periodic health checkup on a regular basis. According to our studies participants who are received periodic health checkup when they have chronic disease like diabetics, heart disease and kidney disease. Participants who don't take periodic health checkup most of them are not aware about checkup. This result also justified that females are more caring for their external appearance than males. Also, this study showed that there were significant differences in the level of health awareness within the nutrition and body aspects ascribed to the variable of academic specialty, whereas there were no significant differences in the level of health awareness ascribed to the variable of academic specialty within the domain of practicing exercises and personal health. This result can be justified through the nature of courses scientific colleges' students have compared to the students of literary colleges.

In the survey of three UK universities reported that a third of students had a long-standing illness. In the General Lifestyle Survey (Office for National Statistics, 2015) 15% of 16-24 year olds reported that they had a long-standing illness.^[91] General population surveys of mental health problems in this age group suggest around one in 10 will have a mental health problem. Other statistics indicate that approximately 21,000 of those aged 10-19 have diabetes, 800,000 have asthma, one in 220 will have epilepsy, and eczema affects around 1 in 12.^[92]

According to the CDC Behavioral Risk Factor Surveillance System, for the period of 2001-2003, 54% of U.S. adults did not engage in the recommended levels of PA.^[93] This number was reported at 51% in 2011.^[94] Despite the health implications of physical inactivity, as noted previously, the numbers of adults engaged in the recommended levels of PA only increased by 3% between 2003 and 2011. It is well recognized that there can be numerous barriers related to the lack of participation in leisure-time physical activity. In multiple studies, physical inactivity has been found to be more prevalent in non-Hispanic blacks and Hispanics.^[95, 96, 97] There is no question that the issue is complex and can involve personal, social, environmental and educational factors.^[98]

One of the leading diseases in the United States, hypertension afflicts nearly 76.4 million adults. The Center for Disease Control reported that in 2010, 38.9 million patients who visited physicians' offices were diagnosed with hypertension. If not treated in a timely manner, the disease can, unfortunately, lead to death.¹ According to the CDC, there were 26,634 deaths in the year 2010.^[99] However, the effects of hypertension can be improved by proper diet and exercise.⁹ Small changes in a patient's attitude and behavior can help minimize the negative effects of hypertension. Patients should adopt good diet and effective exercise as part of their lifestyle. Exercise, particularly cardiovascular exercise, can help in the prevention and treatment of hypertension. Patients need to perform simple vascular exercises for a few hours each week.^[100]

According to the University of Nigeria About half of the students had adequate knowledge of cigarette, cigarette smoking and its implications and just half of them had bad attitudes towards smoking (i.e., attitudes that could make them start smoking or not quit smoking cigarettes). More than a fifth of the respondents had smoked cigarette

before, even if it meant trying a few puffs once or twice. Of this, about a tenth had smoked in the last month and less smoked cigarette daily. Students who resided off campus exhibited a greater tendency to start smoking compared to those who resided in hostels on campus. Peer pressure and close associations could influence cigarette smoking habits.^[101]

The results from this study suggested that the health and wellness course improved students' knowledge of the Canadian Community Health Survey and public health agencies. Students also indicated that the course was important to their academic program and should be required in the undergraduate program. Interestingly, students showed significant improvement in ratings in their self-assessment of knowledge of physical activity and chronic disease suggesting a positive change in their perceptions and attitudes towards healthy behaviors. Used a cross-sectional mail survey and compared alumni from a college that required all students to take a lifetime health and physical education course to alumni from a college that did not require this type of course. They found that the lifetime health and physical education course did have a positive effect on selected health knowledge; attitudes and behaviors compared to those were not exposed. Specifically, they found that those that took the course were more likely to know their blood pressure, blood cholesterol, and recommended dietary intake, than the comparison group. In addition, the course positively influenced students' attitudes toward exercise, eating and smoking. While their study had a much larger sample size (n= 979 completed surveys) than the research presented here (n= 35), the results showed similar findings. They found that a course in community health improved the students' knowledge and positive attitudes towards health promotion and public health.^[102]

The study revealed that sexual harassment existed in the University of Zambia. Majority of the subjects (71.5%) had knowledge about sexual harassment, whereas 5.8% did not have knowledge about sexual harassment. About 16% of the students were not sure about their knowledge on sexual harassment and 3% of the subjects did not responded to the questionnaire. There was no significant association between the gender and the knowledge about sexual harassment (p=0.27).^[103] the present study found that majority of the undergraduate students 336 (82.4%) had average knowledge, 54 (13.2%) had good knowledge and 18 (4.4%) had poor knowledge.

A cross-sectional study was conducted by Abeywardene A. et al in Sri Lanka among 242 schoolboys aged 14-19 years from two Colombo district schools to assess the knowledge on sexual harassment and sexual abuse. This study showed a high prevalence of sexual harassment in the schoolboys on par with global figures. The knowledge on sexual abuse was low and on sexual harassment it was extremely low. Only 3.7% had knowledge on sexual harassment.^[104]

Oral health literacy programs play an important role in providing awareness about oral health and controlling oral disease therefore, the present study was conducted in order to investigate about knowledge, attitude and practices of oral hygiene in a residential college of a Malaysian university and the need to organize awareness programs. The results indicated that the majority of the respondents used toothpaste and brush as primary tool for cleaning their teeth, while dental floss was used sparingly, which is in compliance with the previous studies.^[105, 106] Nevertheless, majority of the respondents had never used Miswak indicating that either the respondents were not aware of Miswak or they intentionally preferred toothbrush to Miswak. This is similar to what has been reported previously but contradictory with few of the studies. Further, it can also be concluded from the studies that Miswak is more frequently used by males as compared to fe-

males. Other than the religious obligation in Islam, Miswak should be encouraged along with toothbrush on daily basis keeping in view the multiple scientific advantages attached to it.^[107] Oral cancer is a lethal disease that has progressively become global menace. Oral cancer is a common problem in the region. It is the third most common cancer after bronchogenic carcinoma in males and breast carcinoma in females.^[108]

The results of our study showed that a significant number of medical and dentals students were aware that oral squalors cell carcinoma is the most common oral malignancy where squalors cell carcinoma was the most frequently observed oral tumor among Spanish dental students.^[109] However; another study conducted among dentists in Italy, one third of them indicated the most common form of oral cancer. The reason of better results could be due to the fact that our study population was 100 students whereas the study conducted in Italy was carried out amongst 1000 dentists which is comparatively a larger sample size.^[110]

In the present survey, dental students were more likely to identify tobacco and alcohol as main risk factors for oral cancer than medical students These findings are consistent with reports from Iran, Spain, UK, and in a study among doctors and dentists from North East of England.¹⁶ The reason for this could be that dental students are more well informed about oral cancer.^[109, 111, 112, 113]

Health is an important aspect of human life. As age progress virtually young both male and female undergraduate university student suffer from some different types of health problem due to the health awareness. Health education establishes People's awareness, skills, and encourages them to adopt positive attitudes towards their wellbeing. Health education raises students' knowledge about physical, mental, emotional and social health. It motivates youth to improve and maintain their health, prevent diseases, and avoid unhealthy behaviors. Health education extends the inspiration and motivation towards the first crucial aspects of life sustenance, maintenance and improves the productivity and standard of living of people around the globe. Knowledge and experience are necessary, but attitude to students and teaching skills are important too.

Conclusion

Result has obtained in our report that participants of young undergraduate student don't take any periodic health checkup. Only a few participants undergo periodic health checkup on a regular basis. According to our studies participants who are received periodic health checkup when they have chronic disease like diabetics, heart disease and kidney disease. Participants who don't take periodic health checkup most of them are not aware about checkup. This result also justified that female student are more caring for their external appearance than male student. Smoking or drinking or taking tobacco negatively affects mental and physical health. Result shows that most of students are out of smoking habit. Blood group and Body weight is known to all but maximum student not knowing about their Blood pressure and Glucose level. Taking regularly food are key factors that impact on the health of young people and a healthy diet and lifestyle can help prevent all chronic disease. Only 50% percent student aware about their food habit. A little amount of student treats their disease by self medication, maximum student are follow sometime with self medication & sometime with prescription of a doctor. But before take any step to treat disease, it is necessary to counseling on health awareness from health professional. Health is an important aspect of human life. As age progress virtually young both male and female undergraduate university student suffer from some different types of health problem due to the health awareness.

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