Assessment of Healthy Life Style among Medical Students in Alzaeim Alazhari University, Khartoum, Sudan 2021-2022

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Abstract

Introduction: *Lifestyle is the way which a person lives. This includes patterns of social relations, consumption, entertainment and dress. The term lifestyle also reflects an individual's attitudes, beliefs and, essentially, the way the person is perceived by himself/herself and, at times, also how he/she is perceived by others.*

Methodology: *Descriptive cross sectional, institutional based study. Targeting under graduated medical student of Alzaeim Alazhari university. Sampling method is Simple randomized sampling of 137 out of 985 medical stu-dents. The Dependent Variables are exercise/ diet/ sleep/ bad habit/ chronic illness. The Independent are age/ gender/ drug use. Data presentation by self-administrated Questionnaires and analyzed by (SPSS). Version25.*

Results: *Most of participants aged from 23-25 years old, most are male, with good exercise history and good sleep history, high dietary quality. Most of participants have stress while least have bad habits and chronic dis-eases.*
Conclusion: *good lifestyle can reflect the health status. However, it can be determining by exercise, dietary his-tory, sleep quality and bad habit in relation with the presence of chronic diseases. Most of participants have a good lifestyle and negative history of chronic diseases.*

1. Background

Doctors have a special role in helping patients to changes their health life style to be more credible and effective if they are role models [1]. The greatest challenge of medicine at the beginning of the third millennium is dealing with the epidemics of chronic diseases that are caused or exacerbated by poor-quality lifestyle. The health behavior of medical students is crucially important not only for their own health but also for their future patients' health [2]. Researches show that healthier personal practice during medical school positively predicts physicians [3]. The average life expectancy in the world has increased substantially in the past few decades [4]. The aging of the population has led to a high prevalence of chronic diseases such as diabetes, cardiovascular disease, and cancer. Although people live longer, older individuals often live with disabilities and chronic diseases. So attaining good health seeking behavior is an important element for prevention, early diagnosis and management of disease conditions. It helps in reducing cost, disability and death from diseases [5].

Health lifestyle is an important in define of health status, University students are in a period of growth and development that bridges adolescence and adulthood. This period witness many fast changes in the body, mind, and in social relationships. At this period, there are a lot of difficult life conditions and different lifestyles in the university environment. With the changes in study style and unfamiliar life conditions, many students acquire a wide range of unhealthy habits, such as inadequate nutritional intake, rest, and exercise [6].

Non-communicable diseases have important role in infectious disease decreasing which were the main cause of death in the past. Recently, non-communicable diseases, are responsible for 80% of the deaths in the world, usually occur as a result of lifestyle and behavioural risk factors such as smoking, physical inactivity, alcohol abuse, and unhealthy diet. These risk factors related to lifestyle are the main determinants of health such as physical environment and socioeconomic factors. Studies have shown that lifestyle and health status are related to utilization of health-care services and health expenses [7].

Lifestyle is the way which a person lives. This includes patterns of social relations, consumption, entertainment and dress. The

term lifestyle also reflects an individual's attitudes, beliefs and, essentially, the way the person is perceived by himself/herself and, at times, also how he/she is perceived by others. Adolescents are a unique population with specific health concerns and requirement. Adolescence is the peak age of onset for serious mental illness such as depression, overthinking and psychosis. Physical, emotional distress, social and sexual change makes the adolescents overloaded with stress, which can result in anxiety, withdrawal, aggression, poor coping skills and actual physical illness. Adolescents with all previously mentioned stresses, are vulnerable to university life changes, sudden environmental changes with responsibilities and transient growth [8].

Health promotion is the main strategy for encouraging people to adopt a healthy lifestyle and for preventing non-communicable diseases. Medical students, in particular, are expected to have an important role in health promotion in their near future as physicians. The good life style helps the people preventing non-communicable diseases ,so we conducted this study to evaluate the Healthy Life Style among Medical Student in alzaeim Alazhari University in 2021.

3. Materials and Method
3.1 Study Information:
3.1.1 Study Design
Observational, descriptive, cross sectional, institutional based study.

3.1.2 Study Area
Alzaeim Alazhari university, Bahri , Alsha'abia , next to the ministry of education branch Bahri , Khartoum North, Sudan Locate in 15.63.7795,32.526800 longitudinal line .

3.1.3 Study Setting
Alzaeim Alazhari university is a public university established at 1993 in memory of Ismail Alzhari. It is horizontal building, has 17 faculties: "medicine, nursing, engineering , agriculture , political science and strategic studies & medical laboratory & public health and environmental health & radiology & education & psychology & IT & urban science & law & economics and research and Sudanese study "and around (985) medical students and around 594 lecturers.

3.1.4 Study Population
Undergraduate student of Alzaeim Alazhari 2022.

3.1.4.1 Inclusion Criteria
Medical student
Both sex

3.1.4.2 Exclusion Criteria
Absent students in all duration of research
Non cooperative students

3.1.5 Study Time
A period of 7 months in December 2021 – Jun 2022

3.2 Samling Information:
3.2.1 Sampling Method
Simple randomized sampling

3.2.2 Sampling Frame:
Alzaeim Alazhari university medical students = 985

3.2.3 Sampling size:
$$n = (\frac{N}{1 + N(e)2})$$

n : is the sample size to be computed
N: is the population size
e: is the degree of accuracy desired (or accepted margin error) and it set to be (0.05)
n = 137 participants

3.3 Data Management
3.3.1 Data Collection Tools & Techniques:
Using google form self-administrated sectional piloted structural questionnaire developed by the researcher.

3.3.2 Variables
Dependent:
Exercise/ sleep/ habit and dietary history
Independent:
Age/ Gender

3.3.3 Data Analysis & Presentation:
Questionnaires completeness and validity were checked before data enter manually and analyzed by Statistical package of social services (SPSS). Version25

3.4 Ethical Consideration
Participants will not be exposed to risk factors that affect their lifestyle.
Participant's privacy will be insured and private information wouldn't be shared to public.
Respect of participant's culture taken in consideration This research would did not interfere the participants life style.
Researcher started to take participant's consent before collecting data The ethical approval of this study will be by department of community of faculty of medicine Alzaeim Alazhari University.

4. Results
A total sample of 137 participants were collected. 12.4% age from 17 – 19 years, 30.7% age from 20 – 22 years, 52% age from 23-25 and 5.1% 26 years and more . 40% of the participants female while 60% were male. Exercise 64.2% of the participants are doing exercising while 35.8% are not. 13.1% of participants exercise at gym while 30.7% play football, 5.1% jumping by rope, 8.8% dance, 3.6% walking, 2.9% running, 0.7% doing squat. 0.7% resistance, 4.4% exercise at home and 0.7% do stone stretch exercise. 53.3%

of participants exercise for 1-3 hours weekly while 16.1% 4-6 hours weekly and 6.65 more than 6 hours weekly. Sleep13.1% of the participants sleep less than 6 hrs. While 67.9% sleep from 6-8 hrs, and 19% sleep more than 8 hrs. 22.6% of participants go to sleep in the morning while 1.5% in the afternoon 75.2% at night and 0.7% in early morning. 41.6% of participants awake feeling rested while 21.2% don't awake feeling rested and 37.2% might awake feeling rested.

Eat 85% of the participants are meat eater while 11% are vegetarian and 4% are vegan. 7.3% of the participants have one meal per day while 53.3% have 2 meals, 33.6% have 3 meals and 5.8% have more than 3 meals. 15.3% of participants don't have snack while 50.4% have 1 snack, 24.8% have 2 snacks, 8% have 3 snacks and 1.5% have more than three snacks. 37.2% of participants feel restriction of diet because of preferences of other while 41.6% don't and 21.2% might feel that. 10.9% of participant's meal contain fruit while 19% vegetable, 21.9% whole grain, 30.7% protein, 15.3% dairy products, 1.5% high density lipid and 0.7% Mixture of many things or fast-food. 39.4% of participant's habits16.8% of the participants don't have any stress while 53.3% have exams stress, 27% have emotional stress, 0.7% have football matches stress, 1.5% have work stress and o.7% have social stress. 78.8% of participants don't have bad habit while 10.9% smoking cigarettes, 2.2% use tobaccos, 1.5% Alcohol consumption, 1.5% staying awake at night, 0.7% of them wasting time, eating unhealthy food, have low revision, have night crawling, have laziness , lack of time management and masturbate .

Drugs 84% of the participants don't use any drugs while 3.6% using ventolin, 2.2% useing paracetamol. 1.5% of them useing Cetirizine, mebeverine HCL, folic acid and multivitamins. 0.7% of them fetaferrol, insulin, antistin, esomeprazole and leprax, steroid and thyroxin.

Discussion
The study assess the lifestyle behavior among medical student of Alzaeim Alazhari University. Most of participants found to be in 23-25 age group, and male. In other studies participants were female. Furthermore, nutrition, and interpersonal relations subscale scores of male were lower than female patients, while physical activity subscale scores were higher in male patients.7 while in this current study, nutritional state and physical activities were higher in male.

The study first examine the exercise history of participants and the most of participants had an exercise routine last for 1-3 hours weekly and most are play football. Participants who were found to have an exercise routine are having a good health status which directly affect their life quality and good mental health. Furthermore they will experience a stress less life. While in the past study the results conducted in India by Raj S, Senjam SS, Singh showed that the North Indian college students had a reasonably healthy lifestyle, a higher frequency of eating fast food was observed, the majority reported that they have a routine exercise 7. Also in a

study conducted in Iran, showed that the majority of students had a routinely exercises with higher incidence in adolescents 8.

According to sleep pattern, most of participants were found to have a good sleep pattern, including 6-8 hours' sleep daily, at night and waking up feel rested. Good sleep pattern has impact on health status. Poor sleep patterns will be associated with anxiety, stress, and poor health status. Factors that affecting sleep pattern include exams, overthinking, sleeping at daytime, and laziness. As in the study in Iran showed that the status of health-promoting lifestyles in medical students was at a moderate level, with poor sleep pattern because of many reasons include studying, anxiety, playing, and waking up lately9.

Dietary history of participants was found to be poor, although there is variation on diet type. There were a percentages of vegetarian and vegan participants, most of them are having two meals per day with one snack and most of meals contain dietary product. In such growing age periods, students need a healthier diet than the one has been found. It's important to provide them with necessary vitamins, Mineral and other beneficial content in order to grow well and be capable to face responsibility and having a good health status. the longitudinal study in Spain among university students showed poor dietary history the majority of participant's meal contains fast food and soft drinks, with a small percentage of having fresh fruit juices and healthy food10.

Most of participants were found to have exams stress. Other stress was mentioned include emotional/ social/ work and football matches. However, most of participants don't have bad habit, other who have included cigarette smoking, masturbate, laziness and lack of time management. Acquiring good habits are extremely important in lifestyle modification. Give healthier life and mental state, also organize time and decreasing stress. Participants who were found to have good habit are less vulnerable for anxiety. This result confirmed with a study conducted in Japan, demonstrate that most of (76%) college students have stress and moderate life style. Due to exams or other responsibilities they had. 34% are smokers, 45% had work stress and 61% had emotional stress. This reflecting the effect of stress on their life and gaining habits 6.

5.3 Conclusion
Among Alzaeim Alazhari medical students, there is a good exercise history and sleep pattern, imbalance diet and increased stress. Decreased bad habit and chronic diseases. Reflecting a moderate lifestyle behaviour and health status.

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