



Studies on Male Adolescent Health-Risk Behaviors in East Kassala Locality - Kassala State, Sudan

Moneer Ali Abdallah¹, Sara Lavinia Braiar² and Almoeiz Yousif Hammad^{3*}

¹*Napata College, Kafouri, Khartoum, Sudan.*

²*Alneelain University, Sudan.*

³*Al-manhal Academic of Science, Sudan.*

Authors' contributions

This work was carried out in collaboration among all authors. Author MAA designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors SLB and AYH managed the analyses of the study. All authors read and approved the final manuscript.

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ABSTRACT

Adolescent health risk behaviors are becoming a serious health care as adolescents engage in health-compromising behaviors at a high frequency in several crucial domains. One domain involves tobacco, alcohol, and illicit drug use. This is a cross section study covered 405 adolescents recruited randomly from Kassala locality, Kassala state, Sudan 2016, data was collected via closed ended standardized questionnaires. Pre testing was done to ensure quality survey instruments and fieldwork procedures were conducted. The fieldwork was coordinated by the Research Team Members, who will also provide the overall supervision during fieldwork to ensure quality and consistency among the teams. Ten data collectors was carrying out the fieldwork. Adolescent participating in the study showed variations in information about behavioral and psychological changes associated with adolescence, concerning the knowledge of the male adolescences regarding the associated with health changes with adolescences, about 89.5% knew those change and effects in general and 44% of them thought that the changes are physical while 25.2% thought that these changes are Psychological & emotional.

*Corresponding author: E-mail: Almoeiz7@gmail.com;

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1. INTRODUCTION

The energy, ideas and aspirations of adolescents and young people are boundless and ceaseless. Adolescents are our important assets and resources; they are our future and hope. They represent a positive force in society, now and for the future. About one fifth of the world's population are adolescents, aged 10-19 years. They face many challenges that put them on the path of ill-health. Today, the health of young people and the adults they will become is critically linked to the health-related behaviors they choose to adopt [1].

Adolescence (from Latin *adolescere*, meaning 'to grow up') is a transitional stage of physical and psychological development that generally occurs during the period from puberty to legal adulthood (age of majority) [1]. The World Health Organization (WHO) defines an adolescent as any person between ages 10 and 19 [1,2,3]. This age range falls within WHO's definition of young people, which refers to individuals between ages 10 and 24. A thorough understanding of adolescence in society depends on information from various perspectives, including psychology, biology, history, sociology, education, and anthropology. In Sudan, the 5th Population and Housing Census in 2008 shows that there are about 9.3million adolescents aged 10 through 19 years (4.9 million are male and 4.4 million are female). That means almost 24% of the Sudan population of 39.2 million in the year 2008 will be aged 10 through 19. That means about one in four people in Sudan are adolescents. Unfortunately, till now there is no adequate and obvious data in Sudan about the prevalence and level of health-related behaviors practiced by adolescents and young people that put their health at risk [1].

Within all of these perspectives, adolescence is viewed as a transitional period between childhood and adulthood, whose cultural purpose is the preparation of children for adult roles [4]. It is a period of multiple transitions involving education, training, employment, and unemployment, as well as transitions from one living circumstance to another [5]. Adolescence is usually associated with the teenage years, but its physical, psychological or cultural expressions may begin earlier and end later [6-9]. For

example, puberty now typically begins during preadolescence, particularly in females [6,10-13]. Physical growth (particularly in males) and cognitive development can extend into the early twenties. Thus, age provides only a rough marker of adolescence, and scholars have found it difficult to agree upon a precise definition of adolescence [9,10,11,14]. A number of health risk behaviors begin in adolescence that affect health both at the time and in later years. Some of these behaviors contribute to the leading causes of mortality and morbidity among adolescents, such as suicide attempts, injuries and the various risks associated with unprotected sexual behavior, conditions related to tobacco or alcohol use and overweight or obesity [15–17]. The majority of adolescent death and illness are caused by risk behaviors that can be grouped into four categories: tobacco, alcohol and drug use; dietary behaviors; physical activity; and sexual behaviors [18,19]. These key health-risk behaviors are often the focus of prevention strategies for non-communicable diseases and some sexual conditions [20,21]. Behavior change is based on social cognitive theory and social-ecological model of health, which emphasizes a dynamic interaction among cognitive, behavioral, and environmental factors over the life course of individuals, families, and communities contributing to the health of populations [18]. An understanding of risk and protective factors at multiple levels, including the adolescent, family, school, and community, has influenced intervention development [16]. At school, a multi-behavior approach is the most effective way to promote healthy behaviors among adolescents [18,19].

2. MATERIALS AND METHODS

This is Cross sectional community based study. Kassala state is the one of the eastern Sudan states encompassing 12 localities. Kassala state is bordered by Eritrea and Ethiopia to the east, Red Sea state to the north, Khartoum and River Nile states to the west and Gadarif state to the south west. Also there is a refugee camp in east Kassala locality.

2.1 Data Collection

For 405 participating, data was collected via closed ended standardized questionnaires. Pre testing was done to ensure quality survey

instruments and fieldwork procedures were conducted. The fieldwork was coordinated by the Research Team Members, who will also provide the overall supervision during fieldwork to ensure quality and consistency among the teams. Ten data collectors were carry out the fieldwork.

2.2 Data Management

Data had been entered, cleaned, and analyzed using SPSS version 22.0.

Descriptive statistics in term of frequency tables with percentages and graphs. Means and standard deviations had been presented with relevant graphical representation for quantitative data.

Bi-variable analysis to determine the associations between the main outcome variable (prevalence of risky behaviors) and the other relevant factors (participants' characteristics/causes) with Chi square test (for categorical variables) and t- test (quantitative variables) statistical tests.

3. RESULTS

Concerning the knowledge of the male adolescences regarding the associated with health changes with adolescences, about 89.5% knew those change and effects in general and 44% of them thought that the changes are physical while 25.2% thought that these changes are Psychological & emotional. The majority of them agreed that adolescent require increased nutritional needs while more than half 51.7% of them have not three meals per day regularly. In general, the study participants could list some benefits for physical activities for their health. About 69.3% of them thought that physical activities can results in Promotion of well-being and health but 45.1% thought it is a way of got a good body shape. The availability of suitable place for training or to perform physical activities was identified as the major barrier in 93.0%. Regarding their knowledge toward reproductive health, 23.5% were not really aware of it, even the aware participants, thought that the reproductive health is related with maternal health in 14.4% and management of infertility in 46.2%.

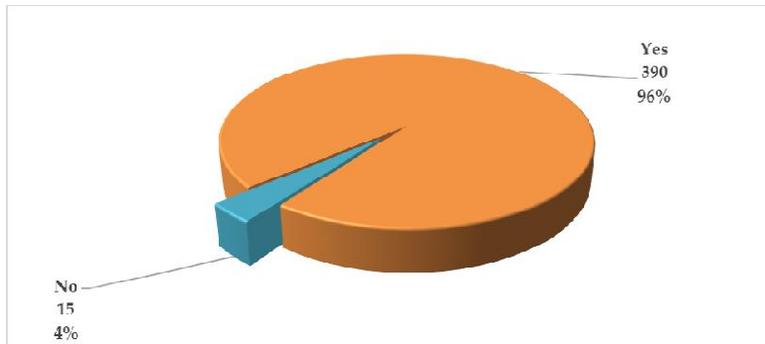


Fig. 1. Distribution of the study participants according to it they had heard about HIV/AIDS

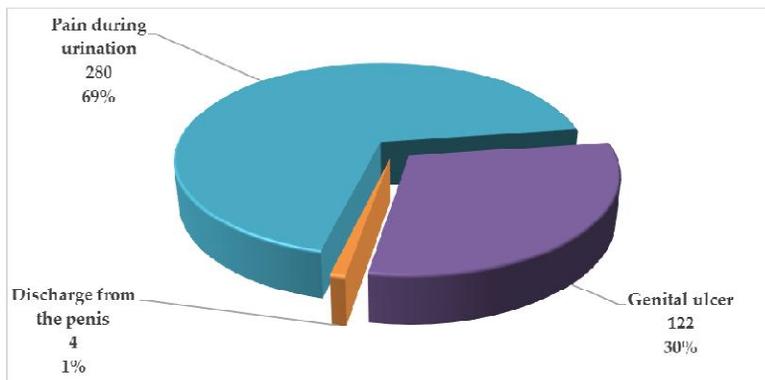


Fig. 2. Distribution of the study participants according to main signs of STIs they knew

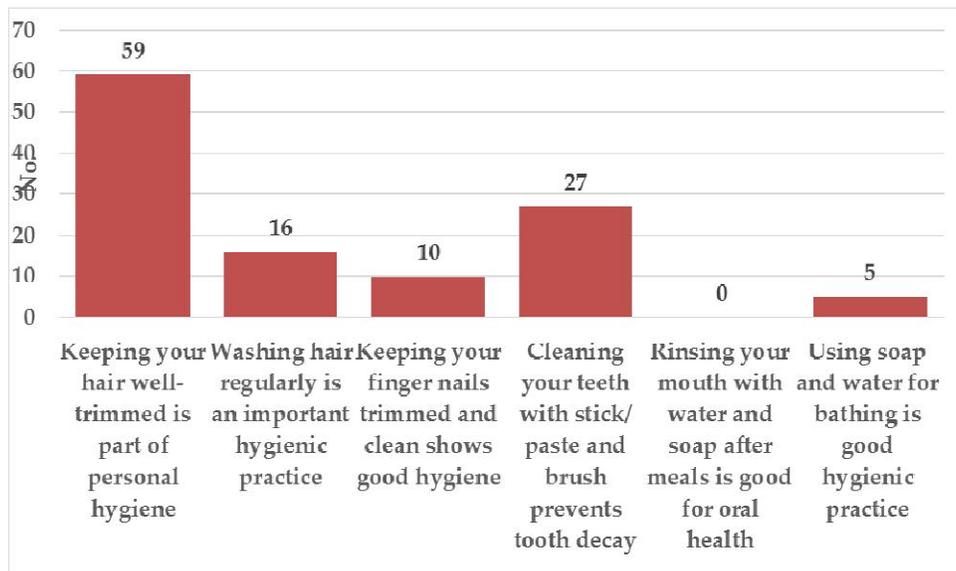


Fig. 3. Distribution of the study participants according to personal hygiene knowledge

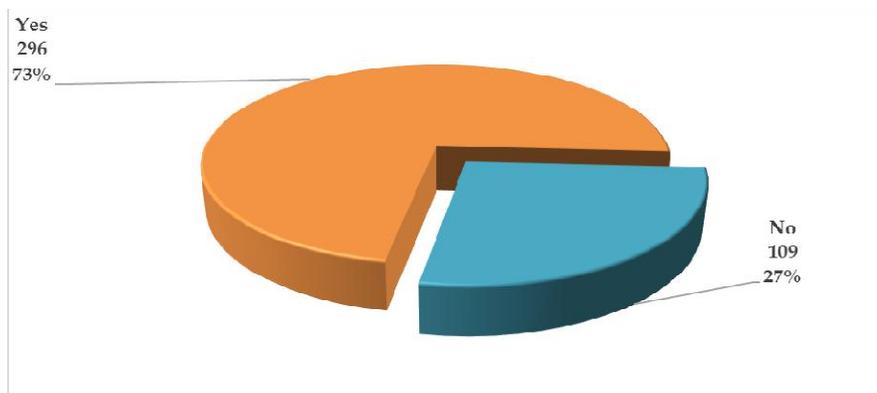


Fig. 4. Distribution of the study participants according to smoking before

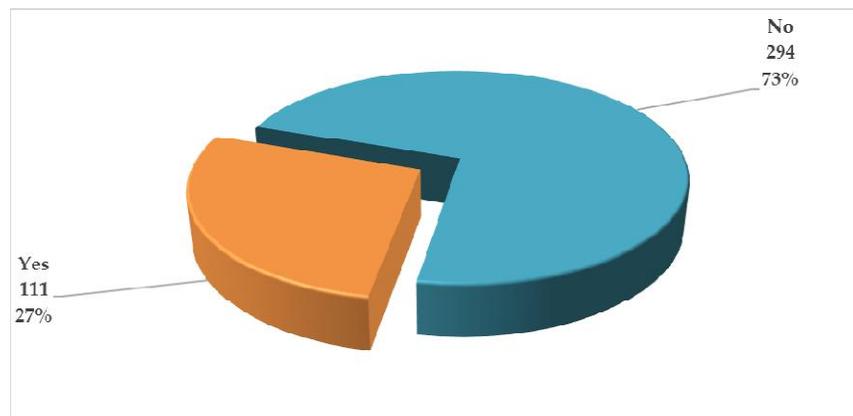


Fig. 5. Distribution of the study participants according to snuffing before

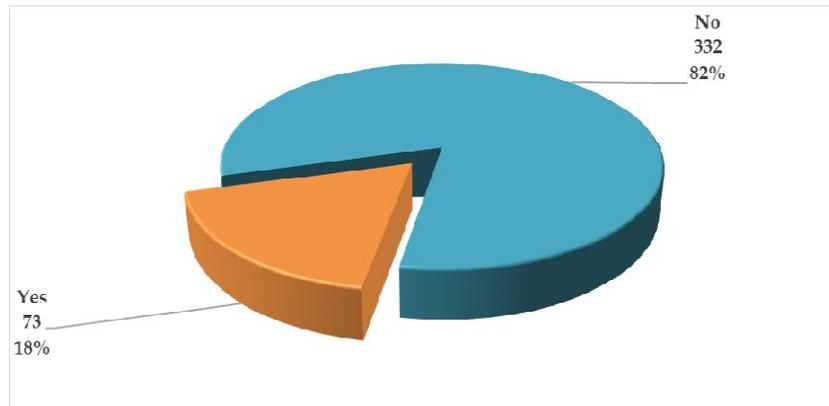


Fig. 6. Distribution of the study participants according to exposure for physical trauma

4. DISCUSSION

From the presenting study we can show that even the most of the study participants have heard about HIV/AIDS in 96.3%, about 42.5% were not sure if the person with HIV looks like that. But they had some knowledge about the signs of sexually transmitted infections in males 74.3% [22]. This result is reflecting a relatively high knowledge among Sudanese adolescents regarding this issue compared with other countries such as Egypt. In Egypt, a descriptive cross-sectional study was conducted to assess current awareness and practice of health risk behaviors among Egyptian university students and they found that about only 30% of students lacked adequate knowledge on AIDS [23-27]. 73.2% of them have smoked before, 70.3% were used to smoke cigarettes but about half of them started smoking after they were 18 years old or above in 53.9%. Snuffing is a risky habit that done by 27.3% of them [28]. These figures may be considered higher than some previous studies done in Sudan in other states. They revealed that in Sudan, according to a recent assessment, 25% of Sudanese men, 2% of women and 20% of the school students are currently using different types of tobacco products. Tobacco use in Sudan stands as a social, political, religious, environmental and economic problem. This variation may be attributed to the prevalence of smoking among adolescence may be significantly higher than the general population [21,28]. 18.1% of the study participants had been exposed to an accident or physical trauma and nearly half of them had the trauma due to falling in 49% [29,30]. These levels of occurrence are quite different from the same context in other countries such as the United States and Europe. This difference may be attributed to cultural and religious

variations. In the United States, the National Youth Risk Behavior Survey (YRBS) monitors priority health risk behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults. They found that 75.0% of high school students had ever drunk alcohol while 28% had engaged in physical violence before [31,32].

5. CONCLUSION

This study realized that the certain risky behaviors among adolescence are relatively high such as inadequate physical activities, smoking, unsafe sexual activity, alcohol drinking, and exposure for physical trauma/fighting.

Multiple-risk behavior was higher among young people in Kassala locality, especially those who had never married, who were not regular students, and who did not live with two parents.

Lack of knowledge was positively linked with some risk behavior, while regular attendance at health promotion services may help to improve and reduce the prevalence among this risky group.

In conclusion, it should stress on the key ingredients for engaging adolescents, their parents, teachers, and communities in the effort to promote healthy, non-violent relationships among them.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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