

The Effect of High Internet Use on Health of Adolescents

Thesis

Master thesis in Community Health Nursing

By

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Dedication

*This work dedicated to the most important persons in my life ... To **My Mother, My father** for their:*

Effort

Encouragement

Cooperation

And

Support

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Nehad Ali Saied, Seham Guirguis Ragheb, Ferial Fouad Malika

Abstract

Adolescents are a vulnerable group; they may be prone to high pattern of internet use and its negative effects on their health. So controlling the pattern of internet usage is very important. **Aim:** The study aimed to evaluate the effect of high internet use on health of adolescents. **Study design:** A descriptive design used to conduct this study. **Subject:** Multistage sample composed of 800 adolescent students. **Setting:** This study was carried out at five schools (El kobba, Saraya El kobba, Ensaf serry, Talaee Gaber Elansary, Amon secondary schools), at Elzayton administrator. **Tools:** It composed of two-tools. The first tool was self-administrated questionnaire to assess socio-demographic characteristics, pattern of internet use, social and psychological health condition of adolescents using internet. The second tool was physical assessment sheet to assess physical health status of them. **Results:** The result of this study showed that 33.5% of adolescents in this study were aged 16 years old, 69% were males. It was reported that, 10.5% of adolescents spent more than eight hours online and 79% of them use internet through mobiles or tablets, 28% of adolescent's body weight increased, 46.5% of adolescent sleeping pattern affected because of using the internet, and 53% of them suffered from neck and backache after browsing the internet. **Conclusion:** There were statistically significant differences between the pattern of internet use and adolescent's physical, psychological, and health status, while there was high statistically significant relation between the total pattern of internet use and social health status, and scholastic achievement of adolescent. **Recommendation:** The study recommended that, continuous assessment for adolescents at school and at home, conducting educational programs for students and parents, design an educational program in the media about proper use of the internet.

Keywords: High internet Use, Adolescents.

Introduction

Adolescence is a transitional stage of physical and psychological human development that generally occurs during the period from puberty to legal adulthood. There are approximately 1.2 billion adolescents (10-19 years) globally, roughly 90% of whom live in low and middle-income countries (*Moghaddam, Bahreini, Abbasi, Fazli, Saeidi, 2016*)

Adolescents considered as high-risk group of exposure to the negative effects of internet. The possible reasons could be available free time, no monitoring because of being away from parents and sometimes to get away from hard school routine (*Akhter, 2013*)

Adolescents are the main users of new technologies and their main purpose of use is social interaction. Although new technologies are useful to adolescents in addressing their developmental tasks, recent studies have shown that they may be an obstacle in their growth. Adolescents with high internet use experience lower quality in their relationships with parents and with others. (*Ballarotto, Volpi, Tambelli, 2018*)

General internet usage can be classified, although not limited to four main areas: Entertainment, streaming movies or music online, Searching for information (i.e. using a search engine

to look up terms, meanings, or general information), Communication (as messaging services and Buying and selling products online). (*Catane, 2015*).

Adolescent internet use is a relatively recent phenomenon. Among the negative health effects of internet on adolescents is exposure to sexually explicit material, sexual grooming, bullying, internet addiction, cognitive developmental consequences, and increased risk taking behavior, lack of face to face communication, Waste of time, abandonment of family, insomnia, internet addiction, cheating, moral corruptions, and physical inactivity (*Brown, 2017*)

Facebook is a social networking service launched in February 2004; it reports more than 1 billion active users. It is particularly attractive to adolescents. As of the third quarter of 2015, Facebook had 1.55 billion monthly active users globally with estimated 27 million users in Egypt in November 2015. It has quickly become both a basic tool and a mirror for social interaction, personality identity, and network building amongst adolescents. (*Saied, Elsabagh, El-Afandy, 2016*)

Feeling stressed depressed, lonely, anxious, lack of emotional support, having a history of other types of addiction such as addictions to alcohol, drugs, sex and gambling and shy

adolescents who cannot easily relate to their peers can contribute greatly to the development of high Internet use. (*Adams, 2018*)

The community health nurse has an important role toward high internet use adolescents such as providing tools that help in early detection and diagnoses of high internet use and differentiating between high internet use and other psychiatric conditions, creating programs and therapies to address high internet use. Highlight the psychological, social, and family conditions for those most at risk. Exploring the physical effects that result from high internet use and strategies for combating the problem. Helping in setting policies and procedures to increase awareness of excessive internet use for adolescents and parents, providing strategies for treatment and prevention in family, school, and community settings are also from her role .(*Young and Abreu, 2017*).

Significance of the study:

According to the internet usage statistics, internet users are increasing in Egypt reaching about 47.4 million users in 2018, compared to 40.9% in 2016. More than 80% of the Egyptian internet café clients are adolescents. Increasingly usage of computer technology and widespread dominance of the internet has faced many people particularly adolescents and extremely usage of it results in mental and psychological disorders.

Adolescents believed to be at a high risk with a marked increase in their internet usage worldwide. (*Statista, 2018*)

The community health nurse identifies the reason for internet use, makes continuing education on the pattern, way of internet use and takes a look around, and see if- adolescents hold their phones almost continuously at school and ask parents about their teens at homes. Asking parents to limit the time spent on computers and smartphones or limiting the megabytes given to their teens. (*Wieland, 2014*).

Aim of the Study

The aim of this study was to evaluate the effect of high internet use on health of adolescents through:

- 1- Assessing of physical, social & psychological health status of adolescents using internet.
- 2- Assessing of scholastic achievement of adolescents.
- 3- Assessing the pattern of internet use among adolescents.

Research questions:

- 1- Is there a relation between the pattern of internet use and physical health status of adolescent?
- 2- Is there a relation between the pattern of internet use and psychological health status of adolescent?
- 3- Is there a relation between the pattern of internet use and social health status of adolescent?
- 4- Is there a relation between the pattern of internet use and scholastic achievement of adolescent?

Review of Literature

Part I

Characteristics of adolescents

Adolescence is a period of life with specific health and developmental needs and rights. It also a time to develop knowledge and learning skills, learn to manage emotions, relations, acquire attributes and abilities that will be important for enjoying the adolescent years and assuming adult roles. All societies recognize that, there is a difference between being a child and becoming an adult. How this transition from childhood to adulthood defined and recognized differs between cultures and over time. (*WHO, 2017*)

It also defined as the period between 13 and 18 or 20 years, a time that serves as a transition between childhood and young adulthood. It can divide into an early period (10-13 years), a middle period (14-16 years) and a late period (17-19 years). Adolescence is the period of growth between childhood and adulthood, this transition from one stage to the other is gradual, uncertain and while the time. It can divide into an early period (13-14 years), a middle period (15-16 years) and a late period (17-20 years) (*Pillitteri, 2013*).

The percentage of adolescent in Egypt is about 17.8% from the total population. They are 17305000 from 97006920 persons,

8895822 out of them are males, while 8409178 are females.

(Central Agency for Public Mobilization and Statistics, 2018)

Physical development of adolescents:

The physical developments triggered by hormones that act on specific organs and tissues. During the teen years, adolescents experience changes in their physical development at a rate of speed unparalleled since infancy Physical developments include many aspects (*Özdemir , Utkual and Palloş, 2016*)such as:

Rapid gain in height and weight: During a one-year growth spurt, boys and girls can gain on average of 3.5-4.1 inches in height. This spurt typically occurs 2 years earlier for girls than boys. Approximately half of adult body weight gained during adolescence. Peak weight gain follows the linear growth spurt by 3 to 6 months in females and by approximately 3 months in males. Girls gain approximately 3.5 kg per year during peak rates of weight gain while males gain about 9 kg per year during puberty (*Stang and Story, 2016*).

Sexual Maturation (Puberty): Sexual maturation or puberty begins at different ages depending on genetic and environmental factors. In boys, sexual changes begin with enlargement of the scrotum and testes, followed by lengthening of the penis. Next, pubic hair appears. Armpit and facial hair appears about 2 years after pubic hair. The growth spurt usually begins a