Impact of using electronic media on health among school children

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Abstract
Background of the study: In today’s society, electronic media are thoroughly integrated into the fabric of life with television, movies, videos, music, video games and computers, central to both work and play. While these media outlets can provide education and entertainment to children, many researches are concerned with the negative impact electronic media is having on children. Children may be the most vulnerable between birth and school age to certain negative effects of media use such as obesity, aggression, fear and sleep disturbances.

Objectives: To assess the impact of using electronic media on health among school children.

Methodology: A quantitative research approach was adopted for the study. Descriptive design was adopted to assess the impact of using electronic media on health among school children. Study was conducted in Narayana School at Nellore. The sample size of the study includes 30 school children who belongs to the age group of 6-12 years. Non probability convenience sampling technique was adopted for the study. The data was collected by using observational checklist. The data was analyzed by using descriptive and inferential statistics.

Results: Majority of the school children 23(76.7%) had moderate impact on health by using electronic media.

Conclusion: The study concluded that with regard to impact of using electronic media on health among school children, 23(76.7%) had moderate impact on health and 7(23.3%) had severe impact on health.

Keywords: Impact, Electronic Media, Health & School Children

Introduction
Children may be the most vulnerable between birth and school age to certain negative effects of media use such as obesity, aggression, fear and sleep disturbances. It is now not just kids in bad neighborhoods or with “bad” friends who are likely to be exposed to bad things when they go out on the street. A “virtual” bad street is easily available to most youth now in their very homes. Media is used as a third parent or servant. It is very important, as both parents are working, mother in kitchen and father busy in reading or out for his work and the child is having remote in his hand and does not know how to select the programs and watches only movies or cartoons. Teenagers spend their lives immersed in electronic media. While doing homework on internet, they do instant messaging to their friends. They have television in background and listen to music on i-pod at the same time. Furthermore, time spent with media decreases the amount of time available for pursuing other more healthy activities such as sports, physical activity, community service, cultural pursuits, reading and family time. Background TV interferes with the toddler’s ability to focus on play. They do not discriminate between TV and real life events until pre-school years.

Children who spend a lot of time watching TV, playing video games or on the computer are more likely to be obese because they are not spending enough time playing or getting exercise. They also view thousands of commercials for unhealthy foods, snacks, sugary cereals and candy which influence their eating habits. Studies have shown that there is nearly two fold increased risk of obesity for every hour spent daily playing electronic games or watching television.

The print media promotes an unrealistically thin body ideal that, in turn is at least partially responsible for promoting eating disorders. Frequent reading of magazine articles about dieting/weight loss strongly predicted unhealthy weight control behaviors in adolescent girls. Just as it is important that parents know the ingredients in food they may feed to their
children, they should be fully informed about the content of the media their children may use. There is significant negative link between grades and media exposure. An academic achievement of children peaks at 1-2 hours of educational programming and declines with behavior use i.e., more than 4 hours. Playing video games can have positive effects in developing visual spatial skills such as visual tracking, mental rotation and target localization. Gaming may also involve problem solving skills. The children having TV set in their bedroom watch one hour more than average. It leads to poor outcomes in academic, social and physical areas. Teenager’s use of cell phones after bedtime contributes to poor sleep. According to American Academy of Pediatrics (AAP), children and adolescents are influenced by media, they learn by observing imitating and making behaviors on their own. Report card on adolescents 2010-UNICEF studied the usage of media by adolescents of age group 15-19 years and reported that internet use is more likely with higher income and education and more men than women use the technology in both industrialized and developing countries.

Materials and methods
A quantitative research approach was adopted for the study. Descriptive design was adopted to assess the impact of using electronic media on health among school children. Study was conducted in Narayana School at Nellore. The sample size of the study includes 30 school children who belongs to the age group of 6-12 years. Non probability convenience sampling technique was adopted for the study. The data was collected by using observational checklist. The data was analyzed by using descriptive and inferential statistics.

Results
Section I: Frequency and percentage distribution of socio demographic variables of school children
- In association to age, 12 (40%) of school children belongs to age of 8-9 years, 11(36.7%) of school children belongs to age of 6-7 years and 7(23.3%) of school children belongs to age of 10-12 years.
- In reactant to religion of school children, 23(76.6) were Hindus, 6 (20%) were Christians and 1 (3.4%) was Muslim.
- In regard to diet of school children, 22 (73.4%) were non vegetarians and 8(26.6) were vegetarians.
- In relation to type of family of school children, 24(80%) belongs to nuclear family and 6 (20%) belongs to joint family.
- In context to area of living of school children, 26(80%) were residing in urban areas and 4 (13.4%) were residing in rural areas.
- In association to height of school children, 16 (53.3%) were between 151-160cms, 5(16.6%) were between 120-140cms, 5 (16.6%) were between 141-150 cms, and 4 (13.4%) were between 161-180 cms.
- In respect to BMI of school children, 12 (40%) are between 20.0-30.0 kg/m$^2$, 11 (36.6%) kg/m$^2$ are between 15.0-18.0 kg/m$^2$, 5 (16.7%) are between 18.0-20.3 kg/m$^2$ and 2(6.7%) are between 13.0-15.0 kg/m$^2$.

Section II: Frequency and percentage distribution of impact of using electronic media on health among school children

Fig 1: Percentage distribution of impact of using electronic media on health among school children.

In regard to impact of using electronic media on health among school children, 23(76.7%) had moderate impact on health and 7(23.3%) had severe impact on health.

Section III: Mean and standard deviation of impact of using electronic media on health among school children.
With regard to mean and standard deviation of impact of using electronic media on health among school children.
Mean score was 17.2 with standard deviation of 2.6.

Section IV: Association between the impact of using electronic media on health with their selected socio demographic variables.
There was a significant association between the school children with their selected socio demographic variables like age, religion, diet, family, area, height, BMI.

Discussion
Section I: Frequency and percentage distribution of impact of using electronic media on health among school children.
In regard to impact of using electronic media on health among school children, 23(76.7%) had moderate impact on health and 7(23.3%) had severe impact on health.
Findings of the study was consistent with study conducted by Rüdiger von Kries, et.al (2010) conducted a population-based cross-sectional study on association between use of electronic media and prevalence of headache in adolescents. Results shows that most of the adolescents used computers (85%), watched television (90%) or listened to music (90%) daily, otherwise only 23% of the participants used their mobile phones and only 25% played with game consoles on a daily basis. A statistically significant association between listening to music and any headache (odds ratio 1.8; 95% confidence interval 1.1-3.1 for 30 minutes per day, 2.1; 1.2-3.7 for 1 to 2 hours per day; 2.0; 1.2-3.5 for 3 hours and longer listening to music per day) was observed. The study concluded that apart from an association between listening to music on a daily basis and overall headache, no consistent associations between the use of electronic media and different types of headache were observed.

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Section I: Association between the impact of using electronic media on health among school children with their selected socio demographic variables.
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Findings of the study was consistent with study conducted by Maxine M. Dennis et.al. 2013 conducted a study on associations between Electronic Media Use and Involvement in Violence, Alcohol and Drug. Results of the study includes overall, 35.4% (95% CI=33.1%–37.7%) of students reported frequent television (TV) use and 24.9% (95% CI=22.9%–27.0%) reported frequent computer/video game use. A number of risk behaviors, including involvement in physical fights and initiation of alcohol use before age 13, were significantly associated with frequent TV use or frequent computer/video game use, even after controlling for sex, race/ethnicity and grade.

Recommendations
On the basis of findings of the study the following recommendation are being made.

- A similar study can be replicated on a large sample in different setting, with in different population as longitudinal.
- Study can be conducted on effectiveness of instructional module on impact of electronic media on health among children in various settings.

Conclusion
The study concluded that with regard to impact of using electronic media on health among school children, 23(76.7%) had moderate impact on health and 7(23.3%) had severe impact on health. Children are more prone to confrontation with their teachers, may engage in fights with their peers and see a decline in school achievements, poor outcomes in academic and poor sleep.

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References