



IMPACT OF TELEVISION ON THE HEALTH AND DEVELOPMENT OF CHILDREN

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ABSTRACT

In today's world children are exposed to a number of digital devices. Revolution in electronic technology, easy availability and affordability has exponentially increased the use of digital devices by everyone. Unlike in developed world television remains the most widely used media format in developing world. Though it's a very useful media for dissemination of information regarding various public health problems major concerns have arisen about its ill-effects on health and psychology of children and adolescents. Taking into consideration the immense impact of digital devices on today's children and adolescents American Academy Of pediatrics have come up with guidelines of using digital media in children. Its recommendations include no use of digital devices below 18 months of age, maximum 1 hour of high quality programs between 2 to 5 years and after 5 years of age limiting the time spent using media in such a way that it does not affect the adequate sleep, physical activity and other behavior essential to health. In Indian context it's important to implement these recommendations as In India alone more than 300 million urban and rural people watch television every day. As television is the dominant media type used in India we conducted this study to know the effects of watching television on children. Information on effects of television may also increase awareness about the impact of other digital devices on the health and development of children. Our study concentrated on studying health problems, behavioral problems, impact on lifestyle and social behavior and impact of television watching on these factors. We found that television viewing was associated with various health problems including altered eating habits, change in behavior, psychological problems and poor academic performance. Excessive television watching was also associated with signs and symptoms like headaches, watering of eyes, fears and phobias. We conclude that recommendations as laid down by American Academy of pediatrics for use of digital media should be strictly followed to avoid the consequences in children.

Key words: American Academy of Pediatrics, Use of digital media, growth and development, behavioral and psychological problems.

INTRODUCTION

Television has become "a major socialization factor and dominates the life of children in urban and electrified rural areas around the globe". Television has become inseparable part of our life. In India, alone more than 300 millions urban and rural people watch television every day. Like many other influences, television program has the positive as well as negative impact on the lives of

children. Many studies have concentrated and reported the impact of television viewing especially in children and adolescents [1]. It is not only the content of television which determines the effect of television viewing on children other factors which have a positive or negative impact include development level of children and parental behavior or involvement while watching television.

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The contents like violence, sexually explicit scenes and offensive language may have a negative impact on children. Many studies have reported that the children who are exposed to violent movies or serials are more likely to be involved in violent behavior than those who have not been exposed to such violent content [2].

Moreover excessive television watching is associated with sedentary lifestyle in children and they are expected to be overweight or obese in comparison with those who either don't watch television or have restricted timing for watching it. Many studies have found that excessive television watching is associated with poor school performance and learning process is also appears to be affected by it. Last but not the least inappropriate sexual content may prompt adolescents to engage in unsafe sexual encounters at an inappropriate age [3].

Television is routine activity for children. They switch on the television just before they consider doing anything else. Outdoor play has decreased and children do not like to interact. Now their topic of interaction is about television program. Most of the children become idle. They watch the television while eating or they eat while watching television whole day. Television has changed their normal daily routine [4]. They sleep late because they are busy watching television till late night. It affects their studies at school. Children also develop early sexual behavior. Many television programs show extreme level of inappropriate behavior in their programs. Children see the glamorous side of it. They develop problems associated

OBSERVATIONS

with desire to be sexually attractive or desirable and start worrying about their built, height and weight. Size of breast, size of penis. Those who are not good looking develops shame, guilt and poor self esteem [5].

It is worrying from the perspective of parents as well as pediatricians that many children are exposed to television at an early age and for prolonged periods of time. For this reason we conducted this study to know the impact of television viewing on health and development of children.

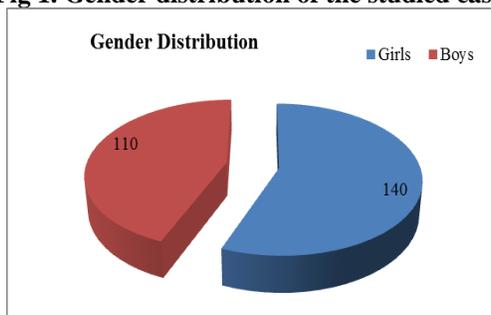
AIMS AND OBJECTIVES

1. To study the extent of various health and behavioral problems due to television
2. To study the overall impact of television on growth and development of children
3. To highlight the social, development and life style problems due to television

MATERIAL AND METHODS

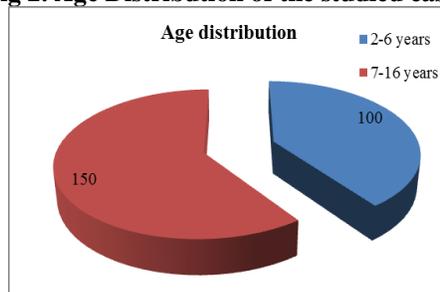
250 children of age group 2-16 years were included in this study. Either parents or child himself or both depending upon the age and situation were interviewed with the help of a pre-set questionnaire. The questions were aimed at knowing the life style and impact of television on these children. From this information various problems in each child were identified. The data obtained was analyzed using statistical software.

Fig 1. Gender distribution of the studied cases



Children belonging to age group of 2 years to 16 years were included in this observational study. Out of total 250 children 100 (40%) children belonged to age group of 2 to 6 years and remaining 150 (60%) children were in between 7- 16 years.

Fig 2. Age Distribution of the studied cases.



50% of children belonged to joint families while 50% were from nuclear families. Most parents were well educated and 50% of mothers were working. 50% belong to middle socio-economic status, 20% low and 30% high socio- economic status.

Table 1. Socioeconomic status of the families

Socio-Economic Status Of Parents	Number of Children	Percentage Of Children
High Socio-Economic Group	75	30%
Middle Socio-economic Group	125	50 %
Low Socio -Economic Group	50	20%

The analysis of number of television sets at home revealed that 45% of the homes had one television set at home, 40% had more than one television and in 15 % cases everyone at home had a personal television. The implication of having more than one television set at home was obviously increased TV watching time per person resulting into cumulative increase in the time spent on watching television by each member of the house.

Table 2. No of TV sets per person

Number of Television sets at home	Number	Percentage
1 TV set Per home	112	44.8%
More than 1 TV set per home	100	40%
Each person had a personal TV set	38	15.2%

The analysis of the reasons for watching the television showed that majority of the children (90%) watched television for entertainment and fun. The other reason for watching television included everybody else doing same (75%), because they had nothing else to do (40%) and lastly for information and education purpose (10%). It was important to note that only merely 10% children watched television for educational purpose. One of the interesting part of analysis of reasons for watching television revealed that a good number of children (40%) watched television because they didn't have anything else to do underlying the importance of engaging children in other recreational activity.

Similarly the analysis of reasons to switch off the television revealed that majority of the children switched off television because they were told to study by their parents (60%). The other reasons for switching off television included parental scolding (50%), for health reasons (20%) and improper programs (10%). The overall percentage was more than 100 because different children had multiple causes for watching and switching off televisions on different occasions.

Table 3. Various reasons to watch and switch off the television

S.No	Reasons	Percentage
To watch the Television		
1.	For entertainment and Fun	90%
2.	Everybody else doing the same at home	75%
3.	Nothing to do	40%
4.	For information and education purpose	10%
To switch off the Television		
1.	Parents scolded for watching television too much	50%
2.	Ask to study	60%
3.	For health reason	20%
4.	Program not fit for them	10%

The analysis of television watching patterns of the studied children revealed that majority of the children (90%) watched television every day and most of them (60%) watched it for more than 2 hours a day. Children usually watched television with their parents or sibling (75%) but there were some children who watched it alone (25%). Half of the children watched television while studying (50%). A whopping 70% children were found to be watching television while eating. The television watching patterns are given in the table below.

Table 4. Television watching patterns of the studied children

S.No	Time Spent/ Pattern	Percentage
1.	Children watch television everyday	90%
2.	Children watch television more than 2 hours every day	60%
3.	Children watch television maximum hours available after school	25%
4.	Children watch television along with their parents or with sibling	75%
5.	Watch television alone	25%
6.	Children watch television while studying	50%
7.	To watch television while studying two to three times in a week	10%

8.	Do not watch while studying	40%
9.	Children watch television while eating at lunch or dinner	70%
10.	Parents watch television for more than one hour	60%
11.	Watch maximum available hour	40%

The analysis of content of the television being watched revealed that majority of the children (30%) watched it for popular serials followed by for watching songs (24.4%), cartoons (14.8 %), advertisements (10%), movies (9.6%), news (4%) and sports (3.6%). Rest of the children (3.6%) watched it for other reasons.

Table 5. Content of Television Watching

Content of Television	Number of Children	Percentage
Serials	75	30%
songs	61	24.4%
cartoons	37	14.8%
Advertisements	25	10%
Movies	24	9.6%
news	10	4%
Sports	9	3.6%
Others	9	3.6%

Table below shows various health problems, behavioral problems and impact of television on the life style of children. Children develop headache, pain and aches and watering from eye when they watch television for long time. Most of the children become aggressive and violent.90% parents admitted the children's reaction is hostile and they become aggressive if the television is switched off while watching. The language of most of the children changed they learn verbal labeling and most of children have attention problem while studying which reflect in the form of lower academic performance. Smaller children develop fear and phobias to violence, ghost, darkness, accidents, death.

Table 6. Health and Behavioral problems and impact of television watching on lifestyles

S.No	Problem	Percentage
Health Problems		
1.	Headache	10%
2.	Watering from Eye	8%
3.	Fatigue	5%
4.	Pain and aches	10%
Behavioral Problems		
1.	Change in behavior	40%
2.	Anxiety	10%
3.	Fear and Phobias	10%
4.	Attention defiant	10%
5.	Lower academic performance	20%
Impact on Life style		
1.	Decreased outdoor play	40%
2.	Change in eating habit	40%
3.	Change in sleeping hours	40%
5.	Pro-social behavior	10%
6.	Early sexual behavior	10%
7.	Physical complexion	5%

DISCUSSION

The present study is community based small sample size study but representative and indicative of the impact of influence of television on the health of children. This study specify the various health and behavioral problems and impact of television on the life style of children and adolescents [6]. As per our study the child

watch television more at school time and has a strong influence in the lives of children and television has successfully replaced all other socialization factors other than formal schooling like other studies [7].

In our study younger children were found to prefer watching the funny programs, film songs, cartoons

and advertisement. They were fond to watch and like happy endings are were saddened by bad endings, violence and horror programs. Adolescent children preferred to see serial, adventurous stories and movies. Boys were found to like sports programs, horror shows and action as compared to girls. These findings were similar to the studies conducted by Taverno et al and Davison et al [8,9].

According to parents watching T.V. program was found to influence school grades of the children. We found excessive television watching was associated with low academic performance whereas in other studies no influence was found on school grades. Television viewing has replaced traditional relationship and found to cause poor interaction. Study time was found to be affected by excessive television watching [10].

Our study analyzed the various behavioral problems in children and found that effect of television watching on children tend to be cumulative with reference to violence. Television had a positive impact on knowledge but was also found to be associated with some social problems if inappropriate programs were watched. Children were found to learn specific acts from television programs and they tend to use dangerous acts even in real life. Various sex and sex related problems like early sexual behavior, indecent behavior and other problems are seen in children exposed to inappropriate television contents. In our study most teenage children agreed and found

television as source of information for sex, sex related problems instead of their parents.

RECOMMENDATIONS

- 1) Parents should fix viewing hours per day/ per week and adhere to them strictly.
- 2) Approve the program for viewing with your child.
- 3) Balance T.V. viewing time with outdoor play and book reading, school work. Make sure that TV watching does not interfere with school home work.
- 4) Program related to children should be introduced to improve their educational health aspects.
- 5) School teachers and pediatrician should apprise children about pros and cons of television watching.
- 6) Guidelines laid down by American Academy of Pediatrics regarding gadget use in children should be strictly adhered to.

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REFERENCES

1. Liebert RM. Effects of television on children and adolescents. *J Dev Behav Pediatr*, 7(1), 1986 43-8.
2. Huesmann LR. The Impact of Electronic Media Violence, Scientific Theory and Research. *The Journal of adolescent health*, official publication of the Society for Adolescent Medicine, 41(6 Suppl 1), 2007, S6-13.
3. Brown JD, Childers KW, Waszak CS. Television and adolescent sexuality. *J Adolesc Health Care*, 11(1), 1990, 62-70.
4. Chapman CD, Nilsson VC, Thune HÅ, et al. Watching TV and Food Intake, The Role of Content. Tomé D, ed. *Plos ONE*, 9(7), 2014, e100602.
5. Tin SP, Ho DS, Mak KH, Wan KL, Lam TH. Association between television viewing and self-esteem in children. *J Dev Behav Pediatr*, 33(6), 2012, 479-85.
6. Morowatisharifabad MA, Karimi M, Ghorbanzadeh F. Watching television by kids, How much and why?. *Journal of Education and Health Promotion*, 4, 2015, 36.
7. Cheng S, Maeda T, Yoichi S, Yamagata Z, Tomiwa K, Japan Children's Study Group. Early Television Exposure and Children's Behavioral and Social Outcomes at Age 30 Months. *Journal of Epidemiology*, 20(Suppl 2), 2010, S482-S489.
8. Taverno Ross SE, Byun W, Dowda M, mciver KL, Saunders RP, Pate RR. Sedentary Behaviors in Fifth-Grade Boys and Girls, Where, with Whom, and Why? *Childhood Obesity*, 9(6), 2013, 532-539.
9. Davison KK, Francis LA, Birch LL. Links between parents' and girls' television viewing behaviors, a longitudinal examination. *The Journal of pediatrics*, 147(4), 2005, 436-442.
10. Bavelier D, Green CS, Dye MWG. Children, wired – for better and for worse. *Neuron*, 67(5), 2010, 692-701.