



Research Article

PSYCHOLOGICAL WELL BEING AND TELEVISION SERIAL WATCHING –A CROSS SECTIONAL ANALYTICAL STUDY FROM A TERTIARY CARE CENTRE IN ERNAKULAM, KERALA, INDIA

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ABSTRACT

Introduction: In spite of the appearance of modern media technologies, television still stands as the most popular screen media. Several studies have shown that television viewing can cause both beneficial and deleterious effects in physical and mental well being across all age groups. The primary objective of the study was to examine the association between psychological well being and TV serial watching among adult bystanders in a hospital setting.

Methodology: This is a cross sectional analytical study conducted in bystanders of various outpatient departments of a tertiary care centre to determine the level of psychological well being in TV serial watching and non watching adult individuals. The study location was a tertiary care centre in Ernakulam, Kerala. Bystanders who were in the age group of 18-70 years of age and without any terminal illness or psychiatric complaints were selected for the study. The bystanders were briefed about the study, consented and data were collected in a self administered questionnaire. Ryff's scale of psychological well being was used to determine the level of psychological well being. The data were analysed using SPSS version 21.

Results: We recruited 500 participants who satisfied the selection criteria. The mean age of the study population was 41.53(14.82) years and three fourth of the participants were female, n=376(75.2%).

In the group of 500, 320(64%) watched TV serials for 1 hr and more per day and 180 people (36 %) did not watch TV serials.

Among the 320 people who watched TV serials ,192 people (60%) watched TV serial for 1 hour per day, 104 people(32.5 %) watched TV serial for 1- 5 hrs, 23 people (7.1%) watched for 6-10 hours a day and only 1 person (0.4%) watched for more than 10 hours a day.

Females spend more time in watching TV serials than males (p<0.001).

Urban population spend more time watching TV serials in comparison to rural population (p<0.05).

There was no significant association seen in the education level between TV serial watching and non watching groups (p0.13).

A significant association was seen in the occupation between TV serial watching and non watching groups (p<0.05).

Low psychological well being was seen in 81(25.2%) of those reported watching TV serials and in 24(13.3%) of those who reported not watching TV serials. This difference was statistically significant (p value <0.0001).

Conclusion: The study results suggest that TV serial watching had a significant negative influence on psychological well being.

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INTRODUCTION

Several studies have shown that television viewing can cause both beneficial and deleterious effects in physical and mental well being of human in all age group¹. In spite of the appearance of modern media technologies; television still

stands as the most popular screen media. In Kerala, the major time engulfing TV program is serials. Serials are television shows which have a continuous plot that unfolds in episode by episode fashion over the years. Studies have proven that many people form one way of parasocial relationship with media characters that mirror actual social relationships.² Parasocial relationships with television characters have been shown to provide feelings of belongingness and buffer against feelings of loneliness and relationship threats.³

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The potential benefits we gain from reading, exercise, family and social interaction are snatched by TV watching⁴. People often lose their ability to differentiate between fantasies presented on TV versus reality. Studies related to TV serial watching and its impact on psychological well being is totally deficient from our setting.

The primary objective of the study was to examine the association between psychological well being and TV serial watching among adult bystanders in a hospital setting. The secondary objective was to stratify duration of TV serial watching based on gender, place of residence, level of education and type of employment.

METHODOLOGY

A cross sectional analytical study was done in adult bystanders in waiting area of various outpatient department of a tertiary care center for a period of six months(January-June 2018). As there were no prior studies reported, we calculated the sample size using a hypothesized correlation coefficient of 0.2. We used an alpha of 0.05 and 80% power to calculate the sample size. The minimum sample size computed was 194. The inclusion criteria were (a) age range 18-70 years (b) visually able (c) who can read and write Malayalam. The exclusion criteria were (a) Persons with a history of psychiatric illness and (b) Persons with terminal illness. Malayalam speaking bystanders were briefed about the study and those willing to participate were consented. Following that a self administered Malayalam questionnaire and Malayalam version of Ryff scale of psychological wellbeing questionnaire were provided to collect the data. We recruited 500 participants who satisfied the selection criteria. Data were entered and compiled in Microsoft excel and analyzed in statistical package for social science (SPSS) version 21.

The psychological well being was assessed in the study using Ryff's Psychological Well-Being Scales (PWB) scale⁵. PWD scale consists of a sequence of statements representing six areas of psychological well being namely autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self –acceptance. The statements from respondents are rated on a scale of 1 to 6 in which 1 indicates strong disagreement and 6 indicates strong agreement. The computed scores were converted to percentiles using the methodology described and reference value available with the parent scale. The six domains are covered by 42 statements. The percentile scores were then stratified into three categories. All scores below 25th percentile were categorized as low psychological well being, those between 25th and 75th as moderate psychological well being and that above 75th as high psychological well being⁵. The permission to use the study tool was obtained from the copyright holders before initiating the study.

Statistical Analysis: The summary statistics for categorical variables were reported using frequency and percentage and for continuous variables using mean (SD). The associations of the outcome variable with predictor variables were reported using Pearson correlation coefficient for continuous predictor variables and Chi square test for categorical predictor variables. A p value of <0.05 was taken as statistically significant.

RESULTS

A total of 500 participants were enrolled in the study. The mean age of the study population was 41.53(14.82) years. The baseline characteristics of the study population are shown in Table 1. Three fourth of the participants were female (n=376, 75.2%). Among participants, 271(54.2%) were from urban area. Majority of participants were degree holders 173 (34.6%) and nuclear family 417(83.4%) was the prevalent type of family structure. Among participants 49 (9.8%) reported hypertension, 58 (11.6%) reported diabetes, 48(9.8%) reported dyslipidemia and 13(2.6%) reported heart disease. Majority of participants were not employed during the study duration (n=209, 41.8%).

Table 1 Baseline characteristics of study population

Sl no:	Patient characteristics (N=500)	Overall (N, %)	Male N=124 (25%)	Female N=376 (75%)
1.	Mean Age (SD)	41.53(14.83) years	45.57 (16.16) years	40.24(14.15) years
2.	Age group			
	18-29 years	126(25.2)	24(19.4)	102 (81.0)
	30-45 years	171(34.2)	43(34.7)	128(74.9)
	46-60 years	145(29.0)	31(21.4)	114(78.6)
	61-70 years	58(11.6)	26(44.8)	32(55.2)
3.	Place of residence			
	Urban	271(54.2)	48 (38.7)	223 (59.3)
	Rural	229 (45.8)	76 (61.3)	153 (40.7)
4.	Level of education			
	Lower primary	20 (4)	3 (2.4)	17 (4.5)
	Upper primary	19 (3.8)	4 (3.2)	15 (4)
	High school	128 (25.6)	49 (39.5)	79 (21)
	Higher secondary	85 (17.0)	23 (18.5)	62 (16.5)
	Degree	173 (34.6)	26 (21)	146 (38.8)
	Professional	76 (15.2)	19 (15.3)	57 (15.2)
5.	Type of family			
	Joint	83 (16.6)	20 (16.1)	63 (16.8)
	Nuclear	417 (83.4)	104 (83.9)	313 (83.2)
6.	Habits			
	Current Smokers	15 (3.0)	13 (86.67)	2 (13.33)
	Current Alcohol use	30 (6.0)	25 (83.33)	5 (16.67)
7.	Co morbidities			
	Hypertension	49 (9.8)	15 (30.61)	34 (69.38)
	Diabetes	58 (11.6)	17 (13.7)	41 (10.9)
	Dyslipidemia	48 (9.8)	14 (11.3)	34 (9)
	Heart disease	13 (2.6)	6 (4.8)	6 (1.6)
8.	Occupation			
	Student	79 (15.8)	13 (16.46)	66 (83.54)
	Working	201 (40.2)	98 (48.76)	103(51.24)
	Not working	209 (41.8)	3 (1.4)	206 (98.56)
	Retired	11 (2.2)	10 (90.9)	1 (9.09)

In the study population 320(64%) watched TV serials and the remaining 180 people (36 %) did not watch TV serials. Among people who watched TV serials,192 people (60%) watched TV serial up to one hour per day, 104 people(32.5 %) watched TV serial for 1- 5 hrs and 23 people (7.1%) watched for 6-10 hours a day. Only one person (0.4%) reported watching TV serials for more than 10 hours a day.

In the TV serial watching group several reasons were reported by viewers for watching TV serials. The common reasons were source of entertainment (n=223,69.8%), to see advertisements (n=43, 13.4%), to spend time in absence of friends(n=27, 8.4%), to spend time in absence of family members(n=15,4.8%) and to develop personality(n=13, 4%). A complete list of self reported reasons related to TV serial viewing are presented in Table 2.

Table 2 Self reported reasons for TV serial watching

Reasons	Number of respondents	Percentage
To derive entertainment	223	69.8
To spend time in absence of friends	27	8.4
To develop personality	26	8
To spend time in absence of family members	15	4.8
To avoid peer rejection	8	2.6
To watch advertisements	7	2.4
To escape from parental absenteeism	4	1.4
To avoid people	4	1.4
To find substitute for companions	3	1
To escape from sibling absenteeism	3	1

Among female viewers, 256(68.08%) watched TV serials and among male viewers, 64(51.61%) watched TV serials. Among females who watched TV serials, 103(40.4%) watched TV serials for 1 hour, 98(8.2%) watched for 1-5hours ,54 (21.1%) watched for 6-10 hours and 1(0.003%) watched for >10 hours. Among males 31 (48.4%) males watched TV serials for 1 hour, 20(31.2%) watched for 1-5 hours and 9(15.3%) watched for 6-10 hours.

Females spend more time in watching TV serials than males (p<0.001).

Among rural study participants, 132(57.6%) watched TV serials. Among them 86(65.4%) watched for 1 hour, 41(31.6%) watched for 1-5hours and 5(0.3%) watched for 6-10 hours. In the Urban study population 188(69.4%) watched TV serials. Among them, 96(51%) watched for 1 hour, 80(42.7%) watched for 1-5 hours and 12(0.06%) for 6-10 hours. Urban population spend more time watching TV serials in comparison to rural population (p<0.05).

The distribution of TV serial watching across different categories of educational levels were, 12(60%) in lower primary, 15(78.95%) in upper primary, 81(63.28%) in high school, 57(67.06%) in higher secondary, 102(59.30%) in degree and 76(15.2%) in professional group. There was no significant association seen between education level and TV serial watching (p0.13).

The distribution of TV serial watching across different categories of occupational levels were, 61(77.21%) for students, 113(56.22%) for working subjects, 138(66.03%) for not working subjects and 8(72.72%) in retired subjects. There was a significant association between occupational level and TV serial watching (p, 0.05).

The overall proportion of people under low psychological well being was 126(25.2%), moderate psychological well being was 255(51%) and high psychological well being was 119 (23.8%). The proportions of people under low psychological well being in the category of < 1hour, 1-5 hrs and 6-10 hrs of TV serial watching were 29(15.1%), 57(54.8%) and 16(69.6%) respectively. The corresponding figures for moderate psychological well being were 67(34.9%), 43(41.3%), 4(17.4%) and for high psychological well being were 61(31.8%), 40(3.8%) and 3(13%) respectively. A rising trend was seen for low psychological well being with increase in the hours of TV serial watching (Fig 1).

In the no serial watching group, 24(13.3 %) had low psychological well being while in the TV serial watching group 102(31.9%) had low psychological well being. There

was a significant difference in the prevalence of low psychological well being between the two groups (p <0.0001).

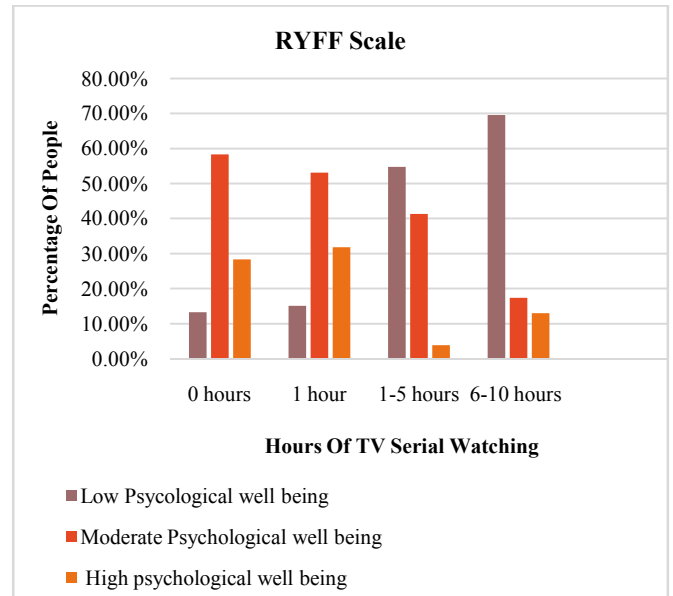


Fig 1 Comparison of psychological well being in TV serial watching and non watching individuals

DISCUSSION

The current study was designed to compare the level of psychological well being in TV serial watching and non watching adult bystanders (18-60 years of age) of a tertiary care centre. The study results suggest a negative association between duration of TV serial watching and Psychological well being. TV serial watching appears to be prevalent among women, urban residents, students and retired personnel.

There is deficiency of literature related to the ill effects of TV serial watching on psychological well being among adults. A study from Scotland conducted in 2010 among adults sheds light into the deleterious effect of TV watching on mental health. The study reported that adults with highest TV screen based entertainment time (TVSE) (>4 hours/day) had an increase in GHQ score (higher scores represent worse mental health status) of 0.28 compared with those with lowest levels⁶. The findings of the current study are in line with the data from this study⁶.

Another study from England too reports similar findings. The study done in 2012 reported that higher duration of TV and screen viewing (>3 hours) was related to lower levels of mental health and increased levels of both unhappiness and negative thoughts⁷.

On the contrary, a study from Georgia done in 2015 failed to find an association between TV viewing and psychological well being⁸. This study used Ryff scale to measure psychological well being similar to the current study. The Georgian study reported that there was no significant relationship between television viewing behaviour and psychological well being⁸. This is in disagreement to our study as well as the study from Scotland⁶.

Studies have also examined the association between screen time and depression⁹. A recent study from US reported that increased screen time was associated with moderate to severe depression⁹.

The association between screen time based sedentary behaviour (ST-SB) and depression was examined in a recently published systematic review by Wang *et al.* The study included 12 cross sectional studies and 7 longitudinal studies. The review concluded that screen time based sedentary behaviour (ST-SB) had a strong association with depression. The pooled OR was 1.28 (95% CI 1.17 to 1.39; $p < 0.01$) for depression when subjects with higher ST-SB were compared with those reported lower ST-SB¹⁰.

Prolonged screen time is known to disrupt biological pathways that may result in central nervous system arousal as well as increased prevalence of sleep disturbances^{11,12}. Both these factors can significantly impair psychological well being among TV viewers. In addition TV viewing may also result in social solitude as well as withdrawal from inter personal relationships¹³. These two deviations are strongly linked to increased feelings of social anxiety¹³. Social anxiety also has the potential to alter psychosocial well being.

The current study as well as the studies mentioned earlier emphasize the strong negative influence TV viewing has on various domains of mental health most notably psychological well being. Altered psychological well being along with higher chances of social anxiety, moderate to severe depression, negative thoughts, withdrawal from inter personal relationships and sleep disturbances can have a cumulative impact on the mental health of the TV viewer with deleterious consequences in later life. Low psychosocial well being can reflect in every aspect of daily living as well as performances in interpersonal relationships and workplaces¹⁰. The same can also have economic as well as societal implications.

Limitations

This study has several limitations. We were unable to assess the quality of TV serials. The participants of the study were bystanders in a tertiary care centre and they could have additional factors that may lead to low psychological well being.

CONCLUSION AND RECOMMENDATION

The study results suggest that TV serial watching has a significant negative influence on psychological well being. This problem appears to be more prevalent among urban population, females and students as per the current study. Interventions targeting reductions in TV serial watching should be attempted for the probable benefit of better psychological well being.

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