

# A Comparative Analysis on Kerala and Tamil Nadu - Child Obesity

S.B.Inayath Ahamed, K.Vidhya



**Abstract:** Obesity has achieved scourge extents in India in the 21st century, with child obesity influencing 5% of the nation's populace. India is following a pattern of other creating nations that are consistently winding up increasingly stout. Undesirable, prepared sustenance has turned out to be considerably more available after India's proceeded with coordination in worldwide food markets. TV viewing is a noteworthy movement and impact on child and teenagers. Youngsters in India watch a normal of three to four hours of TV daily Time spent in staring at the TV detracts from significant exercises, for example, perusing, school work, playing, work out, family communication, and social improvement. Childs likewise take in data from TV that might be improper or off base. Child obesity is the serious issue that influences the Indian child. To the extent presently there are not many investigations which manages effect of TV on tyke stoutness in India, especially in Tamilnadu and Kerala

**Keywords:** Child Obesity, Television, Tamilnadu, Kerala, Overweight, Parents attitude

## I. INTRODUCTION

In the latest couple of decades, youth obesity has significantly increased and it has come to epidemic dimensions in created countries. Around 10% of school child's developed between 5 to 17 years around the globe are overweight out of which 70% grow up to breeze up heavy adults. Weight has essential impact on both physical and mental prosperity of the youth, growing tendency of the overweight adolescents to encounter the evil impacts of hyperlipidemia, bizarre glucose opposition, hypertension, coronary supply course disease, obstructive rest apnea, unprofitability, orthopedic issues, etc. Moreover, social and mental issue, for instance, demoralization, trashing and poor self-respect occur with extended repeat in fat youngsters. Bodyweight is directed by various physiological components that keep up harmony between vitality admission and vitality use. These administrative frameworks are exceptionally exact under ordinary conditions—eg, a positive vitality equalization of just 500 kJ (120 kcal) every day (around one serving of sugar-improved soda pop) would deliver a 50-kg increment in weight more than 10 years. In this way, any

factor that raises vitality admission or diminishes vitality consumption by even a modest quantity will cause stoutness in the long haul. Hereditary elements can greatly affect singular inclination; nonetheless, rising pervasiveness rates among hereditarily stable populaces demonstrate that ecological and, maybe, prenatal components must underlie the youth stoutness pestilence.

Child obesity is the serious issue that influences the Indian child. To the extent presently there are not many examinations which manage effect of TV on child obesity in India, especially in Tamilnadu and Kerala. This investigation expects to uncover the real effect of TV on child obesity. Children who watch a great deal of TV are probably going to have low execution in studies, read less books, practice less and be overweight. Savagery, sexuality, race and sex generalizations, medication and liquor misuse are regular topics of TV programs. Children are naive and may expect that what they see on TV is commonplace, safe, and satisfactory. Thus, TV additionally uncovered child in their practices and frames of mind that might overpower and hard to get it.

Increased TV working time among child and adult s is related with a raised probability of overweight. This outcomes from a blend of undesirable dietary propensities, inactive conduct and presentation to TV advertising. To know the level of children's obesity of Tamilnadu and Kerala states.

1.To understand the unhealthy dietary habits of the children belonging to Tamilnadu and Kerala states.

2. To identify the impact of television viewing pattern on children sedentary behavior.

There are likewise outstanding restrictions that ought to be talked about. Right off the bat, one of the significant confinements is difficult to dietary patterns examples and can't decide the absolute caloric admission. A gauge of the regular bit size of the sustenance devoured by children would have been helpful in lieu of proportions of caloric admission; be that as it may, this would have added over weight to collaboration for child and their families. The precedent size of child was little with minimal arranged assortment. The precedent families were exceedingly instructed and high pay rates.

## II. REVIEW OF LITERATURE

Gortmaker, S.L., Must, A., Sobol, A.M., Peterson, K., Colditz, G.A., Dietz, (1996) consider demonstrates that pervasiveness of stoutness among child and teenagers has expanded, and TV review has been recommended as a reason.

Manuscript published on 30 December 2019.

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Specialist analyzed the connection between long periods of TV saw and the predominance of overweight in 1990, and the frequency and reduction of overweight from 1986 to 1990 out of a broadly delegate associate of 746 young people matured 10 to 15 years in 1990 whose moms were 25 to 32 years of age. Overweight was characterized as a weight file higher than the 85th percentile for age and sexual orientation. Specialist watched a solid portion reaction connection between the commonness of overweight in 1990 and long periods of TV saw. The chances of being overweight were 4.6 (95% certainty interim, 2.2 to 9.6) times more prominent for youth observing over 5 hours of TV for every day contrasted with those watching 0 with 2 hours. At the point when alterations were made for past overweight (in 1986), standard maternal overweight, financial status, family unit structure, ethnicity, and maternal and tyke bent test scores, results were comparable (chances proportion, 5.3; 95% certainty interim, 2.3 to 12.1). Specialist additionally discovered noteworthy relations between TV seeing and expanded occurrence and diminished reduction of overweight during this 4-year time frame, balanced for standard covariates. The balanced chances of rate were 8.3 (95% certainty interim, 2.6 to 26.5) times more noteworthy for youth observing over 5 hours of TV for every day contrasted with those looking for 0 with 2 hours. Assessments of inferable hazard demonstrate that over 60% of overweight occurrence in this populace can be connected to abundance TV review time. TV survey influences overweight among youth, and decreases in review time could help forestall this undeniably basic unending wellbeing condition. revent this increasingly common chronic health condition.

Davison, K.K., Marshall, S.J., Birch, L.L. (2006) think about evaluate cross-sectional and longitudinal relations between (TV) survey and young ladies' weight list (BMI), weight status, and level of muscle to fat ratio. Members included 169 young ladies who were estimated at ages 7, 9, and 11 years. Tallness and weight were estimated and used to figure young ladies' BMI and to order their weight status. Young ladies' level of muscle to fat ratio was evaluated with the utilization of double vitality x- beam absorptiometry. Moms announced the hours out of every day that young ladies sat in front of the TV on a run of the mill day. No noteworthy cross-sectional affiliations were distinguished in identified with this outcomes from longitudinal investigations surveyed that in contrast with young ladies who never surpassed the American Academy of Pediatrics TV seeing suggestions (ie, viewed  $\leq 2$  hours of TV for every day), young ladies who surpassed proposals at ages 7, 9, and 11 years were 13.2 occasions almost certain be overweight at age 11, were 4.7 occasions bound to end up overweight between ages 7 and 11, had altogether higher BMI and rate muscle to fat ratio at age 11, and displayed fundamentally more prominent increments in BMI between ages 7 and 11. Mediations that objective decreases in TV seeing among 7-to 11- year-old young ladies may diminish their danger of weight gain during late adolescence.

Matheson, D.M., Killen, J.D., Wang, Y., Varady, A., Robinson, T.N. (2004) explore work uncover that TV review is related with youth stoutness. Eating during review and eating profoundly publicized nourishments are 2 of the

speculated instruments through which TV is thought to influence youngsters' weight. Our targets were to portray the sums and sorts of sustenances that youngsters devour while sitting in front of the TV, contrast those sorts and the sorts expended at different occasions of the day, and inspect the relationship between childs' weight file (BMI) and the sums and kinds of nourishments devoured during TV seeing. Information were gathered from 2 tests. The principal test comprised of ethnically diversed third-grade childs, and the second comprised overwhelmingly of Latino fifth- grade childs. Three nonconsecutive 24-h dietary reviews were gathered from every youngster. For each eating scene detailed, childs were asked whether they had been sitting in front of the TV. Stature and weight were estimated by utilizing standard strategies and were utilized to ascertain BMI. On weekdays and end of the week days, 17-18% and around 26% of absolute day by day vitality, separately, were expended during TV seeing in the 2 tests. Despite the fact that the fat substance of the nourishments devoured during TV survey did not vary fundamentally from that of the sustenances overwhelmed by the TV off, less soft drink, inexpensive food, natural product, and vegetables were overcome with the TV on. The measure of nourishment expended during TV survey was not related with childs' BMI, however in the third-grade test, the fat substance of sustenances devoured during TV review was related with BMI. A noteworthy extent of youngsters' day by day vitality admission is expended during TV seeing, and the utilization of high-fat sustenances on ends of the week might be related with BMI in more youthful childs.

### III. OBESITY AND OVERWEIGHT IN CHILDREN

Childhood obesity connected with an enormous gathering of incessant afflictions, for instance, Type 2 diabetes, hypertension, coronary sickness and a couple of dangerous developments (Ogden et al., 2006; Krebs et al., 2007; Nicklas T& Hayes D, 2008). The urgency in recognizing this prosperity peril early is that overweight and weight adults have a higher risk of getting the chance to be strong as adults (Krebs et al., 2007). Guo et al. (2002) moreover noted data from the Fels et al., (2004) longitudinal examination demonstrating that a BMI in the 95th percentile dependably during puberty is a practical pointer for grown-up grown-up obesity. As the prevalence of youth corpulence has extended in all races, ages and sexual directions, adult minority preschool children include a particularly impacted assembling as substantiated by the National Health and Nutrition Examination Surveys (NHANES) in 1976-1980 and 2007-2008 (Ogden et al., 2006). Also, the Pediatric Nutrition Surveillance System (PedNSS) proposes an a lot higher normality of youngster corpulence in low-pay preschool Childs developed birth to four years (Sharma et al., 2009).

### IV. RESEARCH METHODOLOGY RESEARCH DESIGN

Research is a coherent and orderly look for new and valuable data on a specific theme.

The examination configuration features the characteristics in quantitative research the extent that information accumulation is concerned; recording occasions and the instrument of research is concerned.

### A. Research choice

The present examination gathered quantifiable information that was explored and portrayed utilizing graphic and inferential measurements. The agent filled in as an examination aide and accumulated information; with the end goal of uncover the connection between TV review example and youngster corpulence among 6-12 years of age offspring of Tamilnadu and Kerala and their folksestity among 6-12 years old children of Tamilnadu and Kerala and their parents.

### B. Descriptive study

Descriptive study is a technique used to the improvement of more data about physical attributes inside a specific territory of premium or field of study. It's essential point is giving a major picture of conditions as they consistently happen (Burns and Grove, 2009)

### C. Sources of data

#### Primary Data

Primary data are the data initiated by the researcher for the specific purpose of addressing the research problem. In this research a well-structured questionnaire and interview schedule are used to collect the primary data from 2000 respondents in Tamilnadu and Kerala Essential information are the information started by the specialist for the particular motivation behind tending to the exploration issue. In this exploration a well-organized survey and meeting calendar are utilized to gather the essential information from 2000 respondents in Tamilnadu and Kerala

#### Secondary Data

Secondary data may help to clarify or redefine the problem during the exploratory research process Secondary data may actually provide a solution to the problem Secondary information may explain or rethink the issue during the exploratory research process Auxiliary information may really give an answer for the issue

### D. Sample selection

Researchers invariably propose two general methods of sampling, non-probability and probability techniques.

#### Sample Unit

Sampling unit refers to the children of Tamilnadu and Kerala under the age category of 6-12 years old and their parents are considered for the present study Sample unit refers to the children of Tamilnadu and Kerala under the age classification of 6-12 years of age and their parents are considered for the present investigation

Name of the cities	SD as per pilot study	Expected sample size			
		Tamilnadu	Kerala	Tamilnadu	Kerala
Chennai	Kochi	0.466	0.397	334	242
Madurai	Thiruvandram	0.412	0.448	261	308
Trichy	Thrissur	0.364	0.338	204	176
Kovai	Kozhikode, Kollam	0.389	0.398	233	243
<b>Total</b>		<b>1031</b>			<b>970</b>

### E. Questionnaire design

Questionnaire includes two parts; first part of questionnaire is used to collect the data from parents regarding their socio economic status and television viewing patterns, health issues due to television and behavioral changes of the child. Second part of the questionnaire used to collect the data from children and it includes questions like most favorite television programs and channels, food preference due to advertisement and preferred time of watching TV. Both questionnaires are collected simultaneously from both parents and child.

## V. DATA ANALYSIS AND INTERPRETATION

**Table 1: Educational qualification household head**

Educational qualification of household head	Tamilnadu (n=1000)	Kerala (n=1000)
School level	499	306
Under graduation level	254	376
Post- graduation level & Above	160	209
Illiterate	87	109

It is inferred from the above table that, In Tamilnadu 499 of the respondents have completed their school level education, 254 of them are Under Graduates, 160 of the respondents are Post Graduates and the remaining 87 of the respondents are illiterates.

In Kerala 306 of the respondents have completed their school level education, 376 of them are Under Graduates, 209 of the respondents are Post Graduates and the remaining 109 of the respondents are illiterates.

**Table 2: Health Issues due to TV viewing**

Health issues due to TV viewing	Opinin	Tamilnadu (n=1000)	Kerala (n= 1000)
Sleeping	Yes	302	314
disorders/ sleeping problem	No	698	686
Day time sleepiness	Yes	321	329
	No	679	671
Bedtime resistance	Yes	446	454
	No	554	546
Hyper tension	Yes	378	380
	No	622	620
Poor dietary habits	Yes	244	252
	No	756	748
Stomach problems	Yes	191	199
	No	809	801

From the above Table 2 it is inferred that, in Tamilnadu 302 of the respondents told that their children are facing sleeping disorders while watching television and 698 of the respondents told that their children is not having any problem because of watching television. In Kerala, 314 of the respondents told that their children are facing sleeping disorders while watching television and 686 of the respondents told that their children is not having any problem because of watching television. While considering hyper tension effect, in Tamilnadu 378 of the respondents told that their children are affected by hyper tension and 622 of the respondents told that their children are not at all affected by hyper tension by watching television. In Kerala, 380 of the respondents told that their children are affected by hyper tension and 620 of the respondents told that their children are not at all affected by hyper tension by watching television. Regarding the side effect poor dietary habits, in Tamilnadu 244 of the respondents told that their children are affected by poor dietary habits because of watching television and 756 of the respondents told that their children are not at all affected by poor dietary habits because of watching television. In Kerala, 252 of the respondents told that their children are affected by poor dietary habits because of watching television and 748 of the respondents told that their children are not at all affected by poor dietary habits because of watching television

**A. Finding**

In both Tamilnadu and Kerala, nearly 50 percent of the

children like to take food while watching TV and many of the respondents told that their children prefers to watch television before bed time and willing to watch television during evening time. Many children prefer crisps and savory snacks and children are influencing their parents to buy things that are showed in television

**B. Suggestions**

In the first place, while the reason stays to be seen, obviously overweight and stoutness are identified with TV seeing and potentially other screen time. Second, guardians ought not permit TVs in their child's room, particularly youthful childs.

**VI. CONCLUSION**

While absolutely understanding the association between TV/screen time and forcefulness remains a test for general prosperity, this can't be a deterrent to action. Attempts are required on various fronts in case we are to significantly affect weight rates and related relentless sicknesses, and diminishing TV seeing obviously has an occupation. We welcome more research, especially concerning causal associations, the impact of other screen time practices and the effect of TV/screen time on child obesity. Until we have more information, we should work with what we do know. As such, continued with movement is required, especially concerning the activity of TV and child obesity.

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**Dr.S.B.Inayath Ahamed** is working as Assistant Professor in the Kalasalingam Business School. He had Cleared UGC NET,SET in the year 2012. He had published many quality research papers in the journals of repute.



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