“Effect of screen exposure is linked to weight gain in females”

Shrini Awasthi
Guest lecturer in Kushbha Thakre University for Hospital Management, Raipur, Chhattisgarh.

Dr. Swati Sharma
Consultant Physiotherapist- Pandit JNM Medical College, Raipur, Chhattisgarh.

Nidhi Pandey
Dietician, Bhopal

Introduction:
Obesity is slowly becoming a grave health concern. There are many reasons for weight gain in different age groups some of which are – physical inactivity, improper diet, stress, hectic schedule, improper or inadequate sleep, smoking, excess intake of tea and coffee, hormonal imbalances, cardiac issues, blood pressure, blood sugar imbalances etc. One very important factor that is contributing to rise of obesity nowadays is the increased use of gadgets like television, smart phone, tablet, laptop etc.

An increase in exposure to technology goes hand in hand with a decrease in physical activity. As people spend more time sitting in front of the television or computer, they spend less time outside running around and burning off calories and energy. Over a period of time, combined with an increase in snacking this can lead to significant weight gain.

Technology and commercials:
Its not just the fact that increased use of technology contributes to more sedentary behaviour – its also the content of technology people are exposed to, that matters. According to a report of the American Dietetic Association in 2008, 9 out of 10 food advertisements shown during Saturday morning are for low-nutrient foods that are high in fat, sodium and added sugars.

Technology interferes with sleep
Having a television in the bedroom increases the impact of television watching on weight status, independent of physical activity. This may be due to decreased amount of sleep associated with late-night, un-monitored television watching. A lack of sleep causes an increase in ghrelin, the hormone that signals you are hungry and a decrease in leptin, the hormone that tells you, you are full. On an average a sleep deprived person will consume 300 extra calories per day, usually from high-fat foods and snack more frequently than someone who is well-rested.
The more the technology we use, the more we sit. And prolonged sitting time can lead to weight-gain, muscle loss, back and neck pain as well as more conditions like diabetes, heart disease.

- Health risks of being overweight
- Feel tired and lacking in energy
- Experience breathing problems (for example – shortness of breath when moving around, or not being able to cope with sudden bursts of physical activity like running across the road)
- Feel that you sweat a lot as compared to other people.
- Develop skin irritation
- Have difficulty in sleeping
- Get complaints from your partner that you snore
- Experience back and joint pains which affect your mobility

**Objectives**
The main objective of the study is to find out the effect of screen exposure is linked to weight gain in females.

The supplementary objectives are to find out if

1) Out of the 3 age groups chosen, which age group has higher mean weight?

2) Of the subjects chosen - was loneliness a contributing factor for increased level of screen exposure?

3) What are the gadgets owned by subjects of different age groups?

4) Awareness level of people regarding balanced diet?

5) Being aware of the fact, how many people actually ate a balanced diet?

6) Awareness level of people about exercise and its importance to stay fit? And how many people did exercise if they were aware of its benefits?

7) To find out if people knew that screen exposure is linked to weight gain?
8) To find out how much time on an average do these subjects spend on screen?

9) People of different age groups and their screen addiction habits (Laptop, Smartphone and Television) i.e.: Are they hooked to their screens even when they are tired or they have pending tasks to finish?

10) Find out correlation between age-group weight and their habits of screen exposure i.e.: being on screen Always or Sometimes

**Limitations of the study**

1) The subjects have been chosen randomly without checking for a correlation between them.

2) The subjects belong to 3 categories - Housewife, Self employed and Service. If the subjects would have been chosen from the same profession, it could have given more correlation between the results, but due to age group and proximity of the subjects to my residential place, subjects from 3 categories were chosen.

3) Education could have played a role in the type of routine and thinking pattern of females. But 19 subjects chosen had the same qualification, which could have affected the study.

4) A few questionnaires were filled over the phone due to unavailability of the subjects; this could have affected their responses.

5) Mean average weight although listed in the study, but is not a clear indicator of weight and health of individual females as weight depends on a few basic things like - Age, Height, Weight, Number of pregnancies / miscarriages, Stress levels and hours of sleep.

**Method of study:**

This is an exploratory research done using simple random sampling.

The tabulation of the data was done 4 times, first of the total subjects and the other 3 were done by dividing the subjects in the age-groups mentioned previously.

Combined tabulation of the data was done to present the collected data in a concise manner. Questions that were linked to each other were cross-tabulated to check for correlating variables. Cross tabulation also helped in interpreting whether the objective that was kept in mind in the initial stages of the study does have any relevance or not?
Conclusion:

The study shows that there are many reasons for weight gain in females out of which - Screen exposure plays an important role. The other factors playing an important role are -

(1) Not eating a balanced diet
(2) Not doing exercise on a regular basis and
(3) Not having a fixed routine.

This study can be further elaborated to find out exact pattern of eating habits, how and what is the exact duration and frequency is of screen usage in females.

Bibliography:

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