

Pernicious Effect of Sedentary Presence- A REVIEW

Sunil Yaole, Datta Meghe Institute of Management Studies, Nagpur

Vinod Waiker, Datta Meghe Institute of Management Studies, Nagpur

Ranjit Ambad Associate Professor Dept. of Biochemistry Datta Meghe Medical college, Nagpur

Dhruba Hari Chandi Assistant Professor Dept. of Microbiology Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences Sawangi (Meghe), Wardha

Address for Correspondence

Dr. Vinod Waiker,

Assistant Professor, Datta Meghe Institute of Management Studies,

Nagpur, dmimsit@yahoo.com, 8390316999

Abstract

Sedentary is a global health problem of all ages and major reasons for approximately 2 billion death per year. This is one of the ten leading causes of death that leads to mortality, cardiovascular disease, colon, high blood pressure, lipid disorder, obesity, depression and anxiety except for sub-Saharan Africa where chronic disease is the major cause of death. The level of inactivity ranges from developed countries to developing countries where approximately 70% of the population is inactive. There are 60 to 80% of adults who are sedentary and having a risk of high health problems. The study also reveals the sedentary activities after covid 19 to analyze the risk of health problems among the college students to realize that the most active age is engaged in sedentary activity.

Key Words: *Sedentary Activity, Health problems, Inactivity habits, students' inactivity, diseases borne habit*

Introduction

More than four-fifths of the population worldwide are leading a sedentary lifestyle both in the developed and developing as per WHO along with two third children are inactive posing a risk of poor health in the coming future. As per the definition of SBRN, Sedentary is a behavior characterized by inactivity like sitting, relaxing, or lying less energy expenditure almost less than or equal to 1.5 metabolic equivalents. The study reveals that only 5% of the adults are carrying out the exercise 20-30 minutes per day. Physical activity of at least 20-25 minutes per day recommended by WHO to protect from the disease like cardiovascular, hypertension, mental health, sleep, and obesity.

More than 54% of people are found to be inactive in India as per the ICMR data (TOI,2018). The primary activity involves in the work done at the workplace may be for earning bread and butter and less than 10% of the people are engaging in recreational or physical exercise in their daily routine. Physical inactivity is contributing to the disease burden and death. Globally, One out of five adults and four out of five adolescents are inactive and do not engage in enough physical activities. Physical activities can involve both activities due to work and leisure. As the world's 2nd largest population and almost one-fifth of the total population, India become one of the major contributor to the health burden.

A Sedentary lifestyle is also impacting mental behavior and leads to various diseases like stress and depression severely. The sedentary behavior has increased in the covid-19 period and hampered physical activities resulted in mental stress and perceived stress for the university students (Matthew J. Savage, 2020). Students are being engaged in the physical activities in the college premises and ground and had a place to get relieve the stress and mental pressure. The difference is found with the gender for the health science students as some of them are found time to their physical activities well and increased the activities for women, the low BMI (C. R. Blanco,2020). Sitting time is increased to all the students irrespective of gender and BMI. The lifestyle where the use of tobacco in any form having significantly associated with Covid-19 and at risk to maintain good health practice along with quitting smoking (AskinGülsen et.al, 2020).

The physical inactivity during the covid-19 lockdown has been increased for working professionals and students of undergraduate and postgraduate students. Due to the home ambiance, they used to engage in the sleep in the daytime after lunch along with just sitting at mobile or computer for long hours has been tremendously increased (Piya Majumdar et. al.,2020). That is having an adverse effect on the health and immune system. The various types of stresses are accumulated during the period, like covid 19 pandemics, the heavy workload has given by the company, feeling of insecurity related to job loss, news related to the death of their own, earning for the bread and butter and in turn impact on their health. This stress led to the experience like headache, digestive problems, fatigue, hormonal imbalance, and insomnia, etc. Due to the lockdown, everyone pushed to do physical activity in their premises only, leaving very little space to stretch themselves and leads to the various virtual games and engagement in stressful activities under online classes. This leads to an increased risk of obesity, cardiovascular disease among children (Genevieve F. Dunton, et. al., 2020)

This physical inactivity has been increased for the students worldwide and therefore care must be taken by the educator, policymaker to implement population-specific health education along with self-practice to keep all of them active and self-motivated towards the amount of required physical activity per day (Chen Zheng et. al., 2020). The practice of physical activities mainly due to the previous lifestyle of engaging in some of the active lifestyles reduced up to great extent during the lockdown. This may happen due to various constraints like lack of space, teammates, ground, equipment's, etc. (Francesca Gallè et. al., 2020)

Material and Method

The primary data collected from the students of the Nagpur region to know the sedentary lifestyle of the young generation mostly students. 200 Questionnaires were floated and 148 students have filled complete data which has considered for the analysis. 59% of the female and 41% of the male are considered to analyze their sedentary activities during the start of the lockdown period. The study was only done to the students and did not consider much of the working professionals doing work from the home and the households who are not involved in any sort of online engagement for the routine task. Businessmen and other categories are also not considered for the analysis. Stratified random sampling is used to select the respondent of different regions, their graduation discipline, place of residence, and age group. The cross-tabulation is used to match the age group, gender, and place of living and how much percentage of them are facing problems or likely to face problems soon or late due to sedentary activities. The study only considers the active age and not included the other upper age band. The students of schools and colleges of Nagpur region are considered for the study.

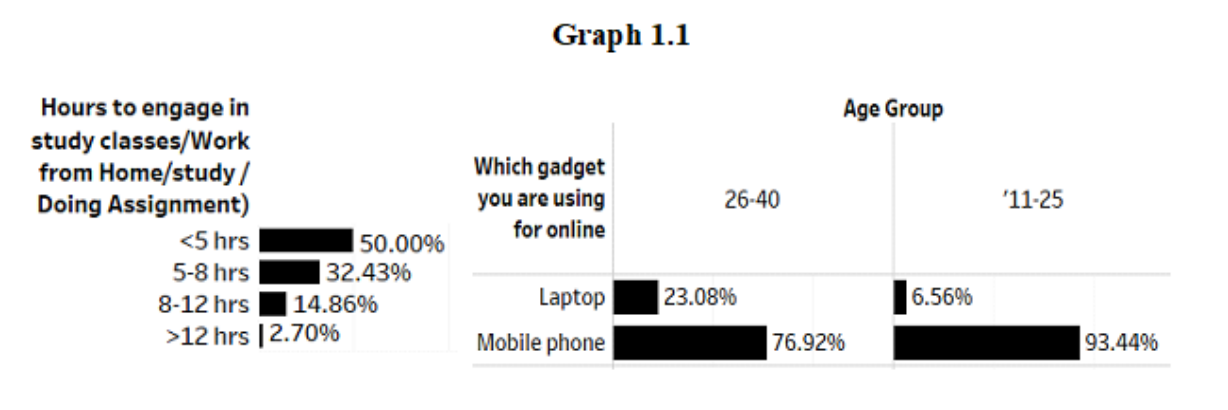
Result and Discussion

As per the demographic of respondents' mostly active young generation especially students are considered for study the changes reflected during the lockdown period. A total of 180 respondents was selected out of which 148 has been received the correctly filled form and the percentage of male and female counterparts was 40.5% and 59.5% respectively. Similarly, the occupation we have not selected and students who are currently working is also taken into consideration along with age group generally chosen is only students i.e. 11-25 and 26-40 out of which 82% belongs to the students who are studying now or just finished. The respondent is 36.5% are from urban background 63.5% are from a rural background and falls in all the income group and education discipline.

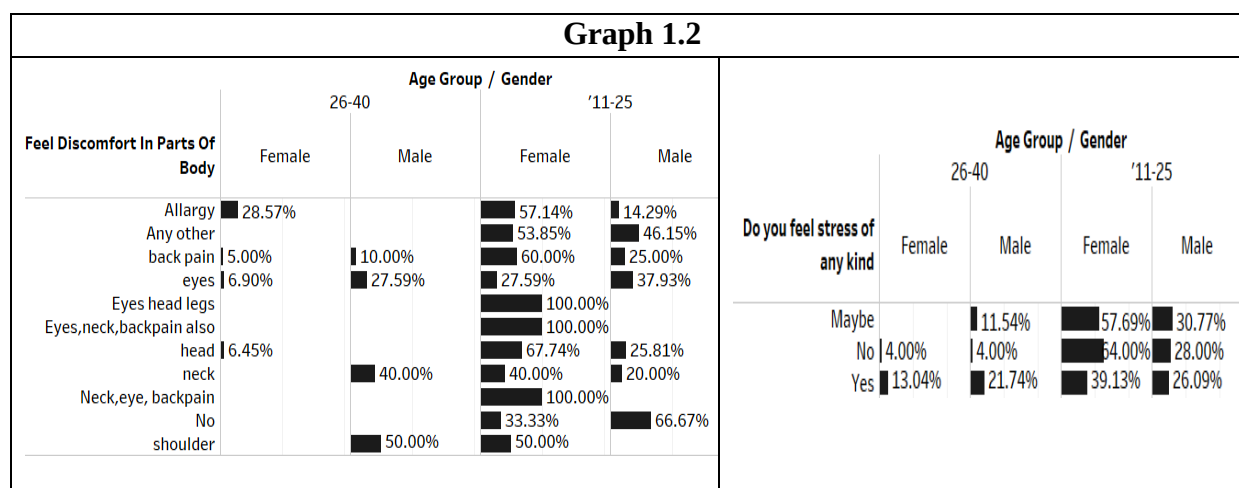
Gender	Male	60	148
	Female	88	
Occupation	Student	140	148
	Students working	8	
Age Group	Age group 11-25	122	148
	Age group 26-40	26	
InCome Group	<2 LPA	80	148
	2-5 LPA	34	
	10-20 LPA	8	
	>20 LPA	2	

Education Discipline	Agriculture	6	148
	Commerce	34	
	engineering	12	
	management	90	
	Science	6	
Residing Place	Rural	54	148
	Urban	94	

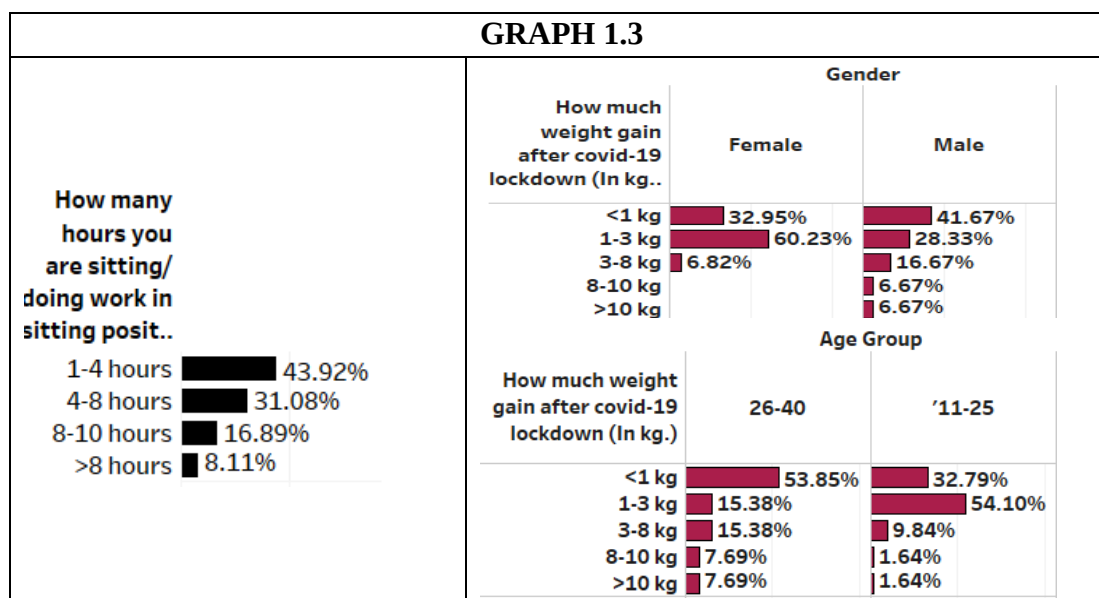
The students are who are using either laptop or mobile phone for their online study and found on average only around 14% are only using the Laptops and rest of them are using the cellphones. Almost more than 50% of the people are connecting online with their cellphone only for study and assignment for more than 5 hours and some people are more than 12 hrs. This may be a prime concern for them to take care of their eyes, heads and stress level is increasing if we do continuously or even if we take breaks in between. This may lead to strain on the eyes, head, neck and back pain, due to continuously sitting



Watching a small screen. Sometimes we should forget to take breaks in between to relax due to the completion of assignments or solving problems, peer pressures etc. Some of the students are not able to cope with this and facing distress leads to depression sometimes. Even we can see from Graph 1.2 that more students in 11-25 category, 63.52% are reported problems in their eyes and almost all female reported eyes neck and back pain up to some extent. Due to the sedentary and less physical movement along with continuous sitting and doing an online activity of any form lead to the side effect on the various body parts. Some 39.13 % females and 26.09 % are confirmed reported that they have some kind of stress. The Factors of stress may have multiple reasons that are not explored in the study but they have some kind of stress and some 88% are may have some discomfort that may be due to stress.

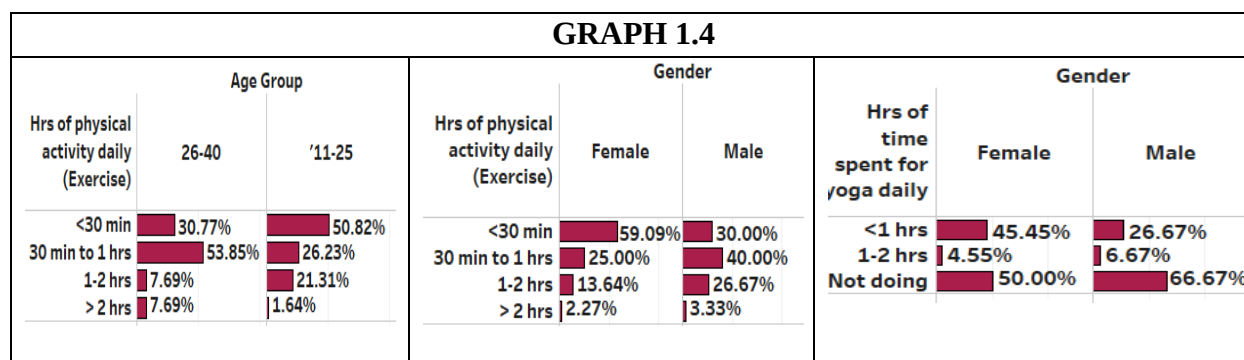


The data also supported to sedentary activities are on the rise and almost 56.08% (GRAPH 1.3) are sitting and doing their work for more than 4 hours and some of them 25 % are working more than 8 hours daily. Everyone is sitting on an average 4-5 hours that lead to gain weight if they are not engaging themselves in the routine exercise or physical work for at least half an hour to one hour daily. All the age groups are reported to weight gain in the lockdown period range from less than one kg to even more than 10 kg for the male group having the age 11-25. This shows students need to work physically as per their energy level or started gaining weight in absence of systematic physical exercise. Students are not very much systematic in their physical exercise or calorie burnout but they are able to manage this by engaging in various other activities of their interest.

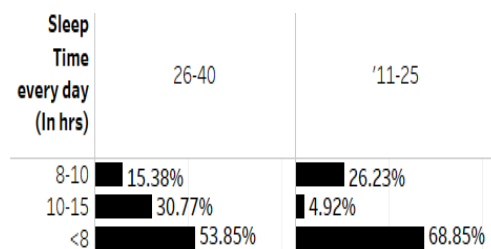


As per Graph 1.4 the all people are engaging in physical activities and still facing physical problems like neck, eye, back pain, allergy and leg pain which meant that doing physical

exercise targeting the specific area of work is needed. This has to mix with yoga, breathing exercise and pranayama for stress relief and internal strength for the head, body and mind. This helps in relieving the stress they feeling due to workload.



The sleep time of every individual is going down due to numerous reasons and almost on average, 61% of students are sleeping less than 8 hours, which is having a great impact on their health, immunity and overall stress. This practice will lead to headaches, insomnia, stress, high BP and root cause of other diseases.



Conclusion

As per the data collected from the respondent all students of school and college they are engaged in the sedentary activities, not doing enough exercise, put on weight, feeling the stress of some kind, continuous attending the classes and homework lead to the discomfort in their body. Attending classes online with mobile phones and doing assignments on small gadgets, along with extra pressure of homework and assignment are leads to some of the stress and their minds. This study aligns with all the previous studies and concluding that active age is still in the sedentary lifestyle and even this will get worse due to the covid-19 and subsequently lockdown period. The habit of regular exercise is part of their early childhood, when parents, school teacher and schools, college are playing an important role to shape the habit of regular exercise and relieve from the discomfort of the body. Students are not engaged in yoga on regular basis and probably not able to relieve the stress which in turn accumulated and reflect in the form of the disease.

As per the report of Medical New today, all of us can reduce the time of sedentary up to some extent by good practice like take a break every after 30 minutes when job involves sitting for

long hours. Moreover, if you are continuously working over the phone or computers, take small walks during lunchtime, standing for stipulating time in the corridor, take yoga every day for at least 30-60 minutes, taking the stairs rather than lift, eat in small amount 2-4 times instead of one-go-all etc. This practice will help in improving the health and relaxing the mind feeling less stress.

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