

Effect of Online Education System on Changing Quality of Life among School Teachers (35-55 Years)

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Abstract

A new virus known as Coronavirus had caused the sudden appearance in Wuhan and the work burden of school teacher's significantly raised. The purpose of the study is to find out the Dietary Habit of the selected subjects, to assess the Physical Health and Psychological Status and to study the Social Relationships and Environment. A standardized questionnaire by World Health Organization was used to evaluate the Quality of Life among School Teachers. 200 participants were selected from Delhi NCR region. Mean, standard deviation and Karl Pearson test were used for statistical analysis. The calculated value shows that the Dietary Habit has significant difference with Physical Health Domain and Psychological Status Domain at the 0.01 level and all the 4 Domains i.e. Physical Health, Psychological Status, Social Relationship and Environment have significant correlation with each other at the level of 0.01. It was noted that all the 4 domains along with the dietary habit changed the Quality of Life of the school teachers. The reasons were isolation, overburden of work, anxiety, lack of sleep and unhealthy eating practice. A dietary pattern with 24 hour dietary recall, food frequency questionnaire, 3 day dietary recall and diet history should be used for the further studies and WHOQOL-100 can be used for conducting similar studies.

Key Words: COVID-19, School Teachers, Quality of Life, Physical Health, Psychological Factors, Dietary Habit

1. INTRODUCTION

In late 2019, a new virus known as Coronavirus had caused the sudden appearance in Wuhan, the origin of new virus from the city. Later on, this virus got spread and caused death around the world (Ciotti, M et.al. 2020) and the WHO (World Health Organization) declared COVID-19 as pandemic on 11 March, 2020 (Tarkar, P, 2020). COVID-19 pandemic caused change in education system. Educational institutions were closed for short period of time to avoid the contact of the virus. UNESCO later advised to adopt distance learning to prevent interruption for learning (Khudoyberdievna, S. Z., 2020) and teachers started taking classes on Zoom call, Microsoft teams or other mode of online class options to keep the training on. (Tandon, U., 2021).

Indian teachers were following traditional method of teaching. When the pandemic pushed traditional teaching to online teaching system, many teachers' satisfaction level was low. Traditional teaching method means interacting face to face between teachers and students to help and improve problem-solving, decision-making, and critical thinking. It is also meant to be a constructive manner of teaching which involves interaction and involvement between students and teachers and school teachers became comfortable with tradition teaching method. An online teaching system can be explained as interaction between students and teachers through online, which also helps to provide study material for students and offers relevant concepts on computer aided education. Teaching and learning takes place between the student and faculty using internet and technology; it is also known as eLearning. During COVID-19 pandemic, schooling is done by distance learning by means of internet. The work burden of school teacher's significantly raised and there is a higher chance of increase in stress level during pandemic (Suganya, S, and Sankareshwari, B. 2020) It is said that the amount of stress that a person

experienced at their workplace can decline their quality of life. Stress is triggered by several reasons. Nowadays, stress is caused to the teachers because of COVID-19 situation and it creates tension which results decline in their mental well-being and their quality of life at academic institution.

Oxford dictionary (2002) defined “stress in the life of a person can be understood as something that causes a state of strain or tension”. Howard & Johnson (2004) defines “teacher stress as an unpleasant feeling, expressed through anger, tension, frustration or depression, etc., that will pose a danger to self-esteem or well-being.” Stress can minimize sense of satisfaction, interactions with students, self-efficacy, self-esteem, etc. The situation of COVID-19 is a cause where the current circumstances have effect on negative feelings among the teachers and reduce their mental well-being. The mental problems among school teachers might rise stress levels, symptoms of depression, anxiety, negative outlook about life etc. (Thomas, K et.al., 2020).

Teacher’s stress can trigger their ultimate teaching practice, causing adverse effect on behavior and achievement of students and depression is associated with teachers’ interactions quality among students. Depression results constant feelings for sadness, which results in emotional and physical issue like loss of energy, loss of interest in activities, or reduced capacity of work. It is also revealed that teachers having higher degree of depression had ineffective interactions among students. Anxiety state involves extreme fear or panic and are followed by such symptoms like lack of rest, tense muscles, or difficult to focus. Early studies identified that anxiety among teachers’ results in increase stress in their students and worsen the evaluation of students. (Kush, J et.al., 2021)

It is important to be physically active because it helps to avoid mental or emotional instability and enhance the quality of life by reducing the adverse effect of mental instability because of the COVID-19 pandemic. Physical activity for health and well-being must be important, it was proven that those teachers who performed exercises in free time, it helped to reduce mental and physical health problems. To prevent such kind of problems in future, it is important to understand the problems during the lockdown situation. (Aperribai, L et.al., 2020) The purpose of the study is to find out the Dietary Habit of the selected subjects, to assess the Physical Health and Psychological Status and to study the Social Relationships and Environment.

The COVID-19 pandemic is having a far-reaching effect on the QoL of teachers. Previous studies had been conducted which shows the impact of mental health on the teachers during COVID-19 pandemic. It also focused on anxiety symptoms during COVID-19 among school teachers. The study will demonstrate on the findings that how dietary habit, physical health, psychological factors, social relationships, and environment will change the Quality of Life of school teachers during online education.

2. MATERIALS AND METHODS

2.1 Locale of the Study

The study was conducted on school teachers from Delhi NCR region. Subjects for the study were chosen from regions of Delhi, Faridabad and Gurugram to participate in the study.

2.2 Sampling

For the present study, school teachers of the age group from 35 to 55 years were selected and 200 subjects were selected from Delhi NCR region using Purposive Sampling which included both the genders male and female. The questionnaire form was circulated among school teachers through Whatsapp, in which 10 forms were not filled correctly by the subjects, therefore total number of respondents were 190.

2.3. Inclusion Criteria

School teachers from 35 to 55 years of age

Both the genders were included

School teachers from private and government school

2.4 Exclusion Criteria

Subjects below 35 and above 55 years of age

Subjects who are not teaching in school

2.5 Development of Tools

A standardized questionnaire was used which was developed by the World Health Organization (WHO). WHOQOL-BREF questionnaire was selected; the version was Field Trial Version, December 1996. The questionnaire consisted of 4 domains, which contained Physical Health, Psychological Status, Social Relationships and Environment. To seek the permission, a permission approval form was submitted to the World Health Organization and received a confirmation mail at the mail I'd permissions@who.int, permitted to reprint, reproduce or translate the questionnaire.

2.5.1 Socio Demographic Profile

The Sociodemographic profile included age, gender, and education. Socioeconomic class of the subjects was calculated by using Kuppuswamy Scale (2021).

2.5.2 WHOQOL-BREF:

There were 26 questions with 4 domains that were Physical Health, Psychological Status, Social Relationships and Environment and scale from 1 to 5 was mentioned and subjects had to choose an option accordingly.

2.6 Statistical Analysis

Data obtained was analyzed and interpreted using Mean, Standard deviation and the Karl Pearson test.

2.7 Analysis of Data

Data coding was done in SPSS Software. The data was then calculated from raw score to transformed score which is mentioned in WHOQOL- BREF for 4 domains. The test that was used for statistical analysis was Karl Pearson Test. P-value that is lower than 0.05 and 0.01 was considered for the significance level.

3. Result and Discussion

Table 3.1: Body Mass Index of the Respondents

Particulars	N=190 (%)
Underweight	-
Normal Weight	55 (29)
Overweight	113 (59)
Obese Class 1	20 (11)
Obese Class 2	2 (1)

Table 3.1 represents the Body Mass Index of the respondents. About 113 (59%) respondents were falling under the category of overweight and 2 (1%) respondents were falling under the category of obese class 2.

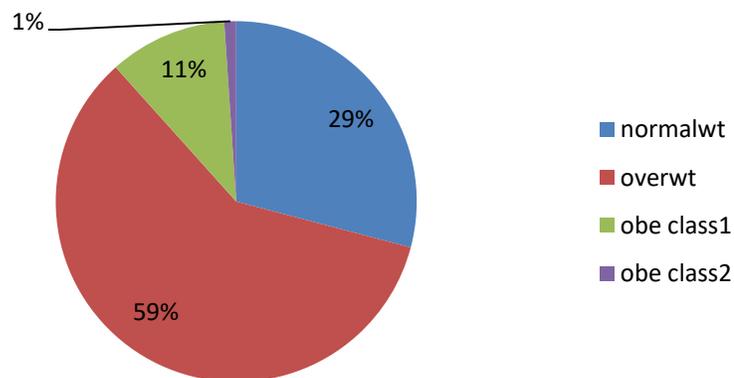


Figure 3.1 Body Mass Index of the Respondents

Table 3.2: Quality of Life of the respondents

Particulars	N (%)
Very Poor	-
Poor	54 (28)
Neither poor nor good	130 (68)
Good	6 (4)
Very Good	-

Table 3.2 represents the Quality of Life of the respondents. It shows that 130 (68%) respondents had neither poor nor good Quality of Life whereas only 6(4%) respondents had good Quality of Life. A similar study done by Nayra Suze Souza e Silva et.al. (2021) mentioned in the study that teachers' Quality of Life declined in the pandemic by increase in their alcohol consumption, lack of sleep, not satisfied with their work, and fear of COVID-19.

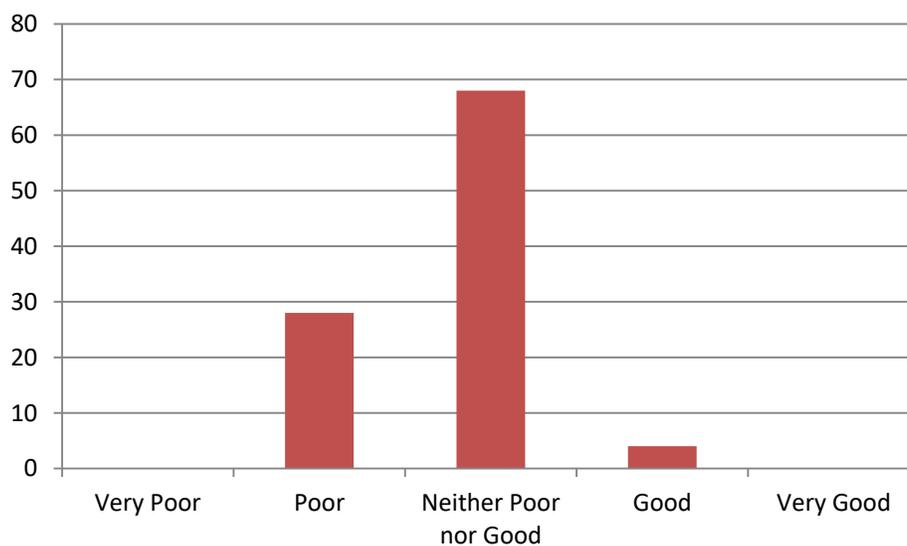


Figure 3.2 Quality of Life of the Respondents

Table 3.3: Dietary Habit of the respondents

Particulars	N=190 (%)	
	Yes	No
Skip one of the main meal	34 (17.9)	156 (82.1)
Habitual of snacking between the meals	134 (70.5)	56 (29.5)
Change the quantity or portions of meals and snacks	163 (85.8)	27 (14.2)
Change in daily intake of fruits and vegetables	158 (83.2)	32 (16.8)
Change the intake of a balanced diet	149 (78.4)	41 (21.6)
Consumption of junk food or fast food and fried food	163 (85.8)	27 (14.2)
Consumption of sugar-sweetened beverages	125 (65.8)	65 (34.2)
Consumption of sweets, candies or chocolate	100 (52.6)	90 (47.4)
Participate in cooking new or traditional recipes	142 (74.7)	48 (25.3)
Consumption of unhealthy food	152 (80)	38 (20)
Consumption of immunity-boosting foods	178 (93.7)	12 (6.3)
Inclusion of nutrition supplements to boost immunity	105 (55.3)	85 (44.7)
Support from family and friends in eating healthy food	169 (88.9)	21 (11.1)
Involve in learning healthy eating tips from the media	55 (28.9)	135 (71.1)

Table 3.3 represents the dietary habit of the respondents. Majority of the respondents i.e. 156 (82.1%) respondents had not skipped their main meals, whereas 34 (17.9%) respondents had not skipped their meals. There were 134 (70.5%) respondents who were habitual of snacking between the meals and 56 (29.5%) respondents were not habitual of snacking between the meals. About 163 (85.8%) respondents changed the quantity or portions of meals and snacks, whereas 27 (14.2%) respondents had not changed the portion of the meal. About 158 (83.2%) respondents changed their daily intake of fruits and vegetables but 32 (16.8%) respondents had

not changed their intake of fruits and vegetables. A similar study done by Puścion- Jakubik et.al. (2022) mentioned that there were significant increase in the consumption of fruits, vegetables and salad (20.4%). About 149 (78.4%) respondents changed the intake of a balanced diet and 41 (21.6%) respondents had not changed their intake of a balanced diet. Majority of the respondents i.e. 163 (85.8%) respondents consumed junk food or fast food and fried food, whereas 27 (14.2%) respondents did not consumed fast food and fried food.

It was observed that 125(65.8%) respondents consumed sugar-sweetened beverages, whereas 65 (34.2%) respondents had not consumed sugar- sweetened beverages. Around 100 (52.6%) respondents consumed sweets, candies or chocolate, and 90 (47.4%) respondents had not consumed sweets, candies or chocolate.

Around 142 (74.7%) respondents participated in cooking new or traditional recipes and 48 (25.3%) respondents had not participated in cooking recipes. About 152 (80%) respondents consumed unhealthy food and 38 (20%) respondents had not consumed unhealthy food. Around 178 (93.7%) respondents consumed immunity-boosting foods whereas 12 (6.3%) respondents had not consumed immunity -boosting foods. It is also shown that 105 (55.3%) respondents included nutrition supplements to boost immunity and 84 (44.7%) excluded nutritional supplements. Majority of the respondents family and friends supported in eating healthy i.e. 169 (88.9%) and 21 (11.1%) respondents' family and friends had not supported in eating healthy. About 135 (71.1%) respondents had not involved in learning healthy tips, whereas 55 (28.9%) involved in learning healthy eating tips. A similar study done by Puścion- Jakubik et.al. (2022) mentioned that about 61.1% of the respondents had not changed their eating habits during the pandemic.

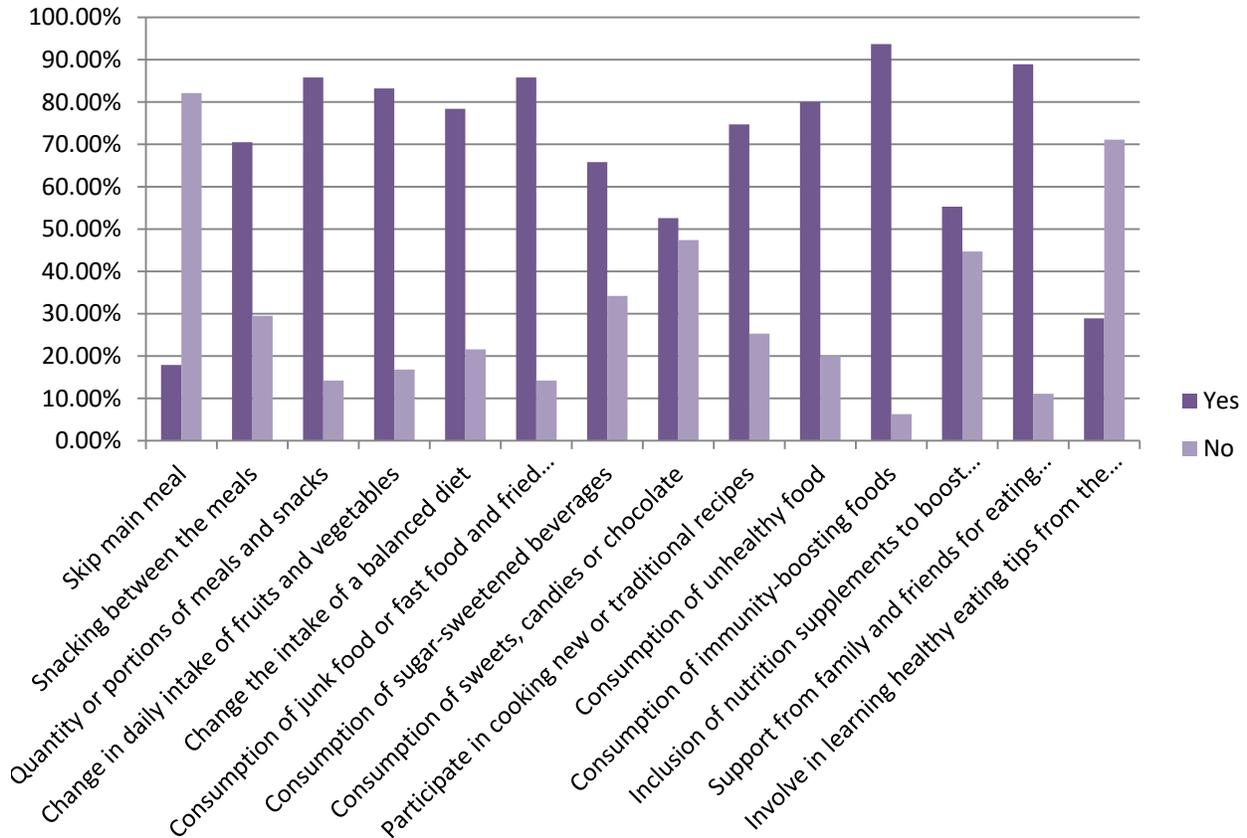


Figure 3.3: Dietary Habit of the respondents

Table 3.4: Correlation values between Dietary Habit and 4 Domains

	Dietary Habit	Domain1	Domain2	Domain3	Domain4
Dietary Habit	1	.243**	.243**	-0.013	0.004
Domain1	.243**	1	1.000**	.442**	.430**
Domain2	.243**	1.000**	1	.442**	.430**
Domain3	-0.013	.442**	.442**	1	.627**
Domain4	0.004	.430**	.430**	.627**	1

** Correlation is significant at 0.01level (2 tailed)

Table 3.4 represents the data obtained through the questionnaire has resulted into the results. The results were assessed on significant at 0.01 levels. The calculated value shows that the dietary habit has significant difference with domain 1 (physical health) and domain 2

(psychological status) at the 0.01 level, domain 1 (Physical Health) has significant difference with domain 2 i.e. Psychological Status, domain 3 (Social Relationship), and domain 4 (Environment) at the 0.01 level. It is observed that domain 2 (Psychological Status) has significant difference with domain 1 i.e. Physical Health, domain 3 (Social Relationship) and domain 4 i.e. Environment at the 0.01 level. Domain 3 i.e. Social Relationship has significant difference with domain 1 (Physical Health), domain 2 (Psychological Status) and domain 4 (Environment) at the 0.01 level and domain 4, also known as environment domain had significant difference with domain 1 (Physical Health), domain 2 (Psychological Status) and domain 3 (Social Relationship) at the 0.01 level.

4. SUMMARY AND CONCLUSION

The study focused on teachers' dietary habit, physical health, psychological factor, social relationship and environment when education system changed to online teaching.

Subjects from 35 to 55 years who were teaching in school were selected from Delhi-NCR region. The data was collected through Google form which was circulated through Whatsapp among School Teachers due to third wave of COVID-19 pandemic. A standardized questionnaire by World Health Organization (WHOQOL-BREF Questionnaire) was used. Scoring was done and the raw score was modified into the transformed score. Karl Pearson test was used for data analysis. It was noted that all the 4 domains along with the dietary habit that changed the Quality of Life among the school teachers.

School teachers suffered lot of problems because of the COVID-19 pandemic. In today's world, in this COVID-19 situation, people were facing mental and psychological problems as well as change in their dietary habit causing change in their Quality of Life and the reasons were isolation, overburden of work, anxiety, lack of sleep, unhealthy eating practice, fear for pandemic. Majority of the school teachers changed their intake of fruits and vegetables, balanced diet, snacking between the meals and consumed unhealthy food which might cause risk of obesity, high blood pressure, diabetes, heart problems. When in stress, the cravings for sweets and salty tends to increase which later makes them to consume more sweets and unhealthy food. Being socially isolated affected the mental health of the school teachers. Being isolated can be associated with less sleeping hours, decline in consumption of eating, stress, and suicidal thoughts, facing difficulty in understanding and performing tasks.

4.1 Recommendations

- During pandemic, teachers are required to look after their own responsibility, health and psychological well-being and need to continue to support their quality of life. Teaching nowadays has become the stressful job due to changes caused by pandemic. It is important to take care of their health and emotional well-being.
- The signs of mental health problems are fatigue, sleeping problems, and increase in heart rate, alter in cravings, loss in weight, hopelessness, headache, and pain, and problem in

digestion. If these signs are not treated, it can prevent the teachers from having a joyful and active life.

- It is important to help teachers focus on their mental and physical health for e.g. to maintain their healthy eating habit, follow up proper sleeping schedule, workout, take some rest; connect with family, friends and colleagues.

4.2 Future Scope

- The study was conducted online due to the third wave of COVID-19, so further studies can evaluate the Quality of Life through field visits.
- Generalized questions were added on dietary habit for this study, therefore dietary pattern with 24 hour dietary recall, food frequency questionnaire, 3 day dietary recall or diet history should be used for the further studies.
- WHOQOL-100 questionnaire can be used for conducting similar studies.
- The study can be evaluated in larger population.

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