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A STUDY ON GENERAL ANXIETY AMONG TELE-MEDICINE CALLERS,KARNATAKA, INDIA, DURING COVID-19 PANDEMIC

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ABSTRACT

Introduction: The SARS-CoV-2 virus has been unprecedentedly exceptional with more survival and viable rates in the air and thought to linger in the air for an prolonged period, In the fight against COVID 19 pandemic, on April 22nd 2020, the Government of Karnataka launched 'Apthamitra' this service was started to provide online medical assistance to the people during lockdown. It guided people andprovided medical advice. Our objective is to understand the level of anxiety among telemedicine callers and their awareness and attitude towards the disease, which will support the government. **Methods:** Prospective observational cross-sectional study conducted on Individual callers aged between 18 and 80 irrespective of the gender, Individuals who has given consent toparticipate in the study were included in our study The data will be collected using a predesigned questionnaire consisting of demographic details and the Generalized Anxiety Disorder scale (GAD-7), Descriptive statistical analysis were used. **Results:** We surveyed and studied 384 callers, of whom, 122 (31.77%) were female, 262 (68.33%) were male. Anxiety levels were assessed using Generalized Anxiety Disorder scale. 10 callers (2.60%) had minimal anxiety, 157 (40.89%) had mild anxiety, 201 (52.34%) had moderate anxiety and 16 (4.17%) had severe anxiety. **Conclusion:** The study concludes that anxiety is more prevalent among the telemedicine callers, and majority of them required education and evaluation. People also should understand the basics of COVID and start implementing all the policies and guidelines provided by the government. Government also should create more awareness programs in educating the public about this.

KEYWORDS: COVID 19, Government, Apthamitra, Generalized Anxiety Disorder scale, Guidelines, Telemedicine.

INTRODUCTION

Corona Virus belonged to the family of Corona viridians and it appeared just like spiked rings when observed through an electron microscope.[1] Viral epidemics are not new to public and this represents a very serious issue to their health and wellbeing. SARS – CoV from 2002-03, H1N1 influenza 2009 and recent MERS CoV in 2012 are some of the viral epidemics in the last 20 years.[2] The SARS-CoV-2 virus has been unprecedentedly exceptional with more survival and viable rates in the air and thought to linger in the air for an prolonged period.[3] The route of human-to-human transmission is by droplets, which are generated during coughing, talking, or sneezing, which when inhaled by a healthy individual develops the disease. Indirect transmission can occur when infected individuals land on surfaces that are touched by a healthy individual who may then touch their nose, mouth, or eyes, which allows the virus entry into the body.[4] The spreading of the Severe Acute Respiratory Syndrome Coronavirus (COVID-19) pandemic was associated with psychiatric implications.[5]

Patients with COVID-19, close contacts, suspected cases isolated at home, patients in clinics, families, and friends of affected people, and health professionals caring for patients, the general public also experienced elevated mental health concerns.[6] On the counterpart, our Indian government also started awareness programs for the people by disseminating information through various reliable sources and providing medical facilities and trying to reduce the losses due to coronavirus. But, in India, as there is a very huge dense population without well-established medical facilities, which is a matter of concern, and large numbers of people are illiterate, isolated, migrants, live remotely and are below the poverty line, struggling hard for their daily needs are raising the government's concern during the lockdown.[7]

In the fight against COVID 19 pandemic, on April 22nd 2020, the Government of Karnataka launched ‘Apthamitra’ helpline with a toll free number and a mobile app with the support of Infosys. This service was started to provide online medical assistance to the people during lockdown. It also guided people and provided medical advice. People having symptoms of COVID called from their home and got medical advice and got their doubts cleared. Expert team of doctors and students worked for it and assisted patients what to do, like providing them the address of nearest health care center, ambulance, medicines and also hospital admissions. Risk assessment, counselling, telemedicine and referral for testing and treatment

was performed. People with symptoms similar to that of COVID like telemedicine supported with OTC medicines and counselled them for self-quarantine.[8] The main aim of this study was to assess the level of anxiety, awareness and attitude of general public towards COVID 19 infection. This is a unique study, wherein we assessed anxiety and awareness in people who call to Telemedicine center for COVID related assistance and advice. Therefore, this study will help us to understand the level of anxiety among telemedicine callers and their awareness and attitude towards the disease, which will support the government and other NGOs to create awareness among general public to reduce the infection rate and improve prevention strategies.

MATERIALS AND METHODS

Study Design: Prospective observational cross-sectional study.

Ethical Approval

Study Population: Individual callers aged between 18 and 80 irrespective of the gender, Individuals who has given consent to participate in the study were included in our study. Individual's data was not documented if the call had disconnected in the middle of the conversation, or if it was not a genuine caller or if the caller denied participating in the study were excluded from the study.

Data Instrument: The data will be collected using a predesigned questionnaire consisting of demographic details and the Generalized Anxiety Disorder scale (GAD-7).

Sample size: Estimated sample size was 300.

Statistical Analysis: All recorded data was entered using MS Excel and analyzed, Descriptive statistical analysis been carried out in the present study. Results on continuous measurements are presented on Mean & SD and results on categorical measurements are presented in Number (%).

RESULTS AND DISCUSSION

We surveyed and studied 384 callers, of whom, 122 (31.77%) were female, 262 (68.33%) were male. The demographic characteristics of the respondents are shown in Table 1, 54 (14.06%) respondents were in the age group of 21-30, 73 (19.01%) respondents were in the age group of 31-40, 127 (33.07%) respondents were in the age group of 41-50, 72 (18.75%) respondents were in the age group of 51-60, 48 (12.5%) respondents were in the age group of

61-70 and 10 (2.6%) respondents were in the age group of 71-80. 123 (32.03%) had a positive travel history, 93 (24.21%) had positive contact history and majority i.e. 168 (43.75%) respondents had no history of any exposure. 271 (70.57%) urban residents and 113 (29.42%) rural residents called to our telemedicine center during the study period, Calls came majorly from urban areas. Among the callers, 41 (10.68%) had Hypertension, 66 (17.19%) had Diabetes Mellitus, 11 (2.86%) had heart disease, 31 (8.07%) had respiratory complications, 6 (1.56%) had renal disease, 24 (6.25%) had hypertension and diabetes mellitus, 15 (3.91%) had both respiratory and cardiovascular disease and majorly 190 (49.48%) had no comorbidities.

Table 1: Demographic details of the study population.

Variables	No of Respondents(n=384)	Percentage (%)
Gender		
Males	262	68.23
Females	122	31.77
Age Distribution		
21-30	54	14.06
31-40	73	19.01
41-50	127	33.07
51-60	72	18.75
61-70	48	12.5
71-80	10	2.6
Covid -19 Exposure		
Travel history	123	32.03
Contact history	93	24.21
None	168	43.75
Residence		
Rural	113	29.42
Urban	271	70.57
Comorbidities		
HTN	41	10.68
DM	66	17.19
Heart diseases	11	2.86
Respiratory Complications	31	8.07
Renal Disease	6	1.56
HTN+DM	24	6.25
Respiratory Complications +CVD	15	3.91
None	190	49.48

Anxiety among Telemedicine callers

GAD-7 scale used to assess the level of anxiety, total 7 questions in the scale were asked to all the participants and their response was noted. Figure 1 represents the response of

participants to various questions. When callers were asked if they were feeling nervous, anxious or on edge, most of them nearly 156 (40.63%) said more than half the days, When callers were asked if they were not being able to stop or control worrying, most of them nearly 143 (37.24%) said they experience this several days, When callers were asked if they were worrying too much about different things, most of them nearly 142 (36.98%) said they experience this several days. When callers were asked if they had trouble relaxing, most of them nearly 160 (41.67%) said they experience this several days, When callers were asked if they were being restless which is making them hard to sit still, most of them nearly 127 (33.07%) said they experience this several days. When callers were asked if they were becoming easily annoyed or irritable, most of them nearly 158 (41.15%) said more than half the days. When callers were asked if they were feeling afraid as if something awful might happen most of them nearly 134 (34.9%) said they experience this several days.

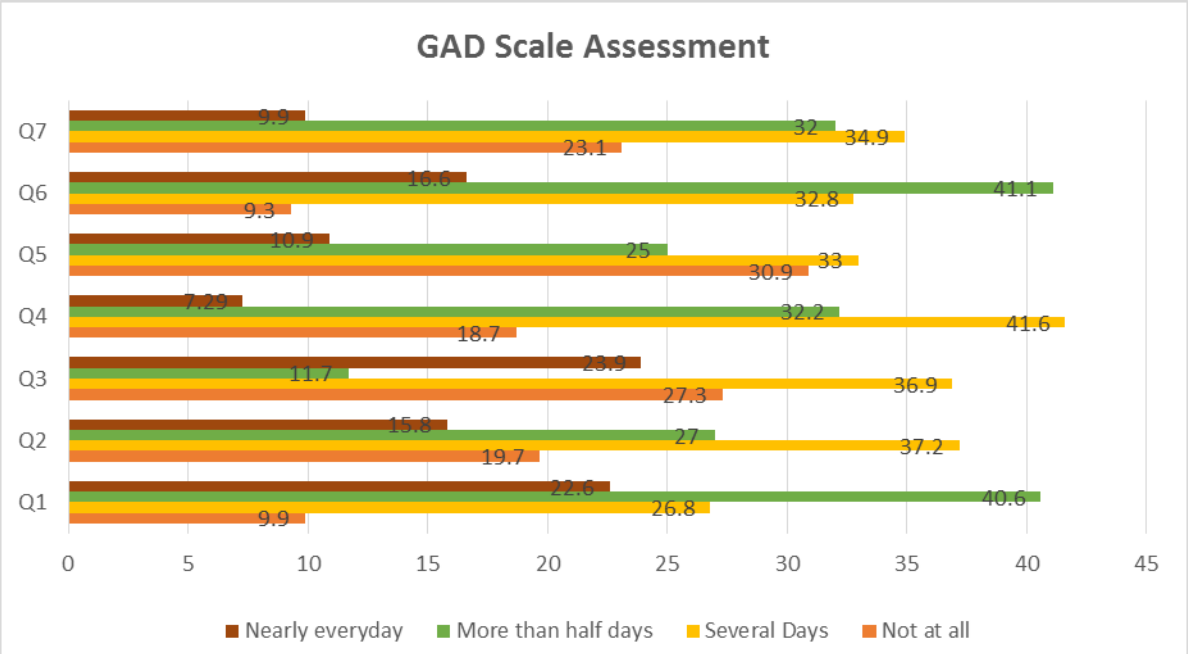

Fig 1: Assessment of GAD Scale.

Table 2: Anxiety levels and mean scores among the study population using the GAD-7 scale.

Anxiety	No of Individuals(n=384)	Mean score	Percentage (%)
Minimal Anxiety	10	3.4	2.60
Mild Anxiety	157	7.73	40.89
Moderate Anxiety	201	11.36	52.34
Severe Anxiety	16	15.62	4.17

Table 2 describes the anxiety levels assessed using GAD 7 scale. 10 callers (2.60%) had

minimal anxiety, 157 (40.89%)had mild anxiety, 201 (52.34%) had moderate anxiety and 16 (4.17%) had severe anxiety, this shows that more than half of the respondents are in the stage of moderate anxiety which shows the impact on their psychological health. This shows that the pandemic has affected the general public negatively. The quarantine rules, social stigma, morbidity and mortality have made the public to think in a negative way these results were Consistent with the study conducted by Biswas.[9]

Assessment of COVID 19 Infection Awareness

Once the anxiety assessment was complete, participants were evaluated for their awareness about the various aspects of COVID 19 infection. Here are the following questions asked and the below figures represent the response of participants towards it. Fig 2 shows that only 27.6% of respondents aware that COVID infection spread through touching, sneezing and sharing the food the same was supported by the study conducted by Syed Muhammad Mubeen.[10]

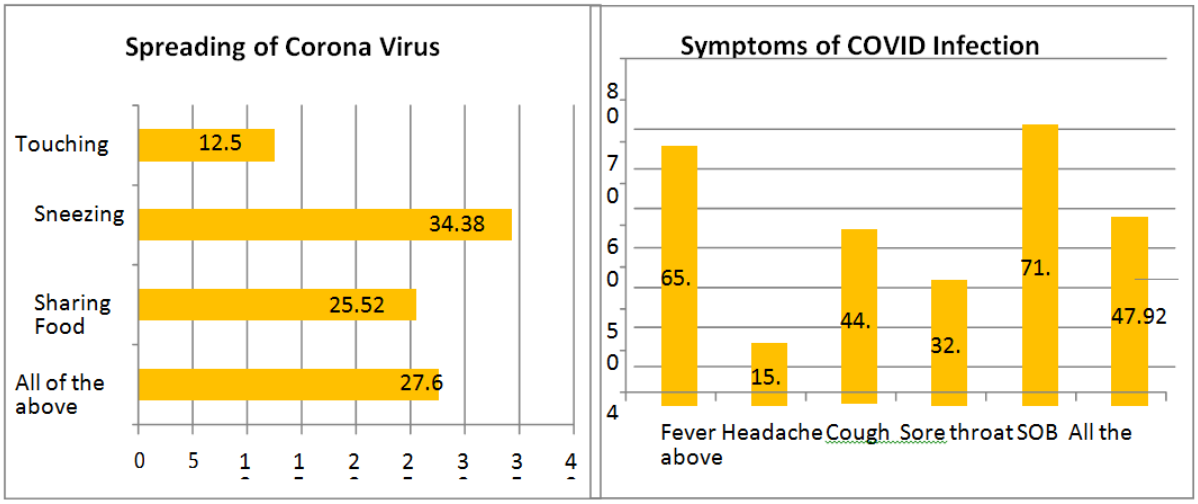

Fig 2: Assessment of COVID 19 Infection Awareness.

When callers were asked about if isolating a person with symptoms can prevent the spread of virus, 131 (34.11%) of them said Yes, 111 (28.91%) said No and 142 (36.98%) said they didn't know When callers were asked if pets at home can transmit the corona virus, 38 (9.9%) of them said Yes, 227 (59.11%) said No and 119 (30.99%) said they didn't know. When callers were asked if they have any knowledge about current on-going treatment for COVID 19,61 (15.89%) of them said Yes and 323 (84.11%) said No.

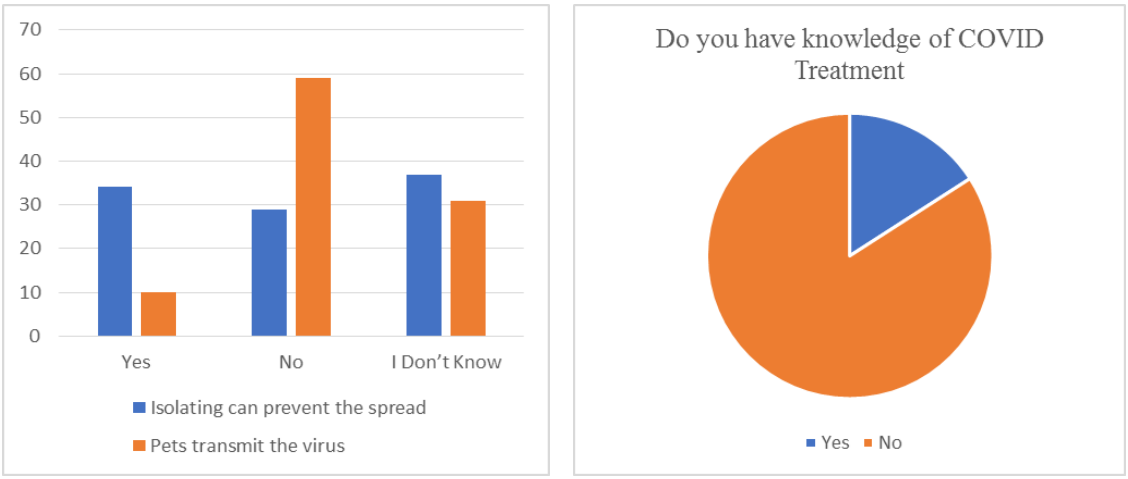

Fig: 3 assessing the knowledge on COVID 19 Infection.

Attitude towards COVID 19 Pandemic

When callers were asked about washing hands to decrease the risk of infection, 146 (38.02%) said agreed. When callers were asked if they would isolate/quarantine themselves if they had symptoms like cough and fever, 142 (36.98%) said agreed. When callers were asked about the practice of social distancing to stop the spread of virus, 210 (54.69%) said strongly agree. When callers were asked if travelling across the country is unsafe during the pandemic, 242 (63.02%) strongly agreed this.

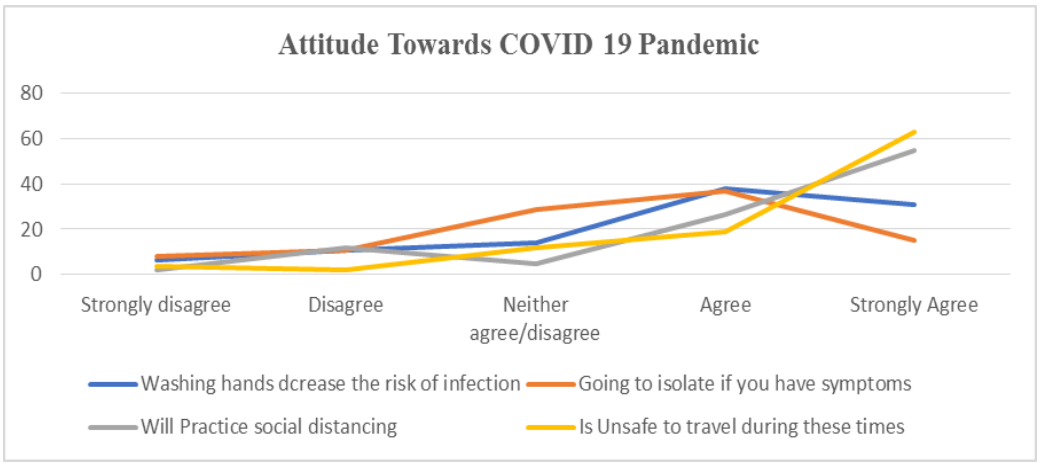

Fig. 4: Attitude towards COVID Infection.

CONCLUSION

The study concludes that anxiety is more prevalent among the telemedicine callers, and the incidence of anxiety may increase based on the situation, Considering the alarming impact of covid 19 on psychological status of individuals we suggests that majority of them required psychological support and evaluation. Our results concludes that almost more than half of

the people have understand the basics of COVID and start implementing all the policies and guidelines provided by the government. Government also should create more awareness programs in educating the public about this, Further more studies need to be conducted to bring the focus on psychological in population.

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