**Assessment of Fear of COVID -19 and Quality of Life among the faculty of Pharmacy College**

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**ABSTRACT**

The world is suffering from a pandemic spread of Covid-19 which is continuously adding on to the disease burden. While the scientists and researchers are striving hard to discover an effective treatment to combat the infection, there are certain allied problems predisposing due to the pandemic spread, social distancing and significant change in life pattern that has occurred due to lockdown initiated by majorly affected countries. The two worth mentioning problems are fear of Covid-19 amongst the people and resulting decrease in Quality of Life. Therefore we aim to assess the fear and QoL amongst people by considering the teachers coming from pharmaceutical background as subjects through a MCQ based survey questionnaire so that a brief idea of mental health in this pandemic spread of Covid-19 can be provided and allied problems can be controlled before they pose to be a serious suffering.

**Key words:** COVID-19; Pandemic; Fear; Quality of life; Assessment

**INTRODUCTION**

The world is facing a problematic situation of pandemic spread of Covid-19 [1-2].It is an infection caused by virus of the Corona family which invades the respiratory system majorly [3-4].As known by all, the infection is contagious; spreading through contact with infected patients, substances and environment, the crucial problem that exists is that the world lacks an effective standardized treatment to cure the patients. This is the reason that there is an increase in number of patients by everyday and there are also considerable numbers of deaths across the world [5-6]. One of the significant steps taken by affected countries is social distancing with a hope to minimize the spread and number of affected individuals [7-8]. While different countries like India, United States, Italy, Australia and China have called for social distancing by complete lockdown of all organizations and institutions except those related to services and products of daily needs like food and healthcare, there are many other predisposing difficulties that every country is going through. To name a few, economy has fallen down [2], hike in number of unemployed people, many people deprived of food due to unemployment, negative effect on education, fear among people, anxiety, depression, panic disorder [9-10] and decrease in quality of life (QoL) [11].

**Teaching Protocol followed by the faculty in colleges.**

In this Covid-19 pandemic, as all countries are following social distancing and declared lockdown everywhere, use of current pedagogical tools and completing syllabus of students to make them understand the various concepts from different subjects has been very challenging. In the era of adapting and implicating newest technologies everywhere [12-13],the authors have also applied various online tools in learning -methodologies. Uses of online tools like google classroom, zoom app, campus ERP, Vmedulife, webex, wordpress and gnomio are being used widely for online classes. In addition, assessment of students has been conducted through online examination. Academicians are utilizing YouTube as a platform to spread the knowledge and awareness among the students. Academicians are also using google forms to carry out different surveys and conduct quiz among all students of pharmacy from different colleges. Using various online tools in the learning management system (LMS) is very beneficial for academicians to teach various concepts of pharmacy by maintaining social distance and following rules from the Government.

**Impact of pandemic**

Fear is nothing but an initial stage of anxiety. The fear for the disease like Covid-19 has increased the global burden and concern of the people [9]. As, till date no treatment is available for the disease and increased mortality ratescan be a cause for development of fear in an individual. Presence of fear not only leads to anxiety but also affect mental well-being of people [9].Due to mental instability patients suffering from Covid-19 have increased complexity about the disease. Being socially disconnected and quarantine for several days affects quality of life of the people. Mental instability makes people easily believe in rumors which activate thinking, worry and anxiety in people. Many patients have been reported with increased intensity of negative and suicidal thoughts affecting life as well as effectiveness of the treatment [14-15].

As per World Health Organization, Quality of life (QoL) is defined as a state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity (WHO 1999). It refers to physical, psychological and social domains of health which is experienced by expectations, beliefs and perception. As QoL has been given an importance, it will be important to evaluate well-being of the people during the COVID-19 pandemic.

About millions of students get educated in various fields in different institutions of the world. Considering the problem of close down of educational institutions, all the institutions are trying their best to continue educating their students through different online platforms applying the best of teaching-learning objectives. As against this background, a survey was conducted to analyze the fear and quality of life of faculty members of Pharmacy college across India.

**METHODS**

A descriptive survey was conducted between 27th April 2020 to 5th May 2020 among the faculty of pharmacy colleges in India. The study protocol was approved from the Scientific and Institutional Ethics Committee (DYPCPT/ISEC25/2020) The Fear scale of COVID-19 and adapted with permission WHOQOL-BREF questionnaire was used for the survey. A google form was generated and the link was circulated in the WhatsApp group whose recipients were the Principals/ faculty of the different pharmacy college. It was an anonymous survey and the participation was voluntary and with consent. Each question in both the assessment tools were multiple choice and based on 5-point Likert scale. The Fear scale of COVID-19 was 7 item questionnaire and the QoL tool was 16 items. The scoring pattern for the both the tools was as follows: 1 for strongly disagree to 5 for strongly agree. Only Q14,15 and 16 of the QoL tool was marked in reverse. The total score of Fear scale of COVID-19 was calculated by adding the score of individual questions. For the QoL tool, Q1 and Q2 were core questions used for comparison and the total score was calculated by adding the individual scores of Q3- Q16.

Statistical analysis: The collected data was analyzed using IBM SPSS (Statistical Package for Social Sciences) version 21.0 for Windows. The findings were expressed in terms of percentages, mean and SD. Gender-wise difference between mean scores was tested by using independent sample t*-*test. Co-relation was assessed using eta correlation analysis. P-value less than 0.05 was considered as significant.

**RESULTS**

A total of 212 faculty participated in the survey. 13 survey forms were not completely filled and were excluded from the analysis. The final survey sample was 199 participants of which 101 were males and 98 females (age ranged 24-53 years). They were qualified with either B Pharm, M Pharm, PhD, or MBA degree.

Table 1 shows the distribution of the survey sample according to the Fear scale for COVID-19. majority (Q1=57.28%) of the participants are experiencing fear from Covid-19 and the thought of it makes them uncomfortable (Q2=about 51.75%). 28.13 % reported clammy skin (Q3) due to the thought of pandemic while 50 % of them had no such symptoms.5.02 % strongly feared of losing life due to the infection from corona virus, 22.61 % were neutral and 57.28 % had no fear of losing life due to this infection(Q=4).Majority of the subjects (46.23%) reported anxiety on hearing/reading about Covid-19 pandemic on social media(Q5). Only 10.5 % of subjects reported sleep disorder in this period(Q6) while 65.32 % did not have any sleep related issue. Thought of corona virus gave palpitations to about 18.58 % of the participants (Q7).

Table 2 shows the distribution of the sample according to the QoL assessment tool. 46.73% and 28.64 % of participants have rated their QoL as satisfied and very satisfied respectively, while 20.1 % have neutral opinion and 4.51 % are not satisfied with their QoL. 87.93 % of them are satisfied with their health. About 47.23 % of subjects reported that lockdown has prevented from doing what they wanted to, while 25.11 % do not feel so and the rest have a neutral opinion. Around 60 % of subjects are enjoying life and 50.74 % people find their life meaningful. Only 0.5 % of subjects are not able to concentrate while 16.08 % reported very good concentration. Also, 81.4 % of subjects are satisfied with their ability to work from home and 78.39 % are satisfied with their capacity to work in this situation. About 72.35 % reported that they are in a healthy physical environment. About 30.65 % of subjects are very much satisfied with themselves and their relationships while 50 % of them are moderately satisfied and around 15 % have neutral opinion about this. Around 70 % (69.34 %) are dissatisfied to stay at home due to this lockdown as a result of pandemic. 32.16 % of participants reported decrease in their QoL due to anxiety and stress. 3.1 % of subjects are worried about their safety in this situation, 36.18 % are of neutral opinion, 47.23 % feel moderately safe and 13.56 % feel extremely safe.

The total mean fear score calculated was 19.90±5.87. The mean fear score among males was 19.31±5.98 and females was 20.52±5.71 respectively. There was no statistically significant difference in the fear score gender-wise (Table 3)

The overall QoL mean score was 51.13±5.32. The mean QoL among males was 51.47±5.47 and females it was 50.80±5.20 respectively and there was no statistical difference noted (Table3).

There was a negative correlation between QoL and Fear score R=-0.37 (p=0.000).

There was a moderate correlation between QOL rating (Q1) and QOL overall score (r=0.57), and health rating (Q2) and QOL overall score (r=0.52) (Table 4).

**DISCUSSION**

The fear analyzing questions were considered by referring to the Fear of Covid-19 Scale (FCV-19S) as developed [16]. Higher scores indicate greater fear about the Covid-19 pandemic. This study indicated considerably high scores of fears of Covid-19 (mean score: 19.90±5.87), but there was no statistical significant difference in the scores as far as gender was considered. FCV-19S, is a robust tool for fear assessment during the Corona virus infection. It has been designed by surveying 717 Irani population and has good psychometric properties.

The QoL of the participants was assessed by considering the aspects of Physical health, psychological health, social relationships and environment with reference to the adapted with permission WHOQOL-BREF assessment tool [17]. The results indicate a mean QoL of 51.13±5.32 which is close to the upper end of the maximum score (Range 5 to 70).

According to the present study, presence of fear in an individual negatively impacted the QoL. In this aspect, even if participant developed fear against Covid-19, it did not affect physical, psychological, social, environmental as well as mental well-being among them. This can give the positive insights to the researchers while considering QoL of individual in this Covid-19 pandemic.

However, there were limitations to the survey conducted. The sample size was quite small; the participants were all educated (degree or higher qualification) i.e. the study lacked general population thereby omitting the illiterate or less literate population; also, no previous psychological health reports of the participants taken; it was a self-given report and neither the participants nor their reports were examined by a physician, psychologist, psychiatrist; the fear reported by the participants might be timely (while only giving the test) and not permanent.

**CONCLUSION**

The results indicate that the study participants have fear of Covid-19 but it has not impacted their quality of life. This can give us a ray of hope to keep fighting the pandemic and help improve the world to face the challenges.

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**TABLES**

**Table 1: Fear scale score for COVID-19 (n=199)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Questions** | **Strongly Disagree**  **n(%)** | **Disagree n(%)** | **Neutral n(%)** | **Agree n(%)** | **Strongly agree n(%)** |
| **1.** | I am most afraid of coronavirus-19. | 10  (5.02) | 24 (12.06) | 51 (25.62) | 74 (37.18) | 40  (20.1) |
| **2.** | It makes me uncomfortable to think about coronavirus-19. | 9  (4.52) | 44 (22.11) | 43 (21.6) | 78 (39.19) | 25 (12.56) |
| **3.** | My hands become clammy when I think about coronavirus-19. | 30  (15.07) | 72 (36.18) | 41 (20.6) | 43  (21.6) | 13  (6.53) |
| **4.** | I am afraid of losing my life because of coronavirus-19. | 40  (20.1) | 74 (37.18) | 45 (22.61) | 31 (15.57) | 10  (5.02) |
| **5.** | When watching news and stories about coronavirus-19 on social media, I become nervous or anxious. | 22  (11.05) | 40  (20.1) | 45 (22.61) | 76 (38.19) | 16  (8.04) |
| **6.** | I cannot sleep because I’m worrying about getting coronavirus-19. | 54  (27.13) | 76 (38.19) | 48 (24.12) | 18  (9.04) | 3  (1.5) |
| **7.** | My heart races or palpitates when I think about getting coronavirus-19. | 43  (21.6) | 60 (30.15) | 59 (29.6) | 26 (13.06) | 11  (5.52) |

This table shows the distribution of the survey sample according to the Fear scale for COVID-19

**Table 2: Quality of Life assessment (n=199)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.No.** | **Questions** | **Very Poor** | **Poor** | **Neutral** | **Good** | **Very Good** |
| 1 | How would you rate your quality of life? | 3 (1.5) | 6 (3.01) | 40 (20.1) | 93 (46.73) | 57 (28.64) |
|  |  | **Very dissatisfied** | **Dissatisfied** | **Neither satisfied nor dissatisfied** | **Satisfied** | **Very satisfied** |
| 2 | How satisfied are you with your health? | 0 (0) | 3 (1.5) | 21 (10.55) | 106 (53.26) | 69 (34.67) |
|  |  | **Not at all** | **A Little** | **A moderate amount** | **Very much** | **An extreme amount** |
| 3 | To what extent do you feel that LOCK DOWN has prevented you from doing what you need to do? | 15 (7.53) | 35 (17.58) | 55 (27.63) | 64 (32.16) | 30 (15.07) |
| 4 | How much do you enjoy life? | 3 (1.50) | 12 (6.03) | 70 (35.17) | 88 (44.22) | 26 (13.06) |
| 5 | To what extent do you feel your life to be meaningful? | 1 (0.5) | 8 (4.02) | 89 (44.72) | 42 (21.1) | 59 (29.64) |
| 6 | How well are you able to concentrate? | 1 (0.5) | 13 (6.53) | 57 (28.64) | 96 (48.24) | 32 (16.08) |
| 7 | How safe do you feel in your daily life? | 2 (1.005) | 4 (2.01) | 72 (36.18) | 94 (47.23) | 27 (13.56) |
| 8 | How healthy is your physical environment? | 0 | 5 (2.51) | 50 (25.12) | 111 (55.77) | 33 (16.58) |
| 9 | How satisfied are you with your sleep? | 4 (2.01) | 13 (6.53) | 44 (22.11) | 90 (45.22) | 48 (24.12) |
|  |  | **Very dissatisfied** | **Dissatisfied** | **Neither satisfied nor dissatisfied** | **Satisfied** | **Very satisfied** |
| 10 | How satisfied are you with your ability to perform your work from home? | 0 | 9 (4.52) | 28 (14.07) | 106 (53.26) | 56 (28.14) |
| 11 | How satisfied are you with your capacity to do work? | 1 (0.5) | 7 (3.51) | 35 (17.58) | 104 (52.26) | 52 (26.13) |
| 12 | How satisfied are you with yourself? | 1 (0.5) | 4 (2.01) | 32 (16.08) | 101 (50.75) | 61 (30.65) |
| 13 | How satisfied are you with your personal relationships? | 0 | 8 (4.02) | 27 (13.56) | 103 (51.75) | 61 (30.65) |
| 14 | How satisfied are you as you are not able to meet family and friends because of social distancing? | 41 (20.6) | 95 (47.73) | 47 (23.61) | 15 (7.53) | 1 (0.5) |
| 15 | How satisfied are you to stay in the home in this Lock Down Situation? | 48 (24.12) | 90 (45.22) | 44 (22.11) | 13 (6.53) | 4 (2.01) |
|  |  | **Never** | **Seldom** | **Quite often** | **Very often** | **Always** |
| 16 | How often do you have negative feelings such as blue mood, despair, anxiety, depression? | 12 (6.03) | 52 (26.13) | 83 (41.7) | 45 (22.31) | 7 (3.51) |

This table shows the distribution of the sample according to the QoL assessment tool

**Table 3- Gender-wise comparison of the Fear Scale score and QOL score.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | **Gender** | **N** | **Mean** | **Std. Deviation** | **t value** | **Significance (p)** |
| Fear Score | Males | 101 | 19.31 | 5.98 | 1.46 | 0.145 |
| Females | 98 | 20.52 | 5.71 |
| QoL Score | Males | 101 | 51.47 | 5.45 | 0.886 | 0.377 |
| Females | 98 | 50.80 | 5.20 |

This table shows that there was no statistically significant difference in the fear score gender-wise

**Table 4- Correlation of QoL scores with QoL rating and health satisfaction**

|  |  |  |
| --- | --- | --- |
| **Correlation** | **Eta value** | **Eta square** |
| QoL rating (Q1) and QoL scores | 0.571 | 0.325 |
| Health satisfaction (Q2) and QoL scores | 0.522 | 0.27 |

This table shows that there was a moderate correlation between QOL rating and QOL overall score, and health rating and QOL overall score