

## GENDER BASED COMPARISON OF PSYCHOLOGICAL DISTRESS AMONG COVID-19 PATIENTS AT RAWALPINDI INSTITUTE OF UROLOGY & TRANSPLANTATION PAKISTAN

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### Article Info

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### Abstract

**Objective:** To gauge gender based difference in psychological distress among COVID-19 patients admitted at Rawalpindi Institute of Urology & Transplantation Pakistan.

**Subjects & Methods:** A comparative analytical research was carried out among 61 COVID-19 patients admitted at Rawalpindi Institute of Urology & Transplantation during May 2020. Study subjects were enrolled in this research through consecutive sampling. Patients were interviewed to fill in Kessler Psychological Distress Scale (K 10). Data was analyzed by using SPSS version 25. Two sample z-tests were applied to determine gender based difference in degree of psychological distress among COVID-19 patients.  $P \leq 0.05$  was considered statistically significant.

**Results:** Mean age of COVID-19 patients enrolled in this study was  $41.6 \pm 10.97$  years. Out of total 61 COVID-19 patients, 45 (73.8%) were males while 16 (26.2%) were females. Most (71.1%) of the males in our study were psychologically sound and increased proportion of females (31.3%) had severe psychological distress. Females were found to more psychologically distressed in comparison with males ( $P 0.00$ ).

**Conclusion:** Female COVID-19 patients being more psychologically distressed should be properly counseled and undergo psychotherapy to mitigate the severity of distress.

**Keywords:** psychological distress, COVID-19, Kessler Psychological Distress Scale.

### Introduction:

COVID-19 pandemic has drastically affected several nations with grave physical as well as mental health outcomes<sup>1</sup>. The public panic amid COVID-19 pandemic is attributed to verification

of human to human transmission of coronavirus infection, need for quarantine among those coming in contact with infected individuals and declaration of this event as Public Health

Emergency of International Concern (PHEIC) by World Health Organization<sup>2</sup>. Frequency of mental illnesses is expected to escalate in regions confronted with increased number of COVID-19 cases that directs the attention of strategic planners towards mental health care provision as the need of time<sup>3</sup>.

No doubt, infectious diseases are known to the one of the major contributors in escalated mortality than any other pathological disorder<sup>4</sup>. Psychological distress among general public and healthcare workers is found to be considerably associated with outbreak of infectious diseases<sup>5</sup> primarily due to their transmissibility and invisibility<sup>6</sup>. Unawareness about the causative agents, lack of epidemic preparedness and dissemination of misleading information by social media play pivotal role in causing psychological unrest especially among general population. In addition, difference of opinion among medical experts pertinent to diagnostic approach, preventive measures and curative strategies with respect to newly emerged infectious agents may also be responsible for fear in the society<sup>7</sup>.

Increased rate of psychological distress among general public amid COVID-19 pandemic is also attributed to lockdown Imposition, travel restrictions across borders, social distancing and closing of schools and other offices. Moreover, females in contrast to males were found to be greatly and constantly linked with psychological distress<sup>8</sup>. Individuals with pre-existing health problems consider themselves more prone to infections during outbreaks and hence appear more psychologically upset<sup>9</sup>. Emergence of psychological symptoms was also noted to be linked with quarantined people<sup>10</sup>. In addition specific personality traits were also seemed to have some impact on psychological response of people during outbreaks<sup>11</sup>.

The present research is therefore intended to determine the degree of psychological distress among COVID-19 patients admitted at Rawalpindi Institute of Urology & Transplantation (RIU & T) by employing Kessler Psychological Distress Scale<sup>12</sup>. This study will facilitate our healthcare professionals a great deal in judging the severity of psychological distress and hence in consequent persuasion of psychotherapeutic

interventions. Gauging the burden of mental illness on community will help a great deal in implementation of mental health interventions proficiently.

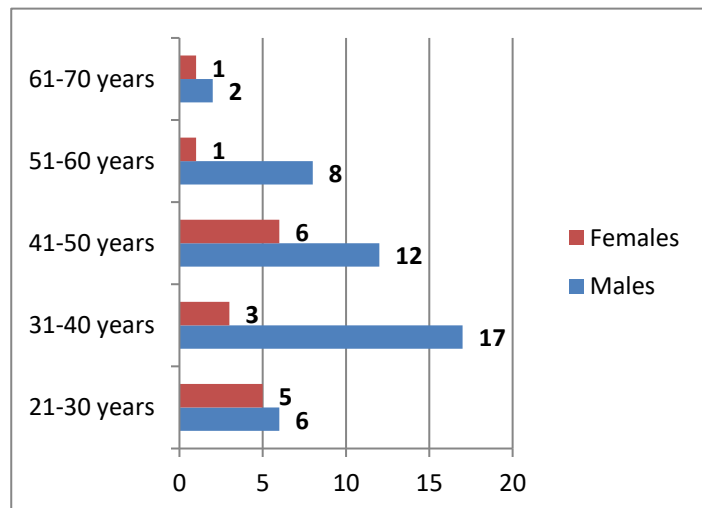
### Subjects & Methods:

A comparative analytical study was done to determine gender based difference in psychological distress among 61 COVID-19 patients admitted at Rawalpindi Institute of Urology & Transplantation during May 2020. Patients dependent on ventilators or supplemental oxygen were excluded from the study. Kessler Psychological distress scale (K 10)<sup>12</sup> was used to gauge the gender based difference in degree of psychological distress. Permission was sought from the inventor of this tool before using it in our scenario. Face to face interviews were taken from conscious and stable COVID-19 patients in order to fill in K 10 tool with their informed consent. Data pertinent to age and gender of the patients was also gathered. The data analysis was done by means of SPSS version 25.0. Two sample z-tests were applied to determine gender based difference psychological distress among COVID-19 patients.  $P \leq 0.05$  was taken as statistically significant.

### Results:

Mean age of COVID-19 patients interviewed in this research was  $41.6 \pm 10.97$  years. Out of total 61 respondents, 45 (73.8%) were males while 16 (26.2%) were females. Gender of respondents along with their age groups is depicted below in Figure 1.

**Fig 1: Gender based distribution of COVID-19 patients with respect to age (n = 61)**

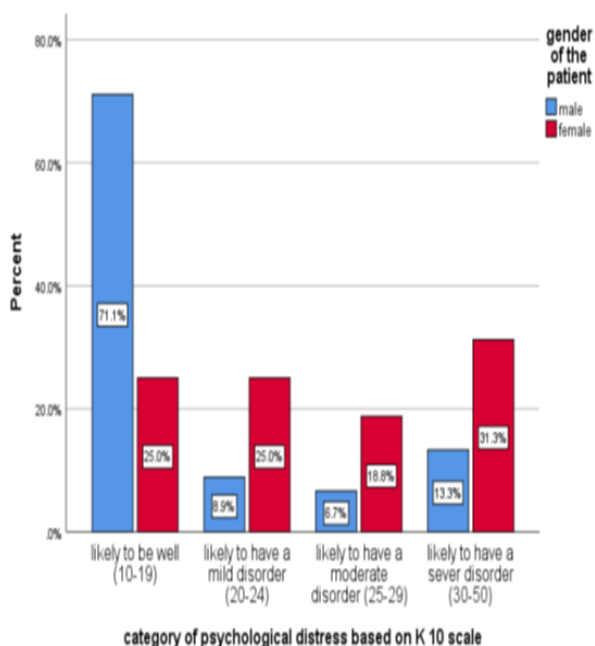


**Table 1: Age based distribution of Psychological Distress among COVID-19 patients (n = 61)**

Age groups	Psychological Distress				Total
	Likely to be well (10-19)	Likely to have a mild disorder (20-24)	Likely to have a moderate disorder (25-29)	Likely to have a severe disorder (30-50)	
21-30 years	06	01	02	02	11
31-40 years	13	02	02	03	20
41-50 years	11	02	0	05	18
51-60 years	05	02	01	01	09
61-70 years	01	01	01	0	03
<b>Total</b>	<b>36</b>	<b>08</b>	<b>06</b>	<b>11</b>	<b>61</b>

Most (71.1%) of the males in our research were found to be psychologically sound and higher frequency of females (31.3%) were determined to have severe psychological distress as shown below in Figure 2.

**Fig 2: Gender based frequency of psychological distress on K 10 scale**



Female COVID-19 patients were more psychologically distressed than males with statistically significant difference (P 0.000) as depicted in Table 2.

**Table 2: Gender based comparison of Psychological distress by means of Kessler Psychological Distress Scale (K 10)**

Psychological Distress	Mean Scores (mean ± SD)			P-value
	Overall	Males	Females	
	18.34 ± 9.1	16.4 ± 8.3	24 ± 9.3	

**Discussion:**

Cases of infectious diseases from any region of the world, if reported in excess than expected appear to have profound impact on mental health of the population<sup>13</sup>. The data pertinent to psychological illness should therefore be keenly deliberated by psychiatrists for prompt management<sup>14</sup>.

Our research revealed strong statistical association of female gender with occurrence of psychological distress (P 0.000). Approximately 71.1% male respondents in our research were determined to be psychologically normal while 50% of the females were found to have moderate to severe psychological distress on use of K 10 scale. About 41.9% study subjects irrespective of gender had mild to severe psychological distress. This gender based discrimination with respect to psychological distress was also evident in another similar research carried out by Qiu J et al among Chinese people amid COVID-19 pandemic. Moreover, 35% of Chinese were psychologically distressed<sup>2</sup>. This discrepancy in results from two different countries might be due to enrollment of COVID-19 confirmed and hospitalized patients in our research in comparison with inclusion of general population in Chinese research. As our patients were acquainted with their COVID-19 infection, this could be the probable cause of more psychological illness among them. Similar to our results, Italian population being acquainted with their COVID-19 infection was found to be more psychologically distressed<sup>15</sup>. Contrary to this, a research by Wang et al concluded that psychological illness is neither related to acquaintance with COVID-19 nor having infected family members<sup>16</sup>. These geographic variations in attributes of psychological distress might emphasize the need to research epidemiological parameters in addition to socio-demographics and personality traits of the people.

Out of 11 COVID-19 patients in our research with severe psychological distress, most (45.4%) of them were 41-50 years old. Although we have not studied their pre-existing medical illnesses, this age group primarily illustrates the need of periodic health checkups due to increased propensity of aging associated diseases like cardiovascular diseases, hypertension and neuro-degenerative disorders<sup>17</sup>. In contrast, research among Chinese populates revealed the psychological impact of disease outbreaks on both young and old people<sup>2</sup>. Likewise an Australian research carried out amid equine influenza epidemic had the same conclusion<sup>18</sup>. A similar research among University students of Jordan by employing K 10 scale concluded that younger students were found to be more psychologically upset in response to COVID-19 pandemic. However, their mean K 10 distress score was  $34.2 \pm 9.4$  in comparison with  $18.34 \pm 9.1$  computed in our research<sup>19</sup>. This difference in mean K 10 score might be due to increased anguish among University students due to closing of institutes and disruption in their studies. Although our general population is confronted with social and economic loss amid COVID-19 battle<sup>20</sup>, but interference in the education of students might be the foremost contributor in their escalated psychological misery.

Even the absence of infection during epidemics illustrated high prevalence of psychological agony in association with lack of adoption of preventive and coping measures<sup>21</sup>. Conversely, taking up coping actions amid outbreaks was also found to be coupled with psychological distress<sup>22</sup>. In short, epidemics and pandemics have always been the source of mental illnesses among people irrespective of protective dealings. Appraisal of psychological infirmity whether among general population or healthcare professionals would really prove advantageous for the society in such unanticipated situations.

#### **Conclusion & Recommendations:**

Females particularly 41-50 years old being vulnerable to severe psychological distress should have immediate access to psychological counseling and psychotherapeutic interventions. Strategic planning by concerned authorities for psychological first aid amid epidemics and

pandemics should be prioritized to intelligently tackle the situation.

**Conflict of Interest:** None

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