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THE EXPERIENCE AND REACTIONS TOWARDS STAGE 1 COVID-19 AMONG JUNIOR DOCTORS IN INDIA

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SUMMARY

Background: *COVID-19 pandemic is the first modern pandemic and has occurred in an era of social media ubiquity. Despite being in stage 1 of the pandemic, and low numbers of patients, various emotional and behavioral changes were observed in junior doctors. This study was designed to assess the experience and reactions of junior doctors in a tertiary teaching hospital in North India and Tamil Nadu in the immediate aftermath of the nation-wide lockdown.*

Subjects and mwthods*: This was an observational cross- sectional study of junior doctors working in tertiary care hospitals in Chandigarh and Tamil Nadu. It was conducted from 28th March to 5th April 2020. Ethical clearance obtained and anonymity was maintained. We used a 17-item self-designed questionnaire circulated online.*

Results*: Mean age was 28.64 years (n=362). Though mostly well informed, only 8% restricted themselves to obtaining information from a single source. Around 46% were feeling anxious and many more (73.20%) perceived the same emotion in their peers and even more of them (85.10%) in their family members. Most of them (90.1%) endorsed more than change in behavior, mainly to avoid potential risk (52%) and females tend to self-quarantine themselves more than males.*

Conclusions: *Knowledge does not play as important a role in the way people behave in an outbreak. Many other covert factors may possible be involved. Strategies leading to reduction in uncertainty, interventions for reassurance in the workplace and better role models would be of help in this outbreak.*

Key words: *COVID-19 – outbreak - junior doctors – experience – reactions – knowledge – uncertainty – lockdown - online survey - stage 1 - pandemic*

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INTRODUCTION

COVID-19 pandemic is the first modern pandemic and has occurred in an era of social media ubiquity. In India, the first patient with confirmed COVID-19 was reported on 30th January. Following a 14-hour voluntary public curfew on 22nd March, the Government of India on 24th March ordered a 21-day lockdown which was subsequently. There were about 440 confirmed cases and nine deaths in India due to COVID-19 until that. Despite the low numbers of patients and deaths, various emotional and behavioral changes were observed among resident doctors involved in patient care (Mohindra et al. 2020). Studies conducted in other countries like China, etc., when the outbreak was already underway have reported frontline health care workers to experience symptoms of depression, anxiety, insomnia and distress (Lai et al. 2019, Mosolova et al. 2020, Usul et al. 2020).

This study was designed to assess the experience and reactions of junior doctors in a tertiary teaching hospital in North India and Tamil Nadu in the immediate aftermath of the nation-wide lockdown.

SUBJECTS AND METHODS

The study was approved by the Institute Ethics Committee (NK/6125/Study/403) and was carried out as per the protocol. This was an observational cross-sectional study. The participants included junior doctors of either gender, having access to WhatsApp and giving written informed consent to participate in the study. Software used for analysis was SPSS version 20.

Setting

Junior doctors were defined as doctors who have completed a basic medical qualification (MBBS) and are pursuing a postgraduate degree. They are usually directly involved in patient care and work under the supervision of consultants. We chose to include junior doctors working in tertiary care hospitals in Chandigarh and Tamil Nadu for this study. As designated facilities for COVID were still under preparation at that time, the chances of these doctors to have had a direct access to a known case of COVID are very less. Inadvertent exposure that is unlikely to be due to COVID was the prevailing condition at the time. So, in our study we did not in particular look for doctors working in the frontline, as it does not apply to this setting. The study was conducted from 28th March to 5th April 2020. We conducted an online survey as physical access was not possible due to the lockdown. The link to this online survey was circulated through an online messaging app (WhatsApp).

Instrument

A group of junior doctors and a consultant of the department of psychiatry in a tertiary hospital in North India reviewed the available literature and also interviewed a few junior doctors who were directly engaged in patient care. From these inputs, we designed a list of questions using Google forms which was further revised. The questions were not framed to assess or diagnose any psychiatric symptoms per se. As far as possible, the exact words expressed by the doctors were used. A pilot study was conducted by circulating this to five junior doctors and based on their responses, the final version of the questionnaire was designed.

The preamble of the questionnaire mentioned the reason for the study and the type of questions that were going to be asked. We ensured anonymity of participants and they were reassured that apart from age and gender (Q 1,2), no other personal information would be collected. It was informed that the results of the study were to be strictly used for research purposes only. We provided participants with e-mail addresses of the authors in case of any queries.

The 17-item questionnaire included responses of multiple-choice type with one or more than one possible responses and short answer type, thus making it user friendly. The responses were not coerced as none of the questions were mandatorily to be responded. Respondents were free to skip questions or withdraw from the survey at any point. The questions spanned domains assessing knowledge (Q 3-8), emotions (Q 9-11) and behaviors (Q 12-16) of the participants. It required about 3-4 minutes to complete and included an option for feedback (Q 17) at the end.

RESULTS

Demographic data

A total of 362 participants completed the survey. No responses were excluded. The average age was 28.64 years (standard deviation (SD):7.67) with no statistically significant difference between both genders. There were 182 males (50.30%) and 180 females (49.70%) in the study, with mean ages 28.79 (SD:7.39) and 28.50 (SD:7.96) respectively.

Knowledge

A majority (n=304,84%) of the participants considered themselves to be well informed about the facts of COVID-19 pandemic in order to make correct behavioral choices in their daily life. Around 76% of the participants (hand hygiene: 85.4%, transmission route: 73.2%, mortality: 70.2%) responded correctly across both genders.

Source of information

The main source of knowledge was websites of WHO, ICMR, etc. (78.2%), followed by mass media sources like TV and newspapers (43.6%) and social media platforms like WhatsApp (34.3%). They also obtained information from training or classes conducted at their institutions (23.2%) and hearsay from family or friends (16.9%). Only 8% of them restricted themselves to the use of a single source.

Emotional response

As seen in Table-1, many of the participants (n=167, 46.1%) felt scared and anxious. Some described their emotional state as excited and upbeat (n=32, 8.8%) and a minority described their emotional state as being bored, helpless, empathetic, responsible, mildly on edge, alert, vigilant, targeted, worried and shocked. Around 30% (n=109) of them reported being in their usual state of mind. It was found with statistical significance ($p<0.05$) that males (n=22) were more likely to feel excited and upbeat than females (n=10). Most respondents (73.0%) perceived their peers or co-workers to be feeling anxious. A still higher proportion of them (85.1%) perceived their family members also to be anxious.

Behavioral changes

As evident from Table-2, most of the participants (90.1%) endorsed more than one change in behavior. Hardly 10% (n=36, 9.9%) of them endorsed a single change in behavior. It was found with statistical significance ($p<0.05$) that females tend to self-quarantine themselves more than males.

Reasons for change in behavior and better choices

The participants indicated that the most common reason for their behavioral changes was because they did not want to take the risk of something bad happening to them otherwise (52%). This was followed by the group of respondents who considered the change in behavior to be evidence-based (46%). Some felt that there was no potential harm in doing so (27.3%), while a few of them had thought about the various facts and concluded to act that way (21.8%). Some of them acted this way after being told to do so (16.3%) or by going along with whatever other people were doing (13.3%).

74.6% felt that better knowledge was the need of the hour to encourage people to make better choices for themselves and the community. Some of them felt that positive role models (38.1%) and reduction of uncertainty with regards to basic amenities (37.8%) were equally important.

Table 1. Emotional responses perceived in self, peers and family members

Type of emotion	Perceived in self n (%)	Perceived in peers/ co-workers n (%)	Perceived in family members n (%)
Scared and anxious	167 (46.10%)	265 (73.20%)	308 (85.10%)
As usual	109 (30.10%)	75 (20.70%)	47 (13.00%)
Excited and upbeat	32 (8.80%)	22 (6.10%)	7 (1.90%)
Other responses	54 (14.90%)	-	-

Table 2. Observed changes in behaviour in self and peers

Types of behaviour	n (%)
Sharing and forwarding COVID-19 related material on social media	260 (71.80%)
Hoarding masks and steriliser bottles	175 (48.30%)
Excessive safety measures while doing procedures unlike before	175 (48.30%)
Trying to keep an excessive distance from patients who are unlikely to be infected	170 (47.00%)
Self-quarantine	159 (43.90%)
Excessive shopping for foodstuffs and rations	146 (40.30%)
Repeated checking for symptoms of flu in self and family members	101 (27.90%)
Self-medication with medicines such as hydroxychloroquine when not indicated	82 (22.70%)
There is no change	11 (3.00%)

Comments of the participants

Around 71 respondents gave their feedback and the common themes were concerns about uncertainty, inadequacy of Personal Protective Equipment and lack of testing for COVID-19.

DISCUSSION

The study was conducted at a time immediately preceded by the lockdown and was surrounded by media hype and misinformation on social and traditional media. India was in the stage 1 of pandemic, with prevailing uncertainty regarding availability of protective equipment, essential food, and effects of lockdown, with only a few patients but risk of spread of infection. So, it was a stage of preparation, both socially and psychologically. Junior doctors are exposed to the situation much more and their concerns are of great importance. Therefore, we decided to conduct this study in junior doctors. Participation was voluntary and around 93% (n=337) of the responses were obtained within 2 days of circulation of the link. This initial surge in responses can be attributed to the relevance of the questionnaire and its ability to tap the emotional state of doctors in the immediate aftermath of the lockdown.

Our study sample seemed to be well informed about the facts of COVID-19 and the results are comparable with studies conducted among various groups of healthcare workers (Bhagavathula et al. 2020, Mosolova et al. 2020, Usul et al. 2020). It is obvious that most respondents were gathering information from many sources, and getting influenced by family and peers, and reacting in various domains of daily activities.

Considering their mean age falling at the 'prime end of the demographic pyramid', the respondents might have been expected to be less likely to be psychologically affected by the outbreak. Despite the presence of only a few cases during that time, there seems to be an excess of response both emotionally and behaviorally. Though high levels of anxiety have been reported in medical staff (Usul et al. 2020, Mosolova et al. 2020, Xiao et al. 2020), it occurs that doctors became attuned to picking up emotional cues like anxiety in their peers and even more in their family members.

Knowledge does not play as important a role in the way people behave during an outbreak, and possibly many other covert factors also play a role. The prevailing uncertainty and fear causing an abnormal stress response may result in behaviors like panic buying of essentials, squandering and depletion of critical resources like hand sanitizers, masks, etc. similar to literature reported (Corley et al. 2010, Garfin et al. 2020). As mentioned, we did not look in particular for those working only in the frontline as the number of COVID patients were very few during that time. Despite this fact, 47% of the participants agreed that they were trying to keep an excess distance from patients who were unlikely to be affected by COVID. So, doctors as a group may be intellectually different from the rest of the population, but do not necessarily behave differently despite their knowledge and well-informed status. Basic yet essential strategies like social distancing and adequate hand hygiene should be insisted upon, rather than solely relying on protective equipment or medication like hydroxychloroquine. Strategies leading to reduction in uncertainty, interventions for reassurance in the workplace and better role models for maintaining self-care would be of help in this outbreak (Wariz et al. 2020). COVID being a psychosocial pandemic, our strategies should be aimed at being holistic, including long term goals.

The strengths of the study were the sample size and the timing that assessed the reactions of junior doctors in the period immediately after the initiation of lock-down. The survey was conducted at an ideal time as results are likely to change with change in stage of the pandemic. The survey itself was short, well received and easy, yet comprehensive. The use of a user-friendly online platform is an example of good utilization of technology amidst the lockdown. We did not however use a formally validated instrument owing to paucity of time.

CONCLUSIONS

Knowledge does not play as important a role in the way people behave in an outbreak. Many other covert factors may possibly be involved. Strategies leading to reduction in uncertainty, interventions for reassurance in the workplace and better role models would be of help in this outbreak.

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Contribution of individual authors:

All authors reviewed and discussed the manuscript draft and contributed to the final manuscript and all authors give final approval of the version to be submitted.

References

1. *Bhagavathula A, Aldhaleei WA, Rahmani JR, Mahabadi MA, Bandari DK: Novel Coronavirus (COVID-19) Knowledge and Perceptions: A Survey of Healthcare Workers [published online ahead of print, 2020 Apr 19]. JMIR Public Health Surveill 2020;10.2196/19160*
2. *Corley A, Hammond NE, Fraser JF. The experiences of health care workers employed in an Australian intensive care unit during the H1N1 Influenza pandemic of 2009: a phenomenological study. Int J Nurs Stud 2010; 47:577–85*
3. *Garfin DR, Silver RC, Holman EA: The novel coronavirus (COVID-2019) outbreak: Amplification of public health consequences by media exposure. Health Psychol 2020; 39:355-7*
4. *Lai J, Ma S, Wang Y, et al.: Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. JAMA Netw Open 2020; 3:e203976*
5. *Mohindra R, R R, Suri V, Bhalla A, Singh SM: Issues relevant to mental health promotion in frontline health care providers managing quarantined/isolated COVID-19 patients. Asian J Psychiatr 2020; 51:102084*
6. *Mosolova E, Chung S, Sosin D, Mosolov S. Stress and Anxiety among Healthcare Workers Associated with COVID-19 Pandemic in Russia. Psychiatr Danub 2020; 32:549-56*
7. *Usul E, Şan I, Bekgöz B. The Effect of the COVID-19 Pandemic on the Anxiety Level of Emergency Medical Services Professionals. Psychiatr Danub 2020; 32:563-9*
8. *Waris Nawaz M, Imtiaz S, Kausar E. Self-care of Frontline Health Care Workers: During COVID-19 Pandemic. Psychiatr Danub 2020; 32:557-62*
9. *Xiao H, Zhang Y, Kong D, Li S, Yang N. The Effects of Social Support on Sleep Quality of Medical Staff Treating Patients with Coronavirus Disease 2019 (COVID-19) in January and February 2020 in China. Med Sci Monit 2020; 26: e923549*

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