

# PERSONAL, PROFESSIONAL, AND EDUCATIONAL CHALLENGES FACED BY THE POSTGRADUATE RESIDENTS OF GYNECOLOGY AND OBSTETRICS IN PESHAWAR DURING COVID-19 PANDEMIC

Fauzia Afridi<sup>1</sup>, Ayesha Afridi<sup>2</sup>, Arzoo Gul Bangash<sup>1</sup>, Jamila Mehnaz Naib<sup>1</sup>, Romana Bibi<sup>1</sup>

<sup>1</sup>Department of Gynaecology and Obstetrics, Khyber Teaching Hospital, Peshawar - Pakistan

<sup>2</sup>Department of Radiology, Polyclinic Hospital, Islamabad - Pakistan

## ABSTRACT

**Objectives:** To find out the personal, professional, and educational challenges in training by the post-graduate residents of Obstetrics and Gynecology in the three tertiary care hospitals of Peshawar during the Covid-19 Pandemic.

**Methods:** This was a web-based cross-sectional study conducted among the postgraduate residents of Gynecology and Obstetrics in the three main teaching hospitals of Peshawar, from 1st April 2020 to 31st July 2020. A structured survey using Google forms was distributed among 98 postgraduate residents through emails and social media platforms. The challenges faced and their severity was assessed using the Likert Scale. Results were analyzed in Microsoft Excel.

**Results:** Total number of participants was 98, with 99% being female. The mean age was  $28.3 \pm 1.8$  years. Their worst fear was of the family getting infected (86.7%). Their greatest challenge was the inability to practice social distancing due to the nature of their work (85%) amidst a lack of PPEs (51%). Their training suffered due to inadequate opportunities for elective surgeries (78%).

**Conclusion:** Post-graduate residents in Gynaecology/Obstetrics faced substantial personal, professional, and educational challenges while training during the covid-19 pandemic.

**Keywords:** training, challenges, Covid-19, postgraduate residents, Obstetrics and Gynecology

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## INTRODUCTION

Covid-19 has rightly been named as a 'Once-in-a-century pandemic'<sup>1</sup>. Worldwide, there have been more than 600 million confirmed cases and more than six million deaths, to date<sup>2</sup>. Pakistan has been severely affected by this pandemic too, with 1.57 million confirmed cases and more than 30,000 deaths due to covid<sup>2,3</sup>.

When a new pandemic erupts, there is a lot of uncertainty regarding its transmissibility, severity, and prevention. Also, there is a lack of protective equipment due to the sudden, unexpected nature of a pandemic. Their impact is more pronounced on healthcare professionals who are exposed to stress, stigma, and burnout. They are at risk of infection while trying to save patients<sup>4</sup>. They have

to modify and limit the standard of care they routinely provide to cater to the additional healthcare needs imposed by the pandemic<sup>5,6</sup>.

Postgraduate medical/ surgical residents face an extra challenge, not only have personal challenges and professional obligations but they are also faced with the dilemma of inadequate post-graduate training opportunities in the face of lockdowns, lack of patient exposure, curtailed elective surgeries, canceled educational conferences/ training workshops, postponed specialty exams etc<sup>7,8</sup>.

It is important to assess the personal and professional challenges, as well as challenges in training, faced by these postgraduate residents, so that timely adaptive strategies may be devised amid such crises.

## MATERIAL AND METHODS

This was a web-based cross-sectional descriptive study. The period of the study was from 1<sup>st</sup> April 2020 to 31<sup>st</sup> July 2020. All the postgraduate residents of Gynecology and Obstetrics in the three main teaching hospitals of Khyber Pakhtunkhwa i.e., Khyber Teaching Hospital, Hayatabad Medical Complex Peshawar, and Lady Reading

Correspondence

**Dr. Arzoo Gul Bangash**

Assistant Professor,

Department of Gynaecology and Obstetrics, MTI, Khyber Teaching Hospital, Peshawar - Pakistan

**Cell:** +92-333-9165875

**Email:** arzoobangash@gmail.com

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Hospital Peshawar were included in the study. Trainees who were on maternity leave or clinical rotation in another specialty at the time of the study were excluded. Ethical approval was taken from the Institution's ethical review board (No.919/ADR/KMC). A questionnaire aimed at postgraduate residents (PGRs) of Obstetrics/Gynaecology (ObGyn) was designed on google forms and consisted of questions related to four components; demography, personal challenges, professional challenges, and educational challenges.

The questionnaire was internally and externally validated by two experts and was pilot-tested on 20 participants before being finalized. It was distributed among the postgraduate residents through social media platforms.

PGRs from the three selected hospitals and different residency years were asked to circulate them in their respective unit's WhatsApp groups (snowballing). Informed consent was taken from the participants at the start of the survey.

The sample size was 98 and the sampling technique was convenient sampling. The challenges faced and their severity was assessed using the Likert Scale. Results were analyzed in Microsoft Excel and presented as bar graphs and pie charts.

**RESULTS**

The total number of participants was 98. The mean age of participants was 28.3+/\_1.8 years. 99% were female, 54% were married, 39% had kids, and 10% were pregnant at the time of the survey. 41% lived in a nuclear family, 31% in a joint family, and 22% lived in a hostel. The percentage of trainees in residency years 1, 2, 3, and 4 were 19.4%, 26.6%, 22.4% and 26.5% respectively.

The biggest personal fear stated by most (86.7%) participants was that of the family getting infected (figure 1). Seventy-five percent claimed that the time and energy spent cleaning up after returning from work affected their personal life immensely.

This was followed by the inability to mingle with kids and family (40.8%), lack of domestic help (15%), and closure of child-care facilities/ schools (11%) (figure 2). The greatest hurdles in practicing precautionary measures against Covid-19 at the workplace were difficulty in practicing social distancing due to the practical nature of work (85%), PPE either not being available regularly (51%), or intolerable to wear due to hot weather (52%).

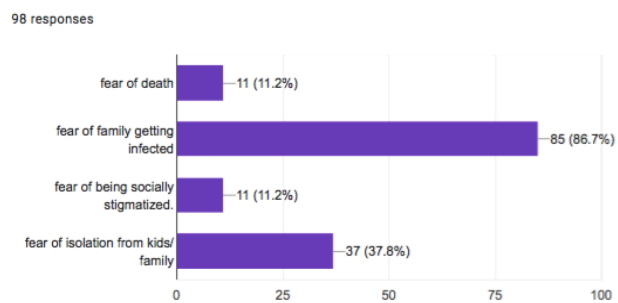
Half of the PGRs reported that working as health-care workers affected their mental health significantly (figure 3) and 54% felt that they were unable to do justice with patient care due to fear of getting infected (figure 4).

Regarding educational challenges, 82% thought that their training lagged due to the covid crisis. Forty-two

percent of gynae PGRs were slightly apprehensive, 18% were very apprehensive, and 25% were extremely apprehensive about their clinical/surgical skills being inadequate as compared to their predecessors. Other fears included the inability to collect data for the dissertation, the delay in the national residency exam schedule, and the possibility of an extension in the training period.

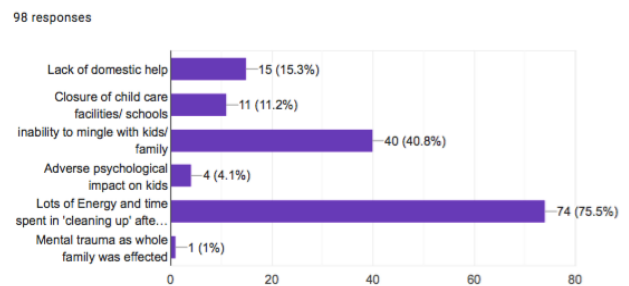
The aspects of residency affected during the covid 19 pandemic are highlighted in figure 5. Forty-three percent of PGRs felt that online teaching resources were not reasonable alternatives to pre-covid traditional teaching resources.

What are your biggest personal fears during this COVID crisis?(check more than one box if applicable.)



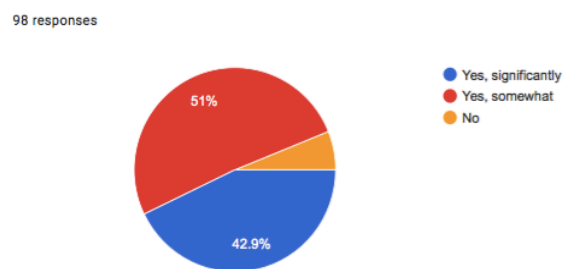
**Fig 1: Personal fears during the Covid-19 crisis**

In what ways has health care delivery during COVID-19 Pandemic affected your personal life and vice-versa?(check more than one box if applicable.)



**Fig 2: Impact of COVID-19 on personal life**

Has working as a health care worker during COVID-19 pandemic affected your mental health?



**Fig 3: Impact on mental health**

Do you feel you are unable to do justice with patient care due to fear of getting infected?

98 responses

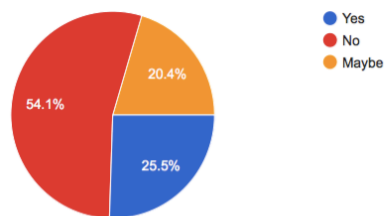


Fig 4: Impact on patient care

What do you miss about your residency, during this COVID-19 crisis?

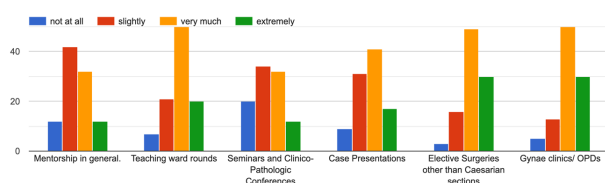


Fig 5: Impact on residency

## DISCUSSION

This study highlights the impact of Covid 19 on personal and professional lives as well as challenges in training faced by the Gynae post-graduate residents (PGRs). In our study, 99% of the participants were female. This is consistent with the 98.5% proportion of females in a study conducted by Sultana R AND 86% in a study conducted in India, but in contrast with that by Gudu et al, in which 85% were male residents.<sup>9-11</sup>

The biggest personal fear stated by most (86.7%) participants in our study was that of the family getting infected. This is consistent with another study that has been done country-wide on healthcare workers in Pakistan<sup>12</sup>. Similar results were obtained in a study conducted in Southwest Ethiopia according to which the demotivating factors in working as health care workers during covid included fear of transmission to family (35%), transmission to self (28%), transmission to other patients from self (21%) and, death (13%)<sup>13</sup>.

Our study revealed that the greatest hurdles in practicing precautionary measures against Covid-19 at the workplace were difficulty in practicing social distancing due to the practical nature of work (85%), PPE either not being available regularly (51%) or intolerable to wear due to hot weather (52%). A similar study conducted on healthcare workers in Pakistan showed that quarantine facilities and full PPEs were available in only 55% and 40% of cases, respectively, and 70% were not formally trained on the proper use of PPE<sup>12</sup>. A study conducted by Diego Del-

gado et al. in Latin America reports that 95% of the health care professionals were having access to hand sanitizer, 91% to disposable gloves, 67.3% to disposable gowns, disposable surgical face masks (83.9%), N95 face mask (56.1%), protective face shield (32%).<sup>14</sup> Our study reported that 85% of trainees felt that social distancing was not possible due to the nature of work. This is in contrast to a study in Turkey in which 67% of trainees reported that it was possible.<sup>15</sup>

In our study, 51% PGRs reported that working as healthcare workers affected their mental health significantly. In a study conducted by Sultana R, out of 268 gynecology and obstetrics residents, 66% of respondents had depression, 71.6% had anxiety and 56% had stress during the COVID-19 pandemic.<sup>9</sup> Similar results were obtained in studies conducted in Peshawar and Italy.<sup>16, 17</sup>

Working as HCWs in covid crisis was daunting as 54% of respondents in our study felt that they could not do justice with patient care due to fear of getting infected. Such circumstances usually lead to complex emotional trauma and moral injury. This is consistent with the results of a study in JAMA, in which healthcare professionals expressed their experiences of moral injury during the Covid pandemic.<sup>18</sup>

In addition to personal and professional challenges, the gynae residents enrolled in our study also mentioned various challenges faced in their post-graduate training due to Covid 19 pandemic. In our study, 85% were apprehensive that their clinical/ surgical skills would suffer due to the lockdown. Similar results were obtained in a study done in Peshawar on PGRs of Surgery and Allied specialties, which revealed statistically significant reductions in opportunities to observe, assist and perform surgeries.<sup>19</sup> Our study revealed that the aspects of training missed by Gynae PGRs included gynecological surgeries, Gynae clinics, and teaching ward rounds. A study conducted by Abdul Hafiz et al in Nigeria reported that the PGRs in surgery reported a decrease in the number of patients in the out-patient clinics (83.6%), as well as in the number of elective procedures (90.8%).<sup>20</sup>

In our study, 82% of residents thought that their training lagged due to the covid crisis. A similar study conducted by Ferry Boekhorst et al in Europe reported a negative impact on their training due to the COVID-19 pandemic 95% of trainees.<sup>21</sup>

Our study revealed that online teaching platforms were considered an inadequate alternative to pre-covid, traditional learning methodologies by 43% of residents. A similar study in India revealed that 91% of Gynae residents think that online teaching was not very useful due to problems in internet connectivity, and the inability to cater to practical training.<sup>10</sup>

The strength of the study lies in the fact that this is the first study with a holistic overview of the challenges faced by the gynae postgraduate residents of the three major government-sector, tertiary care hospitals of Peshawar. It was done during the peak of the pandemic when most of the private obstetric setups had curtailed/stopped altogether maternity services, but obstetric emergency services continued in these hospitals, exposing the trainees to several challenges of unprecedented nature. Limitations of the study include its small sample size and convenient sampling technique. Also, this study was done during the initial days of covid 19 pandemic, when online learning platforms were not fully established. Much progress has been made in this regard; therefore, further studies should be done to assess whether the gap has been filled. Also, with the advent of effective covid vaccines, such studies should be duplicated in the current times to re-evaluate the impact of covid 19 on postgraduate residents.

## CONCLUSION

Gynae trainees faced significant personal and professional challenges while working during the Covid-19 pandemic. Their worst fear was that of the family being infected. Their training had a considerable impact, with the highest impact on their surgical/ clinical skills.

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#### AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under

**Afridi F:** Concept, design, writing

**Afridi A:** Analysis and review

**Bangash AG:** Concept, critical review

**Naib JM:** critical review

**Bibi R:** Data collection, bibliography

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.



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