



ORIGINAL RESEARCH ARTICLE

PERCEPTION OF MBBS AND BDS INTERNS OF CHITWAN REGARDING THEIR CLINICAL POSTING DURING COVID-19 PANDEMIC

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Received: 2 Mar, 2022

Accepted: 6 Jun, 2022

Published: 30 Jun, 2022

**Key words:** Care; COVID-19; Internship; Interns; Patient; Perception.

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DOI: <https://doi.org/10.54530/jcmc.671>

Citation

Banstola P, Shah NK, Bhattarai R. Perception of MBBS and BDS interns of Chitwan regarding their clinical posting during COVID-19 pandemic. Journal of Chitwan Medical College. 2022;12(40):83-6.



ABSTRACT

**Background:** COVID-19 pandemic has changed the routines throughout the world where medical sector hasn't remained untouched. Medical interns have been the vulnerable population being affected by the pandemic. The pandemic has created a huge impact psychologically and academically on the medical students. This study was conducted in the medical colleges of Chitwan, Nepal aiming to find out the perception of the MBBS and BDS interns regarding their clinical posting during COVID-19 pandemic.

**Methods:** A descriptive cross-sectional study was conducted among MBBS and BDS interns of medical colleges in Chitwan, Nepal. A structured 14 item questionnaire containing demographics (4 items) and perceptions on safety, satisfaction and confidence (10 items) regarding COVID-19 pandemic was used for online survey via email. Consent was taken for the survey and descriptive study was done. Data entry was done in Microsoft Excel and analysis is SPSS 16. Descriptive statistics was done.

**Results:** The questionnaire was sent to 130 interns at Chitwan out of which 68 interns responded among which 29.4 % were BDS interns and 70.6 % were MBBS interns. Majority of the interns didn't feel safe to do duty in their internship and also feared of transmission of COVID-19 through them to their families. They also didn't have adequate confidence for the patient management due to the type of learning exposure during the pandemic.

**Conclusions:** The study revealed that virtual learning isn't effective for the interns for the patient management. Majority of the interns at Chitwan didn't feel safe to do clinical duty during the pandemic.

INTRODUCTION

Initially COVID cases was reported in Wuhan, China in December 2019. Three months later the World Health Organization (WHO) declared the novel coronavirus COVID-19 a pandemic.<sup>1</sup> Globally education institutions faced the devastating COVID-19 pandemic outbreak. Lockdowns in pre-clinics and clinics, reduced patient flow limited access to clinical learning opportunities for interns.<sup>2</sup> Covid-19 pandemic changed routines throughout the world with the need for social distancing, online platforms and increase advancement in digital tools.<sup>3</sup>

The COVID-19 pandemic affected the medical education globally.<sup>4</sup> The pandemic has created a huge impact psychologically on the medical students and doctors as well.<sup>5</sup> The imposed lockdown has greatly impacted the number of the patients coming to the hospitals ultimately reducing the clinical exposure and experience of the interns.<sup>6</sup> Fear of passing on the disease to elderly relatives has been a concern.<sup>7</sup> The transition from medical school to internship is a critical milestone for students. This transition was altered by the COVID-19 pandemic,

including disruptions to clinical activities.<sup>8</sup> Virtual learning has emerged as an alternative method of teaching and learning, it hasn't been as effective as conventional learning methodology for medical sectors. The interns have been affected regarding their clinical posting, clinical experiences and confidence in patient management.

The study was conducted among the MBBS and BDS interns in the medical colleges of Chitwan, Nepal with the aim to assess the perception of the interns regarding their clinical posting during COVID-19 pandemic and the impact of pandemic on their learning experience.

METHODS

A descriptive, cross-sectional study was conducted among BDS and MBBS interns posted in the teaching hospitals of Chitwan. Purposive sampling technique was used and all the medical and dental interns posted in different departments during our study period were included in the study, which from the hospital records was 130. We developed a questionnaire to evaluate the perception of the MBBS and BDS interns posted

on teaching hospitals of Chitwan.

The questionnaire included 14 questions: - 4 questions for demographic characteristics and 10 statements for perceptions presented as Likert scale (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree). For the development of the questionnaire, academicians as experts have gone through each and every item of the questionnaire and have come to an agreement. Since all our study participants understood English language and had access to the internet, the questionnaire was developed in English language using Google form survey. The questionnaire was sent via email to 130 interns' posted at teaching hospitals of Chitwan between 19<sup>th</sup>-23<sup>rd</sup> June, 2021 out of which 68 responded.

In the beginning of the questionnaire the purpose of the study was explained and consent was taken for the survey. Follow up was done by resending an email as the reminder during 26-29<sup>th</sup> 2021. To check the reliability, we re-sent the questionnaire to 15 participants who had responded to us before and compared their responses. Our inclusion criteria included MBBS and BDS interns currently working in Chitwan, Nepal and those who were willing to participate in the study. Exclusion criteria included those not willing to participate and those participants with incomplete data submission. The response from the Google form survey were collected, entered in Microsoft Excel and analyzed using the SPSS (Statistical Package for Social Sciences) version 16 software.

## RESULTS

The questionnaire was sent to 130 interns of Chitwan out of which 68 responded. Table 1 shows distribution of study participants based on their demographic characteristics. Among the total participants 29.4% were BDS interns and 70.6% were MBBS interns. 52.9% participants were Male and 47.1 % were female. Responses were collected from the participants dividing them into 3 age groups out of them 76.5% were between 22-25 years, 22.1% were between 26-29 years and rest 1.4% were between 30-33 year old. Out of 68 participants 89.7% have been in internship for 0-3 months, 1.5% for 4-6 months, 2.9 % for 6-9 months and 5.9% for 10-12 months.

**Table 1: Showing distribution of study participants based on their demographic characteristics**

Variable	Frequency (%)
Gender	
Male	36 (52.9%)
Female	32 (47.1%)
Age group	
22-25 years	52 (76.5%)
26-29 years	15 (22.1%)
30-33 years	01 (1.4%)
Faculty	
BDS	20 (29.4%)
MBBS	48 (70.6%)

**Table 2: Table showing perception of the participants regarding safety of the individual, family & society, satisfaction on learning experience and confidence on patient management**

Questions		1	2	3	4	5
1 I feel safe to do duty in the internship.	n(%)	1(1.47)	4(5.88)	18(26.47)	31(45.58)	14(20.58)
2 My family feels safe being in contact with me.	n(%)	5(7.35)	3(4.41)	9(13.23)	32(47.05)	19(27.94)
3 My society feels safe being in contact with me.	n(%)	2(2.94)	2(2.94)	11(16.17)	25(36.76)	28(33.82)
4 I am satisfied by clinical posting during the pandemic.	n(%)	0 (0)	10(14.70)	19(27.94)	20(29.41)	19(27.94)
5 I feel I will have enough clinical experience during my internship in pandemic.	n(%)	0 (0)	5(7.35)	10(14.70)	20(29.41)	33(48.52)
6 Virtual learning has been an option for learning but I feel virtual learning isn't as effective as hand on clinical experience.	n(%)	31(45.58)	31(45.58)	3(4.41)	2(2.94)	1(1.47)
7 I feel group discussion on clinical cases will have positive effect in learning.	n(%)	27(39.70)	32(47.05)	7(10.29)	1(1.47)	1(1.47)
8 I feel my supervisors are helping me learn as they used to do before the pandemic.	n(%)	3(4.41)	25(36.76)	15(22.05)	18(26.47)	7(10.27)
9 I think I will be able to manage the patients well with virtual learning.	n(%)	0 (0)	3(4.41)	7(10.27)	37(54.41)	21(30.88)
10 I think I will be able to manage the patient well with the type of learning I am exposed to during the pandemic.	n(%)	1(1.47)	7(10.27)	14(20.58)	28(41.17)	18(26.47)

## DISCUSSION

In the present study, most of the participants didn't feel safe with their clinical posting. Majority of the intern doctors in our study have agreed that they themselves, their family and society didn't feel safe because of their clinical posting during the pandemic. This finding is similar to a study by Carrascosa M et al where interns were being afraid of being contaminated with the virus, which demonstrates widespread insecurity regarding the current situation.<sup>3</sup> The perception of participants of our study is similar to study by Cai et al where interns perceived fear in relation to being in a medical career during the pandemic of COVID-19. Many perceived heightened fear regarding the risk of infecting family members and fear of losing life.<sup>1</sup>

The participants of the current study believed that virtual learning isn't as effective as hand on clinical experience. In contrast Alzahrani et.al<sup>2</sup>, Albitres-Flores et al<sup>9</sup> have emphasized on the virtual learning as well. Similar study by Kim et al also found that clinical clerkship could not be replaced by an online class during the COVID-19 pandemic.<sup>10</sup> Satisfaction with this method of education within the students is good, but not yet suitable for most of medical disciplines at biomedical faculties in Bosnia and Herzegovina<sup>11</sup> and online course might not be reliable learning methods.<sup>12</sup>

From the study it was found that the interns were not confident in the patient management by virtual learning. Dedeilia et al<sup>13</sup> suggested that the loss of clinical attachments, subsequently causing a loss of bedside teaching, a lack of direct patient care, and a loss of personal feedback from supervisors, has affected the sense of competencies of a medical intern. Sahi et al reported a possible cessation of professional growth of medical students due to a lack of influential clinical role models during this time.<sup>14</sup> Weaknesses of virtual teaching identified by medical students included reduced interaction between peers and tutors, reduced understanding of individualized learning needs by tutors, and the difficulties of balancing practical and theoretical skills.<sup>15</sup> We found that majority of

the participants aren't satisfied with their learning experiences during the pandemic and they feel that they lack enough clinical exposures. Similar study in India, found medical and surgical residents felt that pandemic had resulted in negative clinical impact.<sup>16</sup> Clinical learning was negatively affected by the pandemic despite online clinical placement implemented to maintain the completeness of clerkship according to a study conducted in Taiwan.<sup>17</sup>

However, there are limitations in this study. The first one being the use of purposive sampling along with small sample size, because of which our study is generalizable only to the subpopulation but not on interns working all over the country. Also, owing to the scenario at the time of study we had opted for online Proforma which could result in information bias which could be overcome in further studies by training interviewers to self-administer the questionnaire and collect information using standard techniques for all participants.

## CONCLUSION

Majority of the interns didn't feel safe for the clinical posting during COVID-19 pandemic. Virtual learning isn't effective for the interns for the patient management. For building up the confidence in the patient management, the interns need more clinical exposures. This study may help the medical colleges to effectively plan for the internship program for the interns so that they can have required clinical experiences safely during this COVID-19 pandemic.

## ACKNOWLEDGEMENT

We would like to thank Dr.Safal Dhungel, Dr.Santosh Adhikari, Dr Pujan Kranti Kayastha, Dr Lipika Shrestha, Dr Anisha Pandey , Dr. Nashib Pandey and Dr Namrata Pradhan for their guidance and constant supervision . The authors are grateful to all the participants of this study as well.

**CONFLICT OF INTEREST:** None

**FINANCIAL DISCLOSURE:** None

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