

1 **“Challenges faced and support received during Covid-19 pandemic by staff nurses**
2 **working in a selected government hospital in Kolkata,”**

3
4 **Abstract:**The Covid-19 outbreak hit the whole world with unprecedented consequences and
5 had led to significant impacts on nurses and other healthcare providers. A descriptive survey
6 study was undertaken to find out the challenges faced and support received during Covid-19
7 pandemic by staff nurses in a selected government hospital in Kolkata. Through purposive
8 sampling, data were collected from 100 staff nurses who worked at least 15days in a COVID-
9 19 ward. Ethics committee approval and informed consent from the participants were taken.
10 Before data collection, validity & reliability of the tool was established and the study
11 revealed that the highest challengesfaced by the staff nurses were in organizational challenges
12 i.e. 17% ($>\mu + 1SD$) and moderate challenges include both psychological domain of personal
13 challenges i.e. 85% and financial challenges 85% ($\mu - 1SD$ to $\mu + 1SD$). Low challenges
14 include interpersonal domain 10% ($\mu - 1SD$) of personal challenges. The staff nurses received
15 maximum support from the family (85%) and (57% received support from society) and the
16 lowest support received was from government/organization (34%). So, this study showed that
17 the staff needed good support from the government/organization, the hospital administrations
18 and that the government could proactively support staff nurses who were working in Covid-
19 19 ward during the pandemic. This result might even help the policy makers to take decisions
20 in near future in case a new pandemic arises. Nursing staff need greater recognition in both
21 psychological and monetary forms.

22 **Keywords:** Covid-19 pandemic, Challenges faced, Support received, staff nurses.

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28 **Introduction:**

29 COVID-19 infection is a new disease which has infected large number of people, killing
30 many people in the world. Healthcare staff, especially nurses had facedmany
31 challengesduring the pandemic period.Covid 19 pandemic has exposed nurses to various
32 conditions which threatened their physical and mental health and also their ability to work.
33 They also faced numerous challenges like unavailability of accommodation, transport facility,

inadequate quarantine facilities and shortage of personal protective equipment(PPE). Even some studies revealed that some organizations provided substandard PPE¹kits to the nurses. According to the study conducted by Amal Refaat Gab Allah², multiple complex challenges which the nurses faced, emerged during Covid-19 pandemic. Nurse managers need more organizational support in emotional and structural support, assisting in problem solving, and ensuring safety in their work. While the nurses are playing a vital role in such a pandemic, many of them are facing high-risk situations like some have died due to inadequate personal protective equipment and COVID-19 outbreak had constituted a massive health challenge all around the world. Among all those challenges, stress was found to be quite high among the nurses. Therefore, nurse managers must be aware of these challenges and should offer higher support to nurses in their struggle against the COVID-19 pandemic. Globally, nurses had carried a heavy burden during the COVID-19 crisis and, in the process of controlling the spread of virus, had faced different challenges and its consequences. But in some hospital the nurses might not have received enough support from the government as well as from the society and family. Supporting their psychological wellbeing were very much necessary during the pandemic time. Therefore, it was very important to have a study on the different challenges faced and supports received during COVID-19 pandemic by the staff nurses, who were working in a selected government hospital, Kolkata.

Methods:

A descriptive survey research design was adopted to find out the challenges faced and support received by the staff nurses during COVID-19 pandemic who worked at least for 15 days in last 6 months in COVID-19 ward in a govt tertiary centre in Kolkata. Calculated sample size was 96 and for ease of calculation data were collected from 100 staff nurses during 23.01.2022-28.02.2022. Ethics committee approval was taken (MC/KOL/IEC/NON-SPON/1112/06/2021 dated 12.06.2021) and written informed consent was obtained from the subjects through purposive sampling technique. To assess the challenges faced and supports received, pre-tested developed tools were used. Tool to assess challenges had three main domains i.e. personal challenges, financial challenges & organizational challenges. Personal challenges are again subdivided into physical & psychological domain. Tool to assess support had three parts i.e. support from family, support from societies & organizational support etc. Analysis was done by using descriptive and inferential statistics. Frequency and percentage for different challenges and support and Pearson 'r' was computed for co-relation & co-efficient for relationship between challenges faced and support received by the staff nurses during COVID-19 period. SPSS version 20 (SPSS IBM CORP, AV monk, New York, USA) software was used for statistical analysis.

Results: Sociodemographic characteristics of the subjects revealed that maximum (67%) of the staff nurses were between 21-30 years of age, all (100%) staff nurses were female, 50% of the staff nurses married, maximum (61%) of the staff nurses had GNM qualification, maximum (59%) of the staff nurses had 1-5 years of working experiences. Majority (80 %) of the staff nurses belonged to nuclear family, maximum (57 %) of the staff nurses took 1-2 hours to reach hospital from their homes, majority (88 %) of the staff nurses were using public vehicle for transportation, maximum (60%) of the staff nurses had done duty in COVID-19 ward for 1.5-2 years, maximum (51%) of the staff nurses had no history of COVID-19 infection, majority (74 %) of the staff nurses did not have any kid.

Figure-1A shows that 99% staff nurses always or sometimes had suffocation while wearing PPE, 91% always or sometimes had leg pain due to long standing duty hours, (90%) of the staff nurses sometimes or always had back pain due to long duty hour, (86%) of the staff nurses sometimes or always had fatigue due to working in Covid-19 ward, and 31% of the

staff nurses sometimes or always faced inability to do household activities after duty. All the staff nurses had at least one or more challenges in physical domain. Figure 1B shows that majority (60%) of the staff nurses sometimes or always had fear of being infected with COVID-19. In psychological domain of personal challenges, 7 % of the participants did not face any kind of challenges mentioned above. Figure 1C shows that 21% of the staff nurses were sometimes or always not allowed to come out of their room at home and 38% of the staff nurses did not face any kind of challenges mentioned above. Data presented in figure 1D showed that maximum (52%) of the staff nurses sometimes or always maintained social isolation due to working in COVID-19 ward. 29% of the staff nurses did not face any one of challenges mentioned above. In figure 1E shows that 100% of the staff nurses did not get any extrinsic incentive, 100 % of the staff nurses are sometimes or always not satisfied with their salary and 100% of the staff nurses expressed that they always spent extra money for transportation.

Figure 2A shows that maximum (85%) support received by the staff nurses were from their family members in terms of getting help in doing household work and the lowest support was from the government (34%). Data presented in table 5 shows that 7 (47%) staff nurses opined on having caretaker for their kids. Figure 6A, depicts that 66 participants were not satisfied with the support received from the government and maximum (44%) gave their opinion that increasing salary might improve support from the government. Data presented in table 7 shows that there was no statistically significant correlation (-0.03567) between challenges faced and support received during COVID-19 pandemic by staff nurses.

Discussion: In the present study, the challenges faced in physical domain showed that 86% of the staff nurses sometimes or always felt physical fatigue while wearing PPE. This finding is consistent with a study conducted by Herley Windo Setiawan et al ³ and their study findings showed that all (100%) participants experienced difficulties when working using PPE and out of which 38% participants felt physical fatigue when wearing PPE.

In the present study, the challenges faced in psychological domain showed that 60% of the staff nurses sometimes or always had fear of being infected with COVID-19, and 79% the staff nurses sometimes or always had stress, and 62% of the staff nurses sometimes or always had burn-out and 54% of the staff nurses sometimes or always had ambiguity in patient care due to frequently changing instructions from authority. This finding is consistent with the findings of the study conducted by Amal Refaat Gab Allah², and in his study 99.1% of the participants had stress, fear and anxiety, 90.7% of the staff nurses had ambiguity and uncertainty. Another study conducted by Shaharior Rahman Razu, et al ⁴ also reported that the participant had experienced psychological distress, fear of being infected with COVID-19. This present study is also supported by another study conducted by Enyew Mekonen et al⁵, where 69.6% of the nurse had anxiety and 20.5% of the staff nurses had stress. In another study conducted by Judith E. Arnetz et al⁶ where 29.67% of the nurses had fear of self being exposed to COVID-19 and 6.15% of the nurses had feeling of inadequacy and helplessness, especially in relation to their patient's condition and treatment.

In the present study, challenges faced in interpersonal domain showed that 23% of the staff nurses sometimes or always faced inability to share problem with co-workers, and 32% of the staff nurses sometimes or always had restriction in communication with the patient while wearing PPE. This finding is consistent with the study conducted by Judith E. Arnetz et al⁶ where their result showed that 51.21% of the participants gave an agreement that they faced issue in work-related problems, including relationships with coworkers, perceived workplace administrative failings. On contrary, a study conducted by Amal Refaat Gab Allah² showed that only 1.4% of the participants had faced communication problem.

Regarding the challenges faced in social domain, 52% of the staff nurses sometimes or always maintained social isolation. This finding is consistent with the findings of the study conducted by Yan Liu et al.⁷ where 38% of the nurses reported feeling isolated from family and friends as a result of high-risk exposure and more than three-quarters of all nurses reported that high risk of exposure at work resulted in limited socialization. In another study conducted by Judith E. Arnetz⁶ where 7.03% of the staff nurses faced restrictions associated with the pandemic, such as social distancing and closing of business.

In the present study, the challenges faced in financial challenges showed that 100 % of the staff nurses do not get any extra incentives, 85% of the staff nurses were always not satisfied with their salary, 100% of the staff nurses do not get any extra incentive for transportation. This finding is consistent with the study conducted by Shaharior Rahman Razu⁴ & Talmia Binte Arif et al.⁶ where they reported that the participant had experienced lack of incentives. This finding is also supported by a study conducted by Judith E. Arnetz et al.⁶ and the result showed that 22.64 % of the nurses gave an agreement that they had faced job/financial and security problem.

In the present study, the organizational challenges showed that 73% of the staff nurses did not get any proper training for handling Covid-19/ wearing PPE and 73% of the staff nurses sometimes or always had high patient load, also 96% of the staff nurses sometimes or always faced shortage of staff, and 74% of the staff nurses sometimes or always faced lack of PPE supply, 85% of the staff nurses sometimes or always got poor quality PPE, 32% of the staff nurses sometimes or always faced no-cooperation from administrators. The finding is consistent with a study conducted by Shaharior Rahman Razu⁴ & Talmia Binte Arif et al.⁶ and their study reported that the participant experienced higher workload, shortage of PPE, absence of coordination and proper management during their service. Another study conducted by Marjan Vejdani et al.⁸, showed that the staff nurses faced lack of sufficient equipment and facilities and also the lack of enough workforce and shortage of staff. In this study, the highest support is from the support from family (85%) and second highest support is from society (57%). This finding is consistent with the finding of the study conducted by Yan Liu et al.⁷ where 93% of the nurses got support from their friends and family. In this study, a statistically not significant correlation ($r = -0.03567$) was found between challenges faced and support received during COVID-19 pandemic by staff nurses. On contrary, a study conducted by Amal Refaat Gab Allah² showed that there was a highly statistically significant negative correlation between challenges currently faced by managers and their perception of organizational support. Another contrary in findings was seen in a study by Eman Alnazly et al.⁹ where there was a weak significant negative correlation between social support and selected study variables, indicating a weak association with fear, depression, anxiety and stress respectively. The difference in findings might be due to difference in data collection time; the present researcher had collected the data after 2nd wave of Covid-19 and another researcher had collected data after 1st wave of Covid-19. There are lots of difference in challenges faced during 1st wave and 2nd wave of Covid-19. On the basis of the above discussion, all the staff nurses had at least one or more challenges in different categories of challenges faced during Covid-19 pandemic. The staff nurses got the highest support from family. The present study finding also revealed that there was no statistically significant correlation between challenges faced and support received. The study was limited to a single setting only and data was collected within 6 months of COVID-19 ward duty so there might be some chances of recall bias. So, it can be recommended that the same study can be carried out in a comparative design between government hospital nurses and private hospital nurses and data should be collected with 7 days of COVID-19 ward duty. It can be concluded that identifying the challenges of the staff nurses and giving better support system from the organization/government in terms of providing incentive, increasing salary, giving more

183 leave and mental support from administrator, giving proper training or making proper
184 guidelines for handling COVID-19 patients, organizing in service class to enhance their
185 knowledge and skills, would be helpful in reducing the challenges faced specially during such
186 pandemic.

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Tables & diagram:

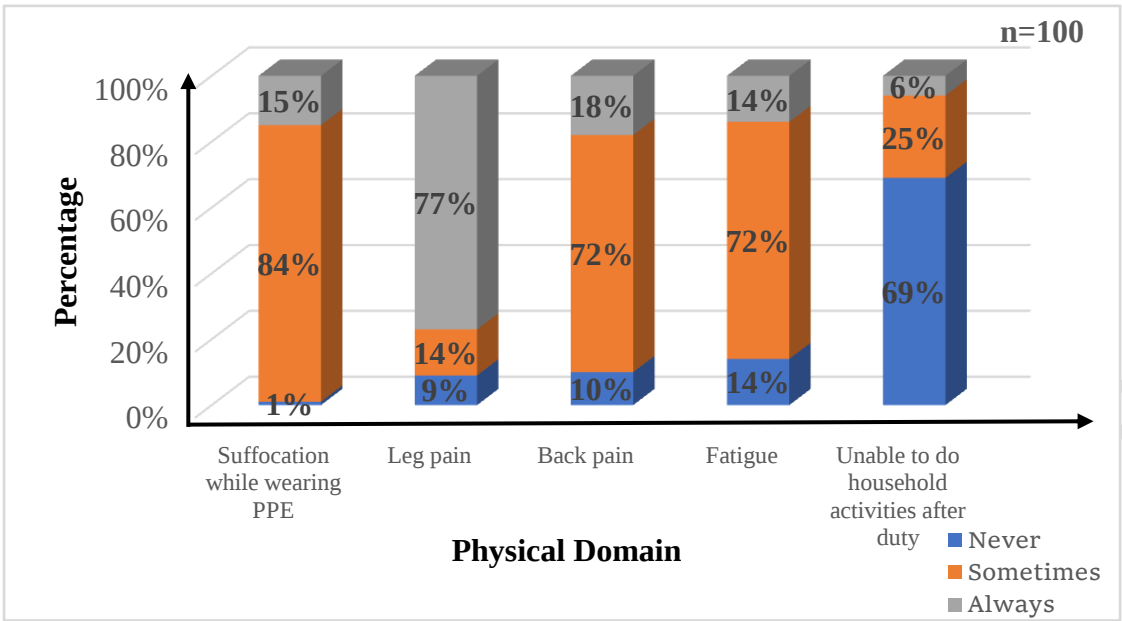


Figure 1A- Composite bar diagram showing the percentage distribution of challenges in physical domain of personal challenges.

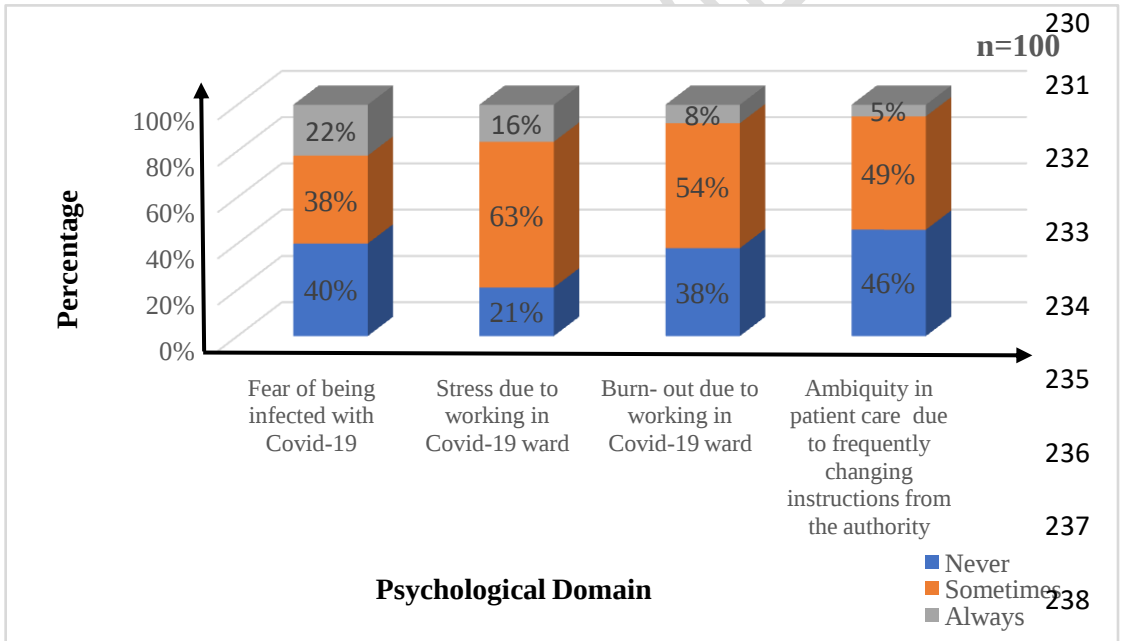


Figure 1B-Composite bar diagram showing the percentage distribution of challenges in psychological domain of personal challenges.

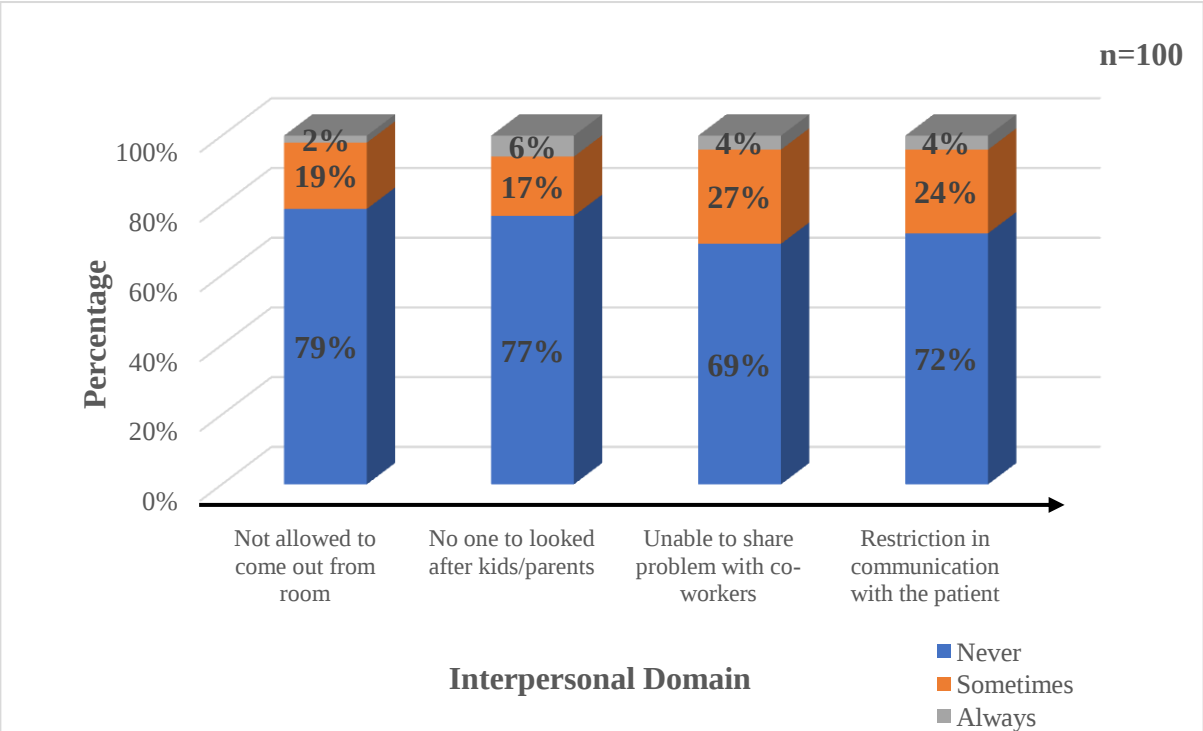


Figure 1C- Composite bar diagram showing percentage distribution of challenges in interpersonal domain.

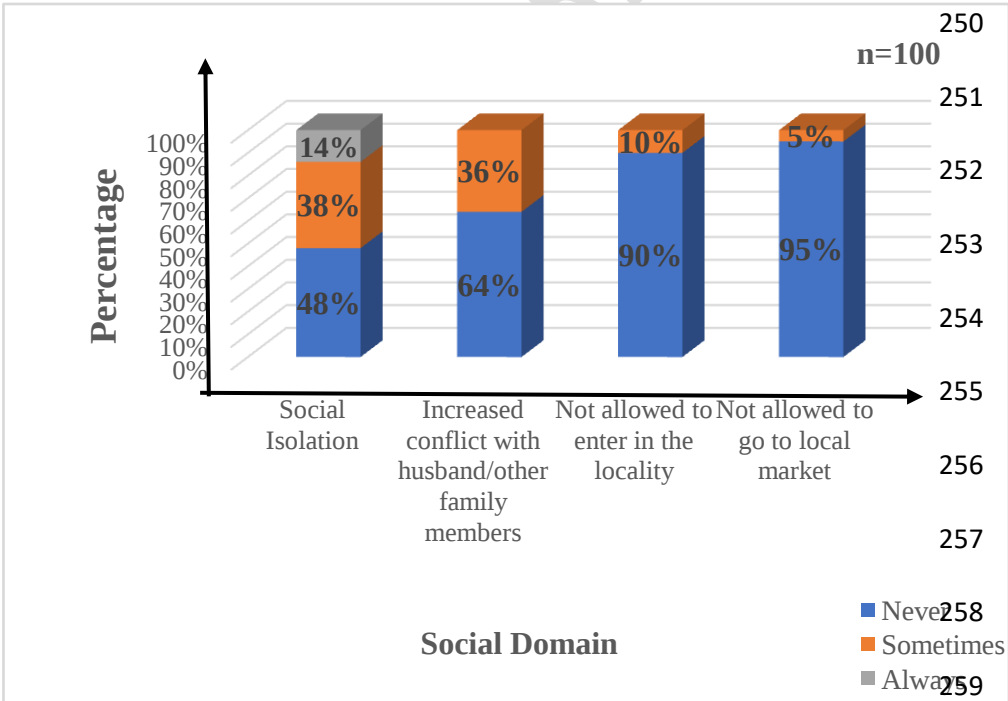


Figure 1D- Composite bar diagram showing the percentage distribution of challenges in social domain of personal challenges.

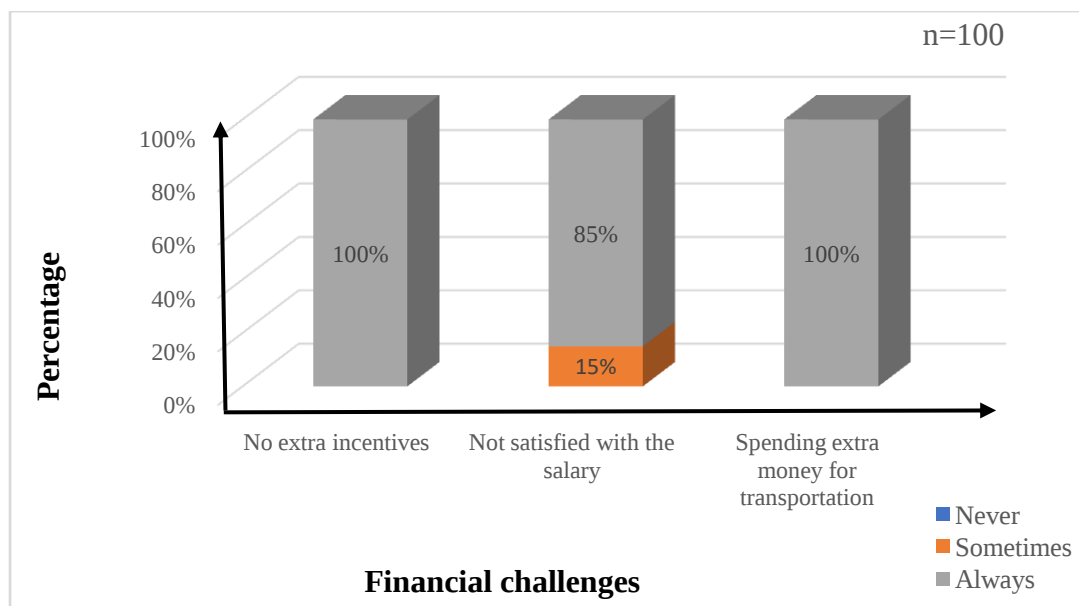


Figure 1E-Composite bar diagram showing percentage distribution of financial challenges.

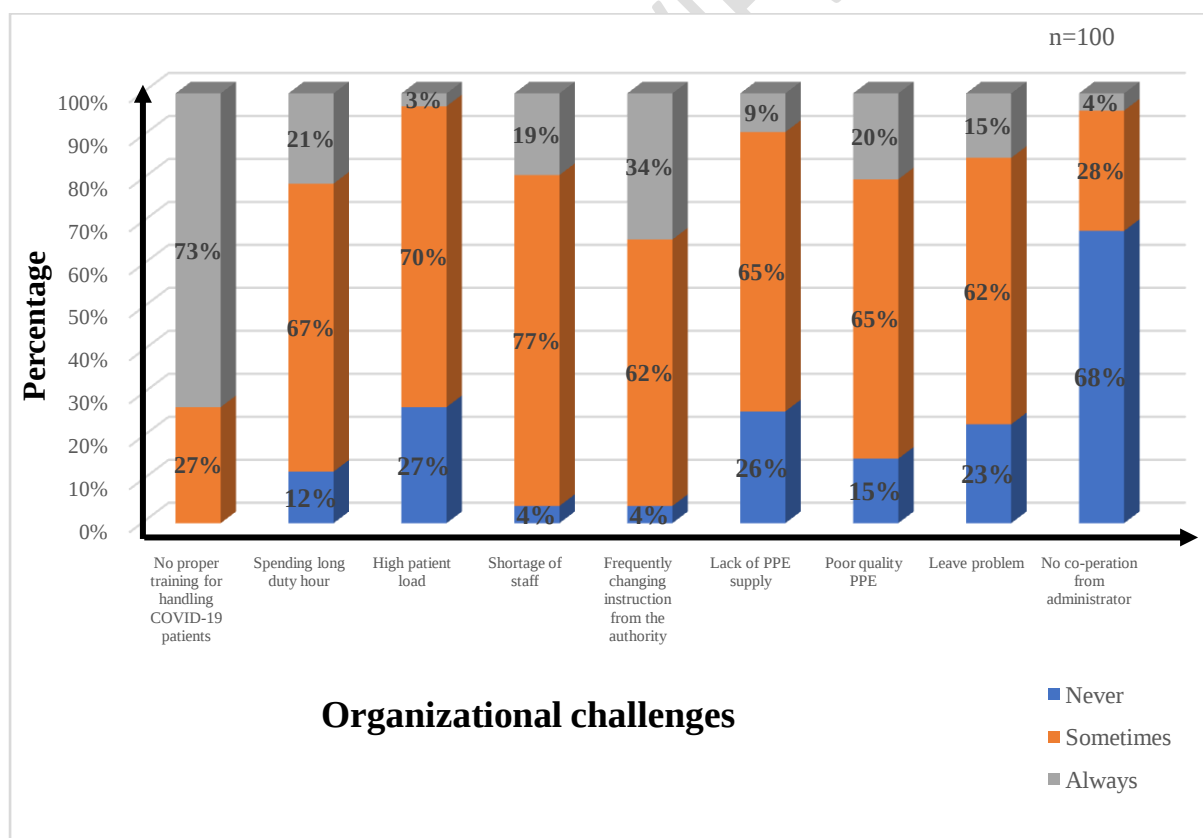


Figure 1F - Bar Diagram showing the percentage distribution of organizational challenges.

Table 1: Frequency and percentage distribution of domain wise different challenges faced during COVID-19 pandemic by staff nurses. n=100

Challenges faced	Low challenges (<u- 1SD)	Moderate challenges (u-1SD to 1+1SD)	High challenges (>u+1SD)
Personal Challenges			
Physical Domain	4(4%)	83(83%)	13(13%)
Psychological Domain	7(7%)	85(85%)	8(8%)
Interpersonal Domain	10(10%)	79(79%)	11(11%)
Social Domain	9(9%)	84(89%)	7(7%)
Financial Challenges	0	85(85%)	15(15%)
Organizational Challenges	7(7%)	76(76%)	17(17%)

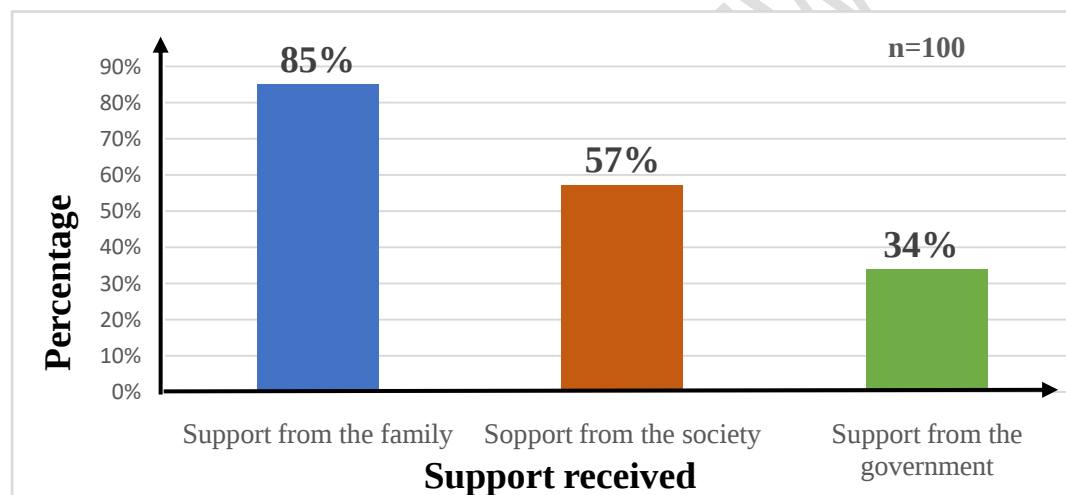


Figure-2: Bar diagram showing percentage distribution of support received by the staff nurses during COVID-19 pandemic.

Table -3: Frequency and percentage distribution of participant's opinion on improvement of support from family. n=15

Sl.No	Opinion on improvement of support from family	Frequency (%)
1.	Need for caretakers of kids from family members.	7 (47%)
2.	Need of family members at home for helping in cooking	5(33%)
3.	Requirement of family members to drop for duty at the hospital.	3 (20%)

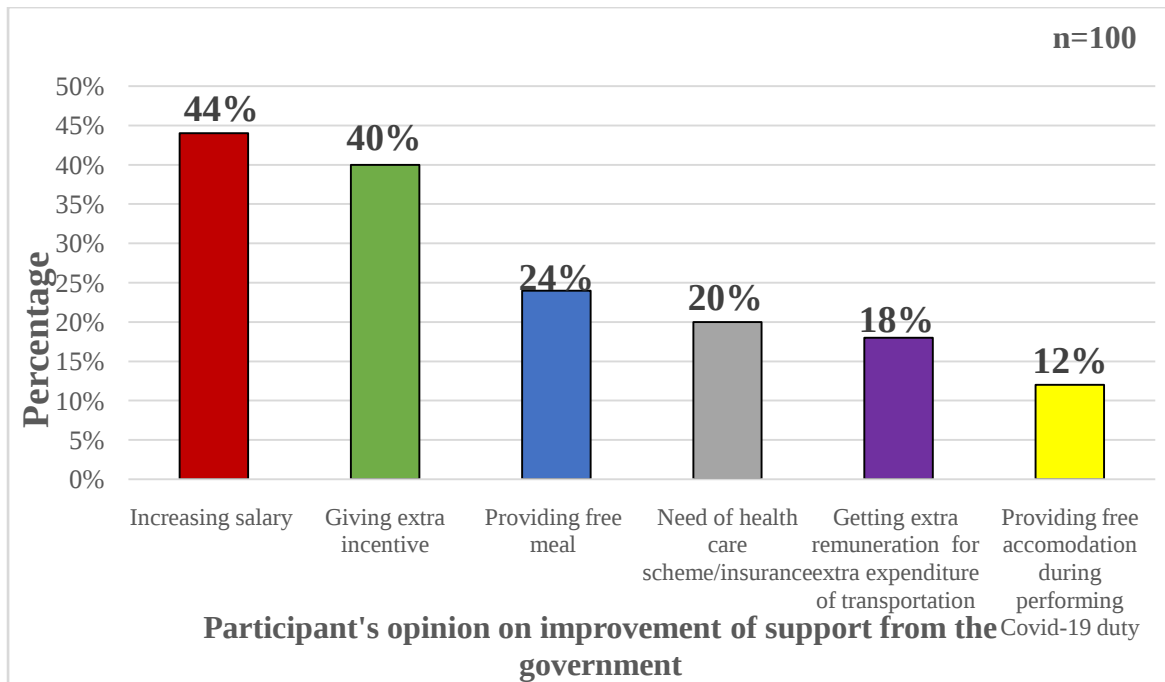


Figure 3A: Bar diagram showing the percentage distribution of participant's opinion on improvement of support from the government on the basis responses of open-ended question.

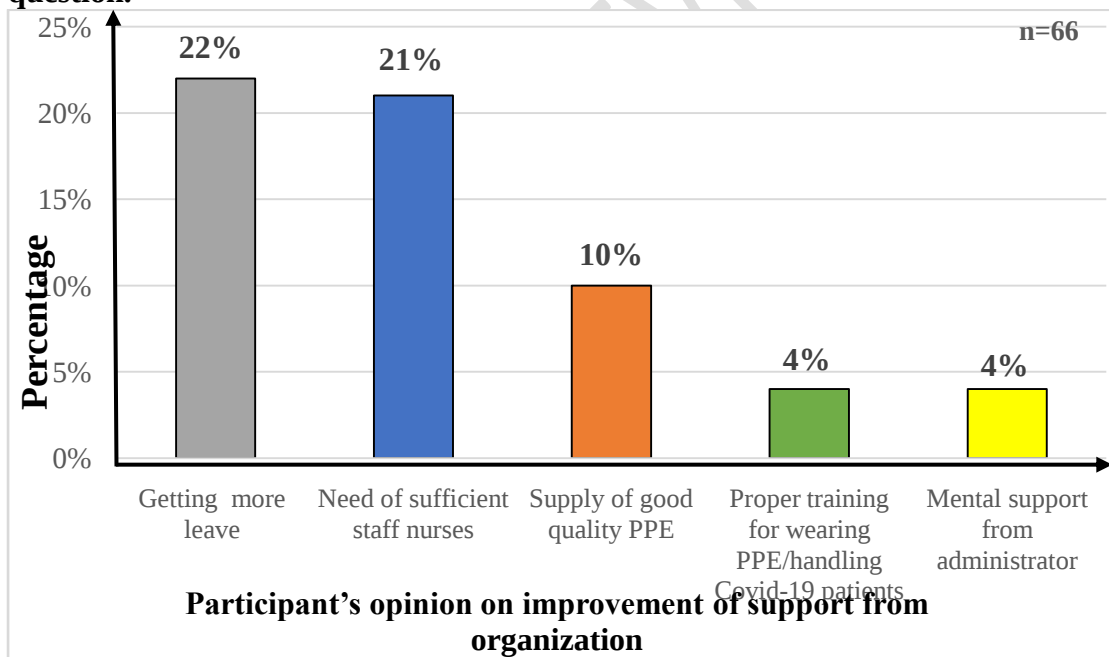


Figure 3B: Bar diagram showing the percentage distribution of participant's opinion on improvement of support from the organization on the basis of open-ended question responses.

292 **Table 4: Relationship between challenges faced and support received during Covid-19**
 293 **by the staff nurses.** n=100

Variables	Mean Score $\pm$ SD	r	t value	p value
Challenges faced during Covid-19 pandemic by staff nurses	59.40 $\pm$ 4.91	-0.03567	-0.311	0.7245
Support received during COVID-19 pandemic by staff nurses	11.28 $\pm$ 2.17			

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