

Study to Assess the Knowledge, Awareness, Perception and Practices of Nurses who Tested Positive after Working in COVID-19 Units

Ms. Mugdha Lad, Ms Shalaka.Parab, Ms. Marilyn Oliver, Ms. Prajakta Dongarkar,
Dr. Deepak Patkar, Dr. Gauri Ahuja, Dr. Mitusha Verma

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Abstract

Introduction-The rapid spread of the COVID 19 pandemic has become a major cause of concern for all and especially healthcare organizations globally as healthcare workers working in COVID units are definitely at an increased risk of developing infection due to increased exposure. Hospitals and researchers are focusing all their resources on trying to understand the factors responsible for the spread of infection and those responsible for causing infection in an individual. We were faced with a novel virus, the dynamic properties of which are being slowly discovered.

Index terms—

1 Introduction

he rapid spread of the COVID 19 pandemic has become a major cause of concern for all and especially healthcare organizations globally as healthcare workers working in COVID units are definitely at an increased risk of developing infection due to increased exposure.

Hospitals and researchers are focusing all their resources on trying to understand the factors responsible for the spread of infection and those responsible for causing infection in an individual. We were faced with a novel virus, the dynamic properties of which are being slowly discovered.

Though a lot of research has been done in this regard, there are yet a lot more discoveries to be made. Several intrinsic factors specific to different individuals are responsible for causation in a healthy individual.

According to Phan T.

2 Demographic data

It is seen that 38% staff were between 21-24 years, 40% of staff were between 25-30 years 6% of staff were in 31-35 years while 16% of staff were above 35 years of age, among those who became COVID positive.

It was seen that 93% of the staff who got COVID 19 were females while 7% were male staff.

Out of 48 times male staff were posted in COVID unit, 5 brothers came positive.

72% of the staff were unmarried while 28% were married.

39% of samples had less than 2 years of experience, 34% of samples had 2-5 years of experience, while 10% of samples had 6-9 years of experience. Also, 17% of the staff had more than 10 years of experience

3 b) Knowledge

It is seen that 96% of staff are aware about the PPE required for aerosol generating procedures while 89% of staff are aware about details regarding the incubation period of Corona virus. The knowledge of staff regarding other infection control protocols is between 94-97%.

In Figure ??o. 1, it is seen that staff with more than 10 years of experience had 89% knowledge regarding COVID 19 while those between 6-9 years had 80% knowledge.

4 c) Perception

It was seen that 21 % of the staff were scared to work in COVID unit, while 65% agreed that by following proper steps of donning and doffing one can prevent getting infected. 92% of staff agreed that it is difficult to work in PPE.

5 d) Practices followed for control of infection i. Practice related to Donning

It is evidenced that 76% of staff were wearing 3 pairs of gloves at the end of donning while only 54 % of staff were washing hands with soap and water before and after wearing scrub suit.

6 ii. Practice related to Doffing

It is seen that 29% of staff removed sterile gloves after removing shoe cover, only 36% followed correct sequence of doffing while 70% removed mask in correct method. 99% of the staff were wearing mask in quarantine period and 100% of the staff were using hand rub after each step of doffing.

7 Figure 2

In Figure No. 2, it is seen that donning practice were better with better compliance between 59-68% while the doffing practice compliance ranges between 57-63%. Sixty three (63%) of staff complied with doffing from >10 years & above group while 68% of staff complied with donning in the 6-9 years group.

8 Knowledge with regards to years of Experince

Figure 3

In ? Feedback after every COVID duty to improve current practice.
III.

9 Conclusion

? The staff had good knowledge (85%) regarding COVID 19 which may be attributed to the structured training before the posting. ? The compliance to practice was between 61-62%. It is a behavioral change that will come with change in attitude and may need time. Need to sensitize on practice. ? To conclude the majority of staff may have got infected with COVID 19 due to improper doffing practice, as 64% of staff did not comply to the correct sequence of doffing. ? The remaining 36% may have got infected due to some unknown intrinsic factors.
IV.

Summary and the Way Forward

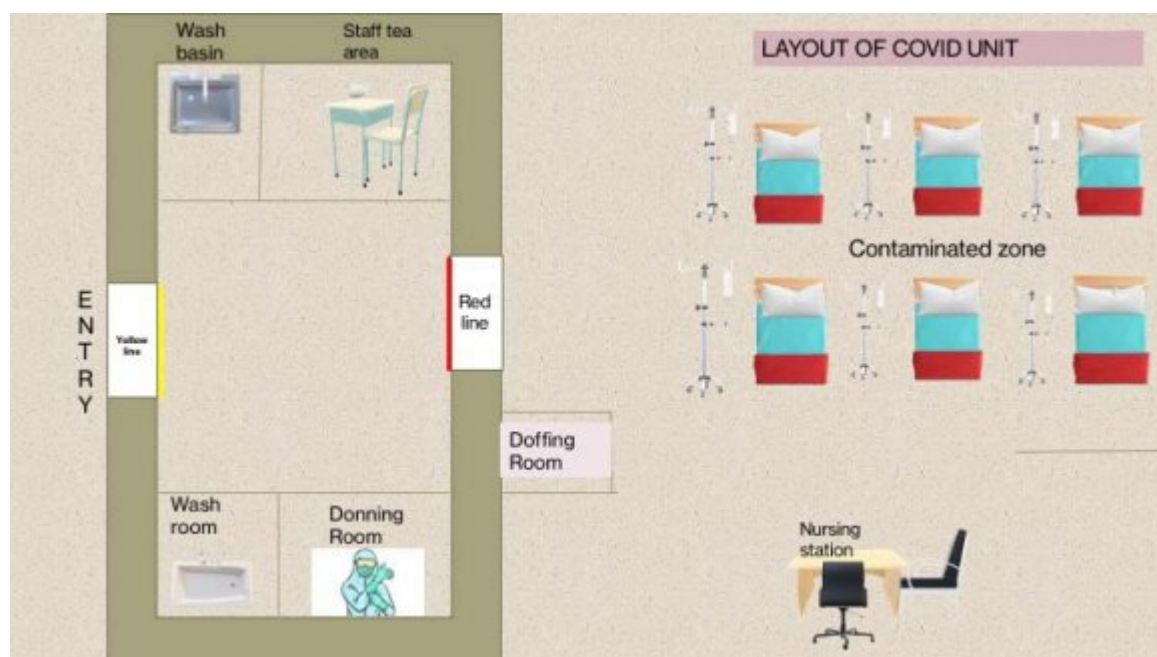


Figure 1:



1

Figure 2: Figure 1



Figure 3: ?



Figure 4:



Figure 5:

	Knowledge	
82%	85%	
59%	57%	65%
< 2 years	2 -5 years	57%

Figure No. 3, it is seen that in spite of increase in knowledge (82-89%) the compliance to donning & doffing practices is between 59-68% & 59-63% respectively.

Challenges: Some challenges faced by nurses during donning and doffing of PPE were as follows: During Do
Figure 4

Figure 6:

Figure 7: ?

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