

Suraksha Chakra: A new scoring system to protect the healthcare workers from COVID

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ABSTRACT

Doctors, nurses, house cleaning staff and hospital ward attendants are at increased risk of acquiring coronavirus disease 2019 (COVID-19) if there is a breach in the personal protection equipment. A new simple, easy to implement scoring system has been developed by our Suraksha Chakra team which can be used by the policy makers and hospital administrators. The scoring system is not to discourage anyone but constantly reinforce the healthcare workers for safe practices during patient care.

Keywords: BSF-PHD score, chakra, Suraksha

Introduction

Doctors, nurses, house cleaning staff and hospital ward attendants are at increased risk of acquiring COVID-19 if there is a breach in the personal protection equipment. Currently, only 9.27 lakh doctors are available for active service, making the health-work force a valuable resource. Healthcare workers (HCWs) doing duties in COVID-19 wards and screening desk and even in OPD and wards are at increased risk of exposure to the virus making them undergo either isolation or quarantine, thus depleting the active manpower services. The number of HCWs confirmed infected with COVID-19 in the United States is over 800, Brazil around 15,000 nurses and more than 1073 cases in India.^[1-3] After around 7 months of this pandemic, what we have understood is only personal protective equipment (PPE) and social distancing are two modifiable risk factors that if addressed in a proper way

would significantly reduce the chain of transmission in hospital setting.^[4,5]

Suraksha Chaka Team

Knowing the magnitude of problem statement, AIIMS Jodhpur constituted 'Suraksha Chaka' team on 25 June 2020 [Figure 1]. The purpose of the team is to look into five appropriate practices in non-COVID areas (non-COVID areas in hospital are points where routine elective and emergency cases are catered after thorough screening for COVID infection) like OPD, IPD, emergency, diagnostics and ICUs in the hospital. The five points to be checked are (i) use of PPE, (ii) infection control practices, (iii) social distancing practices at all places, (iv) hand hygiene practices and (v) ask for any flu-like symptoms and guide those healthcare workers (HCWs) to the COVID Health Monitoring Committee. At our institute, we have formed 14 *Suraksha Chaka* teams (each team consists of two members – one doctor and one nursing tutor). Each floor in OPD, each floor in IPD, each ICU and operation theatre area have been assigned one team. The team takes rounds twice a week between 10 and 11 o' clock.

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Responsibilities of the *Suraksha Chakra* Team

The teams would take regular and surprise rounds in above-mentioned areas in the hospital [Figure 2].

1. The team will have the responsibility to implement above-mentioned safe practices
2. Whenever the team finds that there is failure or laxity in practicing appropriate use of PPE according to SOP, lack of adequate infection control measures, not following social distancing norms and lack of hand hygiene practices:
 - i. will remind the person and his buddy about the same and help in improving the attitude
 - ii. will make note of the incident in a register
 - iii. will check again next day to see for change in action/behaviour
 - iv. if no improvement even after two reminders will inform the head/person in charge
 - v. if improvement then also makes note of it in a register

3. The team would provide feedback to the Hospital Infection Control Officer and Deputy Medical Superintendent on WhatsApp.
4. The team would also recommend best ward/OPD area or any other area in the Institute for reward.

BSF-PHD Scoring system

A scoring system has been designed by AIIMS Jodhpur Suraksha Chakra team to look into the safe practices during COVID.

The BSF-PHD Suraksha Chakra Score is divided into three colour-coded groups – score of 0–5 is assigned red zone which means strict policies are required; score of 6–9 is given yellow zone which means there is scope for further improvement. A score of 10 and above is assigned green zone which meant all safety measures were in place and this area was considered benchmark for other HCWs to follow.

The benefits of using BSF-PHD score by healthcare facilities are many: (i) ensure hand sanitization and hand hygiene practices,



Figure 1: Briefing of the Suraksha Chakra Committee



Figure 2: Reinforcing safe practices amongst healthcare workers

BSF-PHD Suraksha Chakra scorecard		
Letter	Clinical characteristic	Points
B - Biomedical waste	No BMW segregation/PPE disposal	0
	Inadequate or partial BMW segregation/PPE disposal	1
	Appropriate BMW segregation/PPE disposal	2
S - Social distancing	No social distancing	0
	Social distancing not on all areas	1
	Social distancing at all areas	2
F - Flu reporting	Flu-like symptoms and not reported	0
	Flu symptoms and reported	1
	No flu-like symptoms in any HCW	2
P - Personal protective equipment (PPE)	No PPE	0
	Inadequate PPE	1
	Adequate PPE	2
H - Hand hygiene	No hand washing	0
	Inadequate hand washing	1
	Adequate hand washing	2
D - Disinfection control	No cleaning	0
	Cleaning once daily with appropriate disinfectant	1
	Cleaning twice daily with appropriate disinfectant	2
Maximum score		12
Score - 0-5 (Stricter infection control policies required)		Score - 6-9 (Scope for further improvement)
		Score - 10 and above (Benchmark)

(ii) appropriate and adequate PPE usage on duty, (iii) creation of 'buddy system' to ensure that colleagues are following safe practices and there is no breach in infection prevention control practices, (iv) any breach in PPE and exposure is informed to the nodal officer so that immediate action may be taken and (v) constantly reminds and reinforces HCWs to follow abovementioned six best practices.

Conclusion

In order to win this war against COVID-19, hospital policy makers should design stringent yet doable policies in areas that do not deal with COVID patients in order to protect the remaining limited manpower resource available. Implementation of this innovative *Suraksha Chakra* scoring card developed by AIIMS Jodhpur is one of the measures that can be used by other healthcare facilities to protect the scarce manpower resource.

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Conflicts of interest

There are no conflicts of interest.

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