Knowledge, Attitudes and Practice Survey among Health-Care Workers in Times of COVID-19 Pandemic: Identifying Gaps to Strengthen Infection Control Program for Future Outbreaks

Sir,

Coronavirus disease 2019 (COVID 19), an emerging viral respiratory illness, has become a pandemic. Further, COVID 19 infection among health-care workers (HCWs) has become a huge threat. HCWs are at the frontline of any outbreak response and are at great risk of acquiring the infection. We have already seen the morbidity and mortality of this highly infectious disease suffered by the HCW in different countries. For HCW, the psychological effects of such exposure can jeopardize the medical care they provide. WHO and CDC have also given recommendations for preventing infection to HCW. [1,2]

Suboptimal adherence to infection control measures among HCWs is one of the major risk factors for acquiring the infection.[3] Adherence to these measures in HCWs is largely influenced by their knowledge, attitudes, and practice (KAP) concerning COVID 19. An online cross-sectional survey was done among HCWs, including physicians, nurses, and technicians working in various hospitals in India with the aim to identify gaps in knowledge, attitude, and practices. A self-administered, pre-tested questionnaire consisting of 30 questions on demographic characteristics, sources of COVID information and knowledge, attitude and practices and an open-ended question regarding COVID was designed and, after a pilot study, sent to different participants as a Google survey form. Among the 546 respondents, poor knowledge was apparent in 12.1% of respondents regarding the disposal of the dead body of COVID-19 patient, screening tests and oxygen therapy. However, participants had good knowledge regarding hand hygiene, personal protective equipment (PPE), and the use of masks and surface disinfection. About 97.8% of respondents agreed that it is important to participate in infection

control programs, and majority agreed that proper use of PPE can prevent infection. Regarding practices, only 46.2% made standard operating protocols regarding for their departments. In the last open-ended question regarding suggestions for future, valuable inputs like patient relative education, telemedicine, visitor policy, changing the teaching pattern of medical students, and strengthening public health laboratories at district levels for diagnosis of emerging diseases was obtained.

After getting the responses, a PPT document was mailed to respondents with information regarding this disease, which would probably enhance their knowledge and help practicing guidelines related to this disease.

A study has already highlighted insufficient knowledge of HCWs toward COVID 19. [4] All countries have made substantial efforts to train HCWs on infection control measures against COVID19. The success of these training programs can be measured by doing KAP analysis of healthcare workers. Generating such data at this critical point will help in identifying gaps and strengthening training programs.

However, KAP surveys should be conducted at regular intervals. Tailored, periodic infection prevention and control training in healthcare facilities based on these survey results will improve the infection control practices. Apart from continuing education, newer interventions for improving the gaps in practices should be explored. More of reinforcement tools should be designed to effect long-lasting changes. Thus more studies are required to highlight the unreached gaps in knowledge, attitude, and practice of healthcare workers with the aim to reduce the risk of infection among HCWs and preparing institutes for future outbreaks.

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Conflicts of interest

There are no conflicts of interest.

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