

A Survey of Awareness among Personals Involved in Safe Management of Covid 19 Dead Bodies in Vidisha District

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Abstract:

Introduction: The COVID-19 pandemic in India is part of the worldwide pandemic of coronavirus disease 2019 (COVID-19). The management of infected dead bodies and funerals remain a source of concern at the time of writing in countries where the daily death tolls are very high. The objective of this study to assess awareness among personnel involved in dead body management in covid positive cases at covid care centre in ABVGMC Vidisha.

Material and methods: A Survey was conducted and a questionnaire was filled by 48 doctors, 42 nursing staff, 09 staff of shifting of dead body and 9 administrative officers in during the months of February and March of 2021.

Results: All (100 %) doctors, working in Covid care centre, were aware about the risk involved in handling of dead body and during post-mortem. Only 52% doctors were aware that autopsy will be performed in all suicidal and homicidal cases. Among staff involved in packing and shifting, only 78.57% staff were aware about disinfection procedures. Among officers Only 66.66% were aware about the fact that those religious rituals are allowed, in which there is no body contact is made.

Conclusion: Doctors are less aware about required medico legal formalities. Nursing staff were aware about the process. All personnel were complaining about lack of manpower at all levels.

Keywords: Covid deaths, Disinfection, WHO guidelines, India

Introduction

The COVID-19 pandemic in India is part of the worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first case of COVID-19 in India, which originated from China, was reported on 30 January 2020. India currently has the largest number of confirmed cases in Asia, and has the second-highest number of confirmed cases in the world after the United States (1,2). India has reported a total of 2,37,02,832 cases and 2,58,351 deaths. (3) On 13 May 2021, Indian Medical Association announced that 747 doctors have died due to COVID. (4) The dead bodies are generally not infectious. In handling a dead body of a COVID-19 case, people should ensure necessary hand hygiene and should wear personal protective equipment (PPE) for minimize infection. Even in this panicky situation, the dignity of the dead should be protected. The authorities should manage such situation on a case-by-case basis, balancing the rights of the family, the need to find out the cause of death and the risks of exposure staff involved in dead body management. (5)

The management of dead bodies and funerals remain a source of concern for authorities, where daily death tolls are very high. The Ministry of Health and Family Welfare in India issued a detailed guidance for the handling of infected dead bodies. (6) It recommends leak-proof plastic body bags with a thickness of not less than 150 mm to be used with another layer of a mortuary sheet or opaque bag and decontamination of the exterior of the body bag. Further, no embalming is allowed. (6) There is no evidence so far of transmission of virus through the handling of corpses (7) but the virus may also persist on them and unnecessary contact with bodies and exposure to infected bodily fluids should be minimized by wearing PPE. Apart from Govt of India Guidelines there is separate procedure in every Institute suitable for their local conditions. Covid-19 is a highly infectious viral disease and people who have to deal with dead bodies of such cases, are at higher risk of getting infected and must take due precautions at each stage of disposal. (8) Everyday newer challenges are arising during management of dead bodies. Resources are limited and toll of dead body is on the raise every day. Here in India, for dead body management of COVID-19 cases, we are following Government of India Guidelines and instructions. Awareness about these government guidelines and proper training is important aspect of this work. Objective of the study to assess awareness of among personnels involved in covid positive cases 'dead body management at covid care centre in ABVGMC Vidisha, India.

Materials and methods:

A Survey was conducted to assess the awareness of the personnels involved in covid positive dead body management in ABVGMC Vidisha, India. Doctors, supporting staff and administrative officers (Sub Divisional Magistrate and Tehsildar) involved in COVID-19 patient care and dead body management of such cases were interviewed.

The study was conducted in the hospital of ABVGMC Vidisha, India during the months of February and March of 2021. Questionnaires were filled by 48 doctors, 42 nursing staff, 09 staff involved in shifting of dead body and 9 administrative officers. The principal investigator explained the purpose of conducting the study to each participant prior to the commencement of the study. A pre-tested semi-structured questionnaire in Hindi and English was used to collect data, which was developed based on guideline given by health ministry of Government of India. (9)

Data collection was done through one-to-one interviews. Data entry and analysis was done using Statistical Package for Social Sciences (SPSS) version 20

Results

Table No1: Awareness of Doctors involved in COVID-19 patient care or death management (n = 48)

Awareness about guideline	Aware No. (%)	Not aware	Don't have opinion
The mortuary workers are at risk of COVID-19 infection during performing autopsies on COVID-19 positive patients	48(100%)	00(00)	00(00)
Autopsies should be performed in covid positive suicidal/homicidal cases	25(52%)	20(41.66%)	03(6.25%)
If suspected person for COVID-19 infection dies, sample can be taken to know his COVID-19 status	40(83.3%)	07(14.58%)	01(02%)
We should consider all cases to be COVID-19 positive	36(75%)	09(18.75)	03(6.25)

Lab technicians should be called for the collection of COVID-19 testing sample from a dead body	30(66.66%)	17(35.41%)	01(02%)
Autopsy surgeon himself can collect the COVID-19 testing sample from a dead body	31(64.58%)	12(25%)	05(10.41%)
Autopsy can be withheld till COVID-19 testing report is received	29(60.41%)	13(27.08%)	06(12.5%)

Table No 2: Awareness of staff involved in packing of COVID-19 positive dead bodies (n = 42)

Awareness about guideline	Aware No. (%)	Not aware No. (%)	Don't have opinion
Health worker should wear PPE kit while handling covid positive cases.	39(92.85%)	2(4.76%)	1(02.38%)
Remove all catheters and tubes before packing of dead body.	39(92.85%)	2(4.76%)	1(02.38%)
Wounds of dead body should be dressed after disinfecting with 1% hypochlorite solution.	33(78.57%)	08(19.04%)	01(02.38%)
Close nostrils and oral cavity with cotton before packing of dead body.	39(92.85%)	00(00%)	03(7.14%)
Relatives of diseased should be allowed to see his body after wearing PPT kit.	41(97.6%)	00(0%)	01(2.38%)
Body should be wrapped in cotton or plastic sheet after disinfecting with 1% hypochlorite before keeping in bag.	41(97.6%)	01(2.38%)	00(0%)

Table No 3 Awareness of staff involved in shifting of COVID-19 dead body (n = 9)

Awareness about guideline	Aware No. (%)	Not aware No. (%)	Don't have opinion
If we disinfect and properly pack dead body, there is no risk of infection	7(77.77%)	2(22.22%)	0(00%)
Staff must wear mask and PPE kit.	9(100%)	0(00%)	0(00%)
Involved vehicle must be disinfected with 1% hypochlorite after transferring the dead body.	5(55.55%)	0(0%)	4(44.44%)

Table No 4: Awareness of administrative officers involved in COVID-19 death management (n = 9)

Awareness about guideline	Aware No. (%)	Not aware No. (%)	Don't have opinion
Staff of Graveyard/ cemetery should be told that if they will take precautions (like using mask and sanitizer) then there is no additional risk to them.	9(100%)	0(00%)	0(00%)
Relatives of diseased could be allowed to see his face after opening chain of bag from one side.	9(100%)	0(0%)	0(0%)
Religious rituals without contacting body should be allowed	6(66.66%)	1(11.11%)	2(22.22%)
Ash remaining after funeral should be given to family members.	8(88.88%)	0(0%)	1(11.11%)

Result:

Among the Doctor's working in Covid care centre 100 % were aware about risk involved in handling of dead body and during post-mortem. Only 52% were aware that autopsy will be performed in all suicidal and homicidal cases. 83.3 % were aware about sampling process. Only 60.43 % were aware that autopsies could be withheld till report of Covid received in covid suspected cases. (Table 1)

Among staff involved in packing and shifting of corona positive dead bodies. 92.85% were aware about precaution measures. 92.85 % were aware about removal of tubes before packing of dead body. Only 78.57 % staff were aware about disinfection. (Table 2)

Among staff involved in shifting of dead body 77.77 % were aware about fact that no risk to them if take proper precautionary measures. 100 % were aware about wearing mask and PPE kit. Only 55.55 % were aware that vehicle should be disinfected after shifting of dead body to graveyard. (Table 3)

Among officers involved in Covid deaths management 100 % were aware that relatives of diseased could be allowed to see his face. Only 66.66% were aware about fact that Religious rituals where no contact with body should be allowed. 88.88 % aware about fact that Ash remaining after funeral should be given to family members. (Table 4)

Discussion

Among the Doctors', 60.43 % were aware that autopsies could be withheld till status of COVID-19 positivity becomes clear. Only 52% were aware that autopsy will be performed in all suicidal and homicidal cases. This might be due to confusion among doctors to differentiate between routine protocol for autopsy and protocol for Covid deaths.

Among staff involved in packing and shifting of COVID-19 dead bodies, only 78.57 % staff were aware about disinfection. Lack of trained staff and frequent rotation in staff duties may be responsible for this issue. It emphasizes the need of frequent training to all involved or backup staff responsible for dead body management.

Among staff involved in shifting of dead bodies, only 55.55 % were aware that vehicle should be disinfected after shifting of dead body to graveyard. Training and sufficient resource required to improve this knowledge of disinfection.

Among officers involved in COVID-19 deaths management, only 66.66% were aware about fact that Religious rituals without contact with body should be allowed. 88.88 % aware about fact that Ash remaining after funeral should be given to family members. Improvement in coordination required in between officers and health personals. Separate training sessions are also required for them.

Conclusion

During the study one thing was common that there were issues regarding coordination between doctors and other staff members that was resulted in delaying the procedure of shifting of dead body. Doctors are less aware about medico legal formalities as required. Nursing staff was aware about process but complaining about lack of resources. All were complaining about lack of manpower in all levels. Separate training sessions are required for them as well.

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