

Article

## Family Perceptions Toward Muslim Corpses Management of COVID-19 Patients in Padang City

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### A B S T R A C T

Dr. M. Djamil Hospital as a referral center of COVID-19 cases in West Sumatera has a COVID-19 protocol in managing the corpses of COVID-19 patients. This study explores factors that affect patient's family perception toward procedures of handling COVID-19 corpses. We held a qualitative study with phenomenological design to explore the family perceptions toward Muslims corpses management of COVID-19. Ten deep interviews were conducted with the ones who had their family members died by probable or confirmed COVID-19 and the corpses were managed according to COVID-19 protocols. Data triangulation was accomplished via in depth-interviews with two mortuary officers in Dr. M. Djamil Hospital. Three main themes were identified are the corpse management in COVID-19 patients, contributing factors regarding burial procedure during the COVID-19 pandemic, and challenges in managing corpses of COVID-19 patients.

## I. INTRODUCTION

The first COVID-19 case in Indonesia was announced on March 2<sup>nd</sup>, 2020. Until April 2021, 1.64 million people were infected with 44.594 death cases in Indonesia. In West Sumatera until March 30<sup>th</sup>, 2021, the number of COVID-19 confirmed cases were 30.393, and 648 among them were dead, marked one of some higher provincial cases of COVID-19 in Indonesia.<sup>2</sup> 347 death cases were recorded on May 23<sup>rd</sup>, 2021 in Padang as the capital city of West Sumatra.<sup>1,2,3</sup>

The transmission of the coronavirus is suspected to be able to occur from the dead bodies of COVID-19 patients to people around them. The COVID-19 corpses are required to get special procedures without abandoning religious norms and the dead's dignity as human beings. Patients who had been diagnosed with pneumonia, Acute Respiratory Distressed Syndrome, patients with or without clear information of contact with COVID-19 patients, or Death on Arrival cases are still managed according to the established COVID-19 death protocol. The management of COVID-19 corpses from Muslim patients in Indonesia is regulated in the Fatwa of the Indonesian Ulama Council Number 18 of 2020. This Fatwa is acknowledging the World Health Organization standard for managing COVID-19 corpses.<sup>4</sup> This study explores factors that influence the family's perception of the management of COVID-19 corpses from Muslim patients.

## II. METHODS

We held qualitative research with a phenomenological approach. The research was conducted for 4 months (May-October 2020) at the Department of Forensic Medicine of the Faculty of Medicine, Universitas Andalas/Mortuary of dr. M. Djamil Hospital, Padang, West Sumatera, Indonesia. The selected respondents were the ones whose family members died due to probable or confirmed COVID-19. Inclusion criteria included volunteers whose family members died in hospital and managed according to the COVID-19 protocol and come from Muslim backgrounds. The exclusion criteria were respondents who refused to be interviewed. We used the purposive sampling method to obtain the respondents. We held ten in-depth interviews with the respondents regarding their perceptions of the management of COVID-19 corpses according to the COVID-19 protocol of Dr. M. Djamil Hospital. We conducted two in-depth interviews with officers who work at the Mortuary Installation. In-depth interviews were conducted based on the interview guide that has been compiled before. All of the interviews were recorded and transcribed. The verbatim data were analyzed thematically using the Steps for Coding and Theorization model (SCAT) by Otani (2008) to identify themes and sub-themes related to the family's perception of corpses management on Muslims with COVID-19 in Padang city.

## III. RESULT

Table 1 Characteristics of respondents.

No	Respondent's code	Age (year)	Sex	Relationship with the patient	Patient's code	Age (year)	Diagnosis
1	I1	24	Male	Nephew	J1	77	Confirmed COVID - 19
2	I2	38	Male	Biological child	J2	61	Probable COVID-19, multiple organ dysfunction
3	I3	33	Female	Niece	J3	49	Probable COVID-19, Asthma

4	I4	64	Male	Brother	J4	50	Probable COVID-19, septic shock, Diabetic Ketoacidosis hyponatremia
5	I5	34	Male	Biological child	J5	70	Probable COVID-19, Congestive Heart Failure
6	I6	35	Male	Biological child	J6	60	Confirmed COVID - 19
7	I7	25	Male	Biological child	J7	60	Confirmed COVID - 19
8	I8	24	Female	Grandchild	J8	70	Probable COVID-19, severe sepsis, Deep Vein Thrombosis on the right leg
9	I9	49	Male	Biological child	J9	85	Probable COVID-19, Acute Respiratory Distressed Syndrome, Carcinoma Nasopharyngeal
10	I10	40	Female	Wife	J10	50	Probable COVID-19

The three main themes were identified from the analysis. There is corpse management of COVID-19 patients, contributing factors regarding corpse procedure during COVID-19 pandemic, and challenges in managing corpses of COVID-19 patients. The overall descriptions are described in table 2.

Table 2. The identified themes and subthemes

No	Theme	Sub-themes
1	Corpse management in COVID-19 patients	Common perceptions of corpse management during COVID-19 Informed consent and agreement in COVID-19 corpse management through standardized protocols
2	Contributing factors regarding corpse procedure during COVID-19 pandemic	Mechanism of COVID-19 transmission from the dead body to individuals COVID-19 diagnosis policy Religion considerations Human resources considerations and facilities issues
3	Challenges in managing corpses of COVID-19 patients	Diagnostic constraints Public perceptions

### 1. Corpse management in COVID-19 patients

According to the hospital policy regarding COVID-19 corpse management, all bodies who died with confirmed and probable COVID-19 status were managed with the standardized-WHO protocol. Our study found responses during in-depth interviews as follows:

#### a. *Common perceptions of corpse management during COVID-19 in Muslims*

Respondents share their opinions and beliefs in Muslim corpse management that included multiple steps of managing the dead bodies in Islamic ways with COVID-19 consideration. The steps are bathing the corpse, doing tayammum, shrouding, wrapping the corpse in plastic, praying,

keeping the body into the coffin, disinfecting, and final burying. There are various understandings among family members related to this procedure.

*"COVID-19 procedure is the implementation of COVID-19 corpse management in the hospital. It starts from the patient's room to the morgue until transported with a car"*

*"Yes, burial process is like bathing, shrouding "*

The corpses of Muslim patients with COVID-19 must follow the protocols that have been issued by the hospital. Limited staffs for the funeral procession have to be taken into account to minimize the transmission of the virus. Besides, infrastructure facilities, bathing, and ablution of the body must be replaced with tayammum facilities.

*"Managing the bodies of Muslims with COVID-19 is still according to the religious rules (Shari'a). We would do bathing and taking wudhu first, but we choose to have tayammum, then the bodies are shrouded and prayed. We use PPE (personal protective equipment) based on COVID-19 standard procedures"*

Related to plastic wrapping, praying in the Islamic way, and other burial procedures, some respondents had different opinions.

*"I don't understand but what I do know is that the body should not be wrapped in plastic. The family was not satisfied because the body has been put in a coffin, so why should it be plasticized?"*

*"We do a pray for the corpse of COVID-19 after the corpse are put into the coffin, those who pray can be officers or families, not crowding and prayer of the absent can be done"*

*"The burial of dead bodies of COVID-19 patients in Padang directly held by the funeral team from the government in the special graveyard in Bungus."*

**b. Informed consent and agreement in COVID-19 corpse management through standardized protocols**

The given informed consent was identified from the results of detailed interviews with the family member. The informed consent showed agreement with the family about managing the corpse of COVID-19 patients. Some components that presumably influence each other in terms of informed consent, such as the standardized protocol of managing corpse of COVID-19 patients, the way morgue staff gave informed consent to family and family's views about their consent.

*"We ask for the family's informed consent before managing the body. When the family disagrees, especially for suspect COVID-19 case, they have to sign a rejection letter. But when the body is confirmed COVID-19 case, it must be handled by the hospital COVID-19 team"*

## **2. Contributing factors regarding corpse procedure during COVID-19 pandemic**

**a. Mechanism of COVID-19 transmission from the dead body to individuals**

Family members shared their opinion related to COVID-19 transmission from the dead body to living persons.

*"Hmm... when the dead body is confirmed COVID-19... hmm... it's not contagious. Because it (COVID-19) is from the respiratory system. When they're already dead, there would be the absence of active respiratory emissions. So the risk of COVID-19 transmission would be minimal"*

**b. COVID-19 diagnosis policy**

Family members shared their opinion regarding the COVID-19 diagnosis policy.

*"The policy is that patients with lung abnormalities are considered COVID-19. Although it's not COVID-19, it's considered COVID-19. It is better to know whether is confirmed COVID-19 or not, because it has a big impact and different management. Moreover, the result (testing for COVID-19) was too late. If they (lab*

*staff) can do it quickly even though she/he is already dead, the results should be issued quickly. So it will affect next step (management of a dead body)"*

### c. Religious considerations

The respondents shared their views about Muslim's way of handling corpses and the Fatwa of the National Ulama Council related to COVID-19 corpse management in the Islamic way.

*"The corpse was got tayammum, then shrouded, and put into a body bag. Is it having the suitable follows with religious advice? Whether the body will be prayed for or not depends on the family. The body should still be prayed for. After being shrouded, it is enough to be put into the body bag. Plastic wrapping is not necessary. The corpse was put in the coffin. I think there is no need to put the coffin in plastic again. The shroud cloth should be three layers not only one. Is the management of the corpse under Islamic law, starting from bathing, shrouded with shroud, and praying? Because this is fard al-kifayah in Islam (absolute requirement)"*

### d. Human Resource considerations and facilities issues

Morgue staff shared their opinion related to human resources in the hospital and the facilities in managing COVID-10 corpses.

*"We are short of morgue staff especially females"*

*"PPE for medical staff is required protection so they would not be exposed to the risk of contamination. PPE such as Hazmat clothes, boots, face mask, etc"*

## 3. Challenges in managing corpses of COVID-19 patients

Diagnosis policy and public perceptions related to COVID-19 were found to be the challenges in managing the corpses and the stigma related to the disease. The respondents shared their opinions related to these issues below.

*"In my opinion, with a pandemic situation like this, the preparation from the government is sufficient. But what we were quite disappointed, the results of the swab test came out too long. If it came out quickly, maybe the corpses will be buried normally, it did not have to comply with the covid protocol. Any kind of information, negative or positive results, it was still covid protocol."*

## IV. DISCUSSION

According to the hospital policy regarding COVID-19 corpse management, all bodies who died with confirmed and probable COVID-19 status were managed with the standardized-WHO protocol. There are various guidelines for corpses management depends on the context and location. Bathing the corpse of Muslim COVID-19 patients is considered necessary by the community, but the protocol of dr. M Djamil hospital does not allow it, due to the considerations in minimizing the transmission of the coronavirus, limited personnel for the procession, the facilities, and infrastructure. The process of bathing and ablution of the corpse then would be replaced with *tayammum*. The morgue staff also prioritizes those who are same-sex workers with the corpse. The COVID-19 Muslim corpses are also shrouded, according to the procedure for the appropriate Islamic funeral process. Dr. Mushtafa Sa'id al-Khin explained that the body should be wrapped in white clothes and covered all the limbs. The corpses with COVID-19 are put in safe and impermeable body bags to maintain the safety of the funeral attendants and to prevent the spread of the virus. The corpse is placed in a coffin that is impermeable to water and air by tilting it towards the right so that the corpse faces the *Qibla*.<sup>5,6,7</sup>

Muslim corpses are being prayed before burial. Prayer for the corpse COVID-19 is taken place in a safe spot and is carried out by at least one person, when it is impossible to be held, then it is acceptable to pray for the dead before or after burial. The last option of prayer is doing the *Ghaib*

prayer. The corpse held according to the COVID-19 protocol will also undergo disinfection. This disinfection aims to sterilize the body surface of the corpse from the coronavirus. According to the mortuary staff, disinfection is carried out so that the coronavirus dies. Disinfection was carried out using a chlorine solution which dose has been adjusted. Funerals of COVID-19 corpses must also carry out with health protocols<sup>8,9</sup>

Coronavirus has been detected in body fluids such as phlegm, feces, and eye fluid. According to a study, on a ship carrying COVID-19 positive patients, it was stated that viral material was still detectable after 17 days. It is not clear whether the virus is still infective. How long the coronavirus can be detected in body fluids is unknown. There are no studies that explain how long body fluids remain infectious in corpses or anything about the risk of transmitting COVID-19 after death. When handling infectious bodies, morgue staff must use PPE and minimize contact with body fluids. The body must be transported as quickly as possible to the morgue. A leak-proof body bag is advised as a transport medium to the morgue to limit contact with body fluids. The COVID-19 protocol in several countries also recommends that open wounds should be cleaned, disinfected, and covered with a waterproof bandage. The body openings (mouth, nose, and anus) must be closed. Body bags should also be disinfected. Storage of COVID-19 bodies must be separated from non-COVID-19 bodies.

The surrounding environment in contact with the deceased needs to be cleaned from visible body fluids and disinfected with chlorine or 70% alcohol. Excreted body fluids should not be disposed of into regular sewers, but should be treated with special care. Preservation of COVID-19 corpses is not available in China, India, and Indonesia, whereas in the UK and Australia preservation is permitted when appropriate additional protective equipment is used. The gold standard for the diagnosis of SARS-CoV-2 infection is the identification of viral genetic material by RT-PCR with greater sensitivity on bronchoalveolar lavage and nasopharyngeal swab. The COVID-19 protocol at RSUP dr. M. Djamil Padang was originally applied to a corpse that was probable and confirmed COVID-19, but now a TCM examination was carried out first, only a positive corpse was treated according to the COVID-19 protocol<sup>3</sup>

The management of Muslim corpses with COVID-19 must be under the rules of the management of Muslim bodies in general. The Indonesian Ulama Council has issued a *fatwa* related to the caring of Muslim corpses with COVID-19, which is guided by the protocols that have been issued by the WHO and guided by the teachings of the Islamic religion. The morgue staff who are responsible for handling COVID-19 bodies must be trained in handling Muslim corpses with COVID-19 and competent to apply standard infection prevention and control precautions, including cleaning hands before and after interacting with corpses, and the patient's environment and use of PPE.<sup>6</sup>

In this study, one of the respondents said that implementation of COVID-19 Muslim corpse management has been decent, and expects this process should be carried out by competent morgue staff who understand both WHO protocol and Islamic rules. There is one respondent who questions why in the burial process they still use PPE even though the body is itself has many layers. The use of PPE is for ensuring the safe burial of bodies by prioritizing health and safety measures for officers and the surrounding community.<sup>5</sup>

In this study, there are still informants who question the truth of COVID-19, some believe it and some don't so that it also becomes an obstacle in treat corpses according to the COVID-19 protocol. The COVID-19 pandemic has caused public stigma and discrimination against corpses

and families. In the theory proposed by Robbins (2005), a person's perception is influenced by several factors, namely situational factor, personality factor, target factor. Situational factors consist of time, circumstances, workplace, and social. Based on that theory, circumstances can affect a person's perception, look like a change of condition this pandemic, exactly can influence community stigma on the patient to have positive COVID-19. Some informants say most of them have a negative stigma, discrimination and some are shunned and seen like viruses although they have a negative test.

## V. CONCLUSION

Family perception on the handling of Muslim corpses with COVID-19 in Padang city still varies. In our study, there is 3 main factor influence family perception on the handling of Muslim corpses with COVID-19 that is the corpse management in COVID-19 patients, contributing factors regarding burial procedure during COVID-19 pandemic and challenges in managing corpses of COVID-19 patients.

## REFERENCES

- Farizi S Al, Harmawan BN. Data Transparency and Information Sharing: Coronavirus Prevention Problems in Indonesia. *J Adm Kesehat Indones*. 2020;8(2):35.
- Website Corona Sumbar [Internet]. 2020 [cited 2020 Aug 13]. Available from: <https://corona.sumbarprov.go.id/web>
- <http://corona.padang.go.id>. Access on May, 23<sup>rd</sup>, 2021
- Ayyub Subandi, Saifullah bin Anshor. Fatwa MUI Tentang Pengurusan Jenazah Muslim yang Terinfeksi COVID-19 Ditinjau dari Perspektif Mazhab Syafi'i. *Bustanul Fuqaha J Bid Huk Islam*. 2020;1(2):235–50.
- Xu X, Yu C, Qu J, Zhang L, Jiang S, Huang D. Imaging and clinical features of patients with novel coronavirus SARS-CoV-2. *European Journal of Nuclear Medicine and Molecular Imaging*. 2020: 1-6
- Kementrian Kesehatan Republik Indonesia. 2017. Peraturan menteri kesehatan Republik Indonesia. Nomor 27 Tahun 2017 Tentang *Pedoman PPI. Pencegahan dan Pengendalian Infeksi (PPI)*.
- Kementerian Kesehatan Republik Indonesia. 2017. Pedoman Kesiapsiagaan Menghadapi MERSCov di Indonesia.
- World Health Organization (WHO). 2020. <https://www.who.int/health-topics/coronavirus>. Access on April, 3<sup>rd</sup> 2020.
- World Health Organization (WHO). 2020. *Global surveillance for human infection with novel-coronavirus (2019-ncov)*. [https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-\(2019-ncov\)](https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov)). Access on April, 3<sup>rd</sup>, 2020

## BIOGRAPHY

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