# Improvement of funeral home services in preparation for national disasters

#### JeungSun Lee<sup>1</sup>

목 차 2.4.2. Japan Disaster Response summary 1. Introduction System 2. Body 3. Conclusion 2.1. Review of previous research 3.1. Improving personal protective 2.2. Operation of designated funeral equipment management homes in preparation for national disasters 3.2. Improvement of training for 2.3. Status of Designated Funeral designated funeral home workers 3.3 Facility safety management and training Homes for National Disaster 3.4 Implications Preparedness 2.4. Overseas cases References 2.4.1 US Disaster Response System Abstract

#### **Abstract**

As new disasters such as COVID-19, MERS, and earthquakes appear in modern society, the nation's ability to manage uncertain risks is becoming more important. The government is promoting a disaster safety management policy closely related to daily life by reinforcing on-site response capabilities. Therefore, in order to respond more effectively to disasters that have recently been enlarged, complicated, and delocalized, there is a limit to only disaster-related organizations in the public sector. It is necessary to check it and find ways to develop it.

In the event of an unpredictable national disaster or infection, the government needs disaster safety management measures closely related to daily life. Accordingly, as an efficient response and strategy such as procedures and methods for funeral support at the scene of a national disaster were needed, a designated funeral home was introduced. In the event of a major disaster, a large number of casualties that exceed the daily work level of the relevant department occur and rapid changes in relief, medical care, funeral and administrative procedures occur accordingly. The purpose of this study is to derive basic operating directions and prompt funeral support plans for funeral homes designated for national disaster preparedness.

Keyword: National Disaster Preparedness Designated Funeral Home, Mass Death, Infection, Disaster Management, Funeral Support

Received (2022.10.31.), Revised (2022.12.19.), Accepted (2022.12.21)

<sup>\*</sup> Eulji University, Department of Mortuary Science, Assistant Professor, jslee@eulji.ac.kr

#### 1. Introduction

As new disasters such as COVID-19, MERS, and earthquakes appear in modern society, the nation's ability to manage uncertain risks is becoming more important. The government is promoting a disaster safety management policy closely related to daily life by reinforcing on-site response capabilities. Therefore, in order to respond more effectively to disasters that have recently been enlarged. complicated, and delocalized, there is a limit to only disaster-related organizations in the public sector. It is necessary to check it and find ways to develop it. In addition, in case of emergency, effective responses and strategies such as the role and function of institutions at the disaster site, funeral support procedures and methods are needed to establish and operate a network for designated funeral homes for appropriate and dignified funeral support for national disasters.

As of 2021, Korea has 195 nationally designated funeral homes for disaster preparedness, and a case study and the current status and guidelines of related organizations were investigated to improve effective disaster funeral services. In addition, information on similar cases (overseas, etc.) was collected and analyzed to review the role of each institution. In order to derive effective improvement plans, a survey was conducted on employees of designated funeral homes and the implications were reflected. In addition, interviews with field experts (persons related to designated funeral homes, infection administrators, experts, etc.) and experiences of funeral support at disaster sites such as the Sewol Ferry, MERS, and COVID-19 were

actively utilized. Accordingly, the field of funeral support that the designated funeral home should be responsible for was classified and defined by type of national disaster, and each task item was presented.

By organizing various national disaster management-related data provided by the Central Disaster and Safety Countermeasures Headquarters, and suggesting service improvement plans, it is intended to help establish a systematic plan for funeral management of designated funeral homes.

#### 2. Main

#### 2.1. Literature Review

Previous studies related to research are intended to be used as reference materials by reviewing the results of previous studies as follows.

The 「Coronavirus Infectious Disease-19 Funeral Management Guidelines (2020)」 aims to prevent the spread of infection and block social unrest factors by promptly and smoothly handling the body and providing funeral support for the COVID-19 deceased. It covers administrative matters such as death, death, cremation and funeral, as well as administrative matters such as operation of a funeral support team and support for funeral expenses.

『A Study on the Development of an Infection Control System Operation Manual for Medical Institutions (2019)』 aims to deliberate on important matters regarding infection prevention and infection control for patients and health care workers by establishing and operating the Infection Control

Committee and Infection Control Office. Accordingly, an annual plan for infection control was established (see II, Annual Plan for Infection Control), and an infection control guideline was prepared and revised (refer to III, Infection Control Guideline), an outbreak management and rapid response system were established, and infection control training and activities were carried out. In addition. annual influenza vaccination and vaccination rates are presented.

Busan Yeongnak Park Funeral Service Standard Manual (2016) is a manual on cremation, burial and cemetery management, facility management, and funeral related work, and presents safety management related to disaster preparedness. The Health and Hygiene Guide for Funeral Homes in Yeongnak Park (2016) contains information on health hygiene normal funeral home and management, as well as advice on funeral procedures such as management guidance in case of crisis, and other reference materials.

"A Study on Rational Funeral Management Plans for Government Organizations (2013), not only presents a reasonable standard funeral management model for funerals for government agencies that provide general services to the public, but also provides a standard funeral manual for efficient funerals at institutions hosted by government agencies. make progress possible. By holding expert meetings and policy seminars, we have prepared a plan to secure the objectivity and reliability of research by collecting expert opinions during the establishment of funeral management plans and the standard manual stage.

## 2.2. Operation of funeral homes designated for national disaster preparedness

The background of the introduction of designated funeral homes for national disasters is to prevent the spread of infectious diseases and prevent social unrest by promptly and smoothly handling the bodies and providing funeral support for those who died from national disasters, especially those who died from infectious diseases such as coronavirus.

In the event of an unpredictable national disaster or infection, the government needs disaster safety management measures closely related to daily life. Accordingly, as an efficient response and strategy such as procedures and methods for funeral support at the scene of a national disaster were needed, a designated funeral home was introduced.

In the event of a major disaster, a large number of casualties that exceed the daily work level of the relevant department occur and rapid changes in relief, medical care, funeral and administrative procedures occur accordingly. It should be a specialized field to prepare for.

As of August 2021, as a result of interviews with funeral directors and managers who have experience in disaster-related funerals at designated funeral homes, funeral home workers who have no experience in disaster recovery among designated funeral homes have very high awareness of the designated funeral home business. It was a minor situation.

In addition, there were voices demanding more practical education and the knowledge needed in the field where designated funeral home worker training is to deal with actual disasters.

The need to establish and operate a network for designated funeral homes was also raised to provide appropriate and dignified funeral support in the event of a national disaster. A management system that can provide prompt and systematic funeral support that maintains the dignity and courtesy of the deceased and respects the wishes of the bereaved family is urgently needed.

### 2.3. Status of funeral homes designated for national disaster preparedness

Funeral directors who handle and transport the dead bodies of national disasters are also exposed to the risk of infection at all times, and infection prevention management is necessary. Although the management of the corpse is somewhat different for each funeral home, in general, it is carried out in the order of evacuation, occasional burial, burial, ceremonial ritual and admission. Mutual Aid Magazine, [Nam Seung-hyun Column] Insufficient research on infection control for funeral home workers Needs attention

In the case of the body, blood and body fluids are generated during processing, and the risk of infection with various pathogens is high. In particular, since the process of managing the body is attended by the family, infection control and public health hygiene at the funeral home are of utmost importance.

65% of funeral homes in Korea are installed in medical institutions, and are recognized as ancillary uses of medical institutions according to the Medical Act. The infection control guidelines consist of general guidelines and infection control items, and

it consists of complying with standard precautions such as infectious diseases, hand hygiene, and wearing protective equipment for workers who manage corpses. In the case of infection control in medical institutions, infection control has taken a large part in the medical institution certification evaluation project conducted by the Ministry of Health and Welfare since 2010, and infection control has become an important task in medical institutions.

According to the Medical Act and Enforcement Regulations amended in 2012, medical institutions that meet certain requirements are required to set up and operate an infection control committee and infection control office, and to assign dedicated personnel, 2012.

Despite the strict infection control situation, medical institutions have recently reported high in-hospital mortality due to infection with medical-related infectious diseases [6 multidrug-resistant bacteria]. Lee Joo-sun, \(^2012\) Medical-Related Infectious Disease Surveillance Results and Policy Direction, Korea Centers for Disease Control and Prevention, 2013.

In this regard, although many previous studies on infection control guidelines and nosocomial infections in medical institutions have been reported, there are still insufficient studies on infection control targeting funeral home operators and workers who enshrine and manage the dead.

#### 2.4. Overseas Case Study

#### 2.4.1 US Disaster Response System

Due to the nature of the United States' large territory and several independent states, the disaster management system is also dispersed and mixed from the federal government level to the local autonomous fire brigade level. Some federal government agencies have their own responses to disasters in their areas, such as transportation and radiation.

After experiencing major incidents such as the September 11, 2011 terrorist attacks, a more effective response system was created in the United States. which led to the current FEMA-centered response structure. **FEMA** coordinates the roles of participants and leads disaster response beyond the level of state or autonomous organizations, rather than directing various government agencies private organizations in a "top-down" style. For example, in the event of a natural disaster in an area, the governor of that state must declare a state of emergency before FEMA can come to the fore. As a support for the coordination role of FEMA, there is first the Integrated Disaster Management System (IEMS). The IEMS, which consists of 13 steps, is a kind of manual, a basic theory and a kind of basic theory and Provides an operating philosophy.

#### 2.4.2. Japan Disaster Response System

Japan's disaster prevention system has undergone changes in the course of efforts to reduce damage from natural disasters such as earthquakes, volcanoes, and wind and flood damage. Due to frequent disasters, a consensus is formed that life and property should be protected by oneself. This became the driving force behind Japan's disaster prevention system.

In addition to being commonly applied to all disasters, the disaster prevention plan includes 13

different types of disasters such as earthquakes, tsunamis, wind and flood, volcanic eruptions, heavy snowfalls, maritime disasters, aviation disasters, railway disasters, road disasters, nuclear disasters, hazardous material disasters, large-scale fires, and forest fires. Different disaster countermeasures are presented, and these plans are usually divided into prevention, emergency countermeasures, recovery, etc. The state and public institutions and organizations require residents to provide education on earthquakes. The content of the education includes the preparation of items necessary for survival, such as food, drink, first aid kit, lights, and radio, as well as measures to prevent injuries and secure evacuation routes. It even discusses preparations necessary for evacuating with pets.

Experts estimate that although 20% of the world's earthquakes occur in Japan, the loss of life is only 3% of the world's, because the disaster prevention system that drew the activeness of the residents was effective. In addition, lessons from disasters are reflected in disaster prevention measures, but it was not enough during the Great Hanshin and Awaji Earthquakes. One of the characteristics of Japan's disaster prevention system is to revise related systems by reflecting the experiences of the time when disasters or disasters that cause great damage are experienced.

#### 3. Conclusion

## 3.1. Improving personal protective equipment(PPE) management

It must be worn if there is a risk of blood or

body fluids coming into contact with the corpse or contaminated equipment or tools. Protective equipment must be removed immediately after work is finished, and care must be taken not to contaminate clothing and skin in the process of removing personal protective equipment.

Be sure to provide hand hygiene facilities (sink sink, hand sanitizer, etc.) at the place where personal protective equipment is removed and perform hand hygiene immediately. The sanitary clothing should be changed every day, and if it is contaminated with cadaveric secretions, it should be replaced immediately.

Personal protective equipment should be selected in consideration of protecting the respiratory system, eyes, and the whole body from the source of infection. It is important to select and use personal protective equipment according to disease or infection route, infection exposure situation and behavior, and purpose. PPE selection precautions should be taken to know the type of exposure expected. To do this, it is necessary to understand the characteristics and uses of each PPE.

It is necessary to recognize the type of infectious disease and the causative pathogen (virus, bacteria, fungus, etc.), and whether the path of infection of the pathogen is contact, droplet, or air. The type of work to be performed should be checked to determine whether the protective equipment is appropriate for the task. It must be determined whether the durability to withstand the operation is met.

Personal protective equipment is disposable, take off carefully so as not to contaminate the surroundings, and immediately put it in a dedicated

medical waste box and seal and dispose of it. If blood or body fluids from an infected corpse are exposed to transdermal wounds or mucous membranes, they should be washed with plenty of water.

## 3.2. Improvement of training for designated funeral home workers

The detailed training contents for designated funeral home workers should focus on the operation manual and provide training on the epidemiology and transmission route of infectious diseases, how to deal with dangerous work situations, and cases of corpse handling and funeral support. After joining the designated funeral home, employees must complete the training on the national disaster preparedness management manual, including infection control. Existing workers must complete infection control training at least once a year, but the designated funeral home must establish an appropriate education plan that can use various educational materials, educate and provide feedback. Funeral knowledge and skills for the deceased from national disasters and infectious diseases are required, and education and training must be provided to perform duties as a professional. In order to achieve the purpose of the designated funeral home more effectively and efficiently, it is necessary to develop the ability through continuous education and training courses and to motivate them to work.

### 3.3. Facility safety management and education and training

This is to ensure the safety of users by carrying

out safety management activities for the facilities of the funeral home. In order to secure the safety of various facilities and to meet the design and installation purpose, periodic inspections are carried out, and if damage or defects are detected early, repairs can be made to prevent future accidents in advance. The general manager should establish management policies and principles for facility safety management, check whether safety management procedures are being followed, analyze the results, and take necessary actions. The person in charge of safety management oversees the operation and management of the facility, and performs maintenance, maintenance, cleaning and quarantine of the facility.

In addition, the person in charge of each facility is in charge of maintenance and repair of facilities such as the mortuary, the salt room, and the refrigerator in the designated funeral home. Facility management and inspection should be conducted by establishing an inspection plan that can be implemented with the goal of securing safety, and specifying the name of the facility, inspection method by equipment, and inspection period in detail.

#### 3.4. Implication

It is necessary to determine priorities through case analysis of various types of disasters that can occur in Korea (especially related to mass deaths) and prepare a system for them.

A preparation system for the funeral support stage should be established based on the understanding of each type of disaster, and this should lead to the establishment of protocols for each region and institution based on national guidelines.

Training to confirm the implementation of the protocol should be conducted in parallel, and this should be based on the cooperation and evaluation system of various related organizations participating in disaster response.

In the event of a national disaster, financial support for the funeral support response system should be supported, and through this, training of manpower, equipment, and stockpile management system should be prepared.

In addition, in the event of a national disaster, cooperation and coordination with other departments are essential for the funeral support response system.

#### References

- [1] Ko, MyeongSeok, A Study on the Disaster and Safety Management System in Korea from the Viewpoint of Disaster Site, Korean Association of Police Science, 22(4), pp. 105-130. 2020. (고명석, 재난 현장 관점에서 본 우리나라 재난 및 안전관리체계 연구, 한국경찰학회보, 22권 4호, pp. 105-130, 2020)
- [2] The Korean Society for Medical Infection Control, Research on the Development of an Infection Control System Operation Manual for Medical Institutions, 2019. (대한의료관련감염관리학회, 의료기관 감염관리체계 운영 매뉴얼 개발 연구. 2019).
- [3] Ministry of Health and Welfare, guidelines for funeral management of COVID-19 deaths. 2020. (보건복지부, 코로나바이러스 감염증 19 사망자 장례관리지침. 2020)
- [4] Ministry of Health and Welfare, National Disaster Preparedness Operation Manual for Designated Funeral Homes (draft), 2019. (보건복지부, 국가 재난 대비 지정 장례식장 운영 매뉴얼(안), 2019)
- [5] Busan Facilities Corporation. Youngnak Park Funeral Home Health and Hygiene Management Guide, 2016. (부산시설공단. 영락공원 장례식장 보건위생 관리 안내서, 2016)
- [6] Nak-Eun Jeong, et al., Management of mass deaths, Seoul National University of Health, 2004. (정낙은외, 집단사망자 관리, 서울보건대학, 2004)
- [7] Pan of American Health Organization. Management of dead bodies after disasters: a field manual for first responders. 2006.
- [8] World Health Organization, Management of Dead Bodies in Disaster Situations. 2004.



#### Lee, JeungSun(jslee@eulji.ac.kr)

Lee, Jeungsun is an assistant professor of Mortuary Science Department at Eulji University in Seongnam. She received her Ph.D. in Service Management at Kookmin University in Seoul, Korea. She holds a Master's and Bachelor's degree in Business Administration from Texas A&M University at San Antonio, Texas. Her research interests include areas in Service Philosophy, Service Innovation, as well as Funeral Service and Mortuary Science.

### 국가재난대비 지정 장례식장 서비스의 개선 방안

이정선\*

#### 요약

코로나-19, 메르스, 지진 등 새로운 재난이 현대사회에 등장하면서 불확실한 위험에 대한 국가의 관리능력이 중요해 지고 있다. 정부는 현장대응 역량을 강화하여 생활밀착형 재난안전관리 정책을 추진하고 있으나, 예측 불가한 국가적 재난・감염사태 발생 시 사망자・감염시신의 발생은 불가피하다. 이에, 최근 대형화・복잡화・탈지역화 되고 있는 재난에 보다 효과적으로 대응하기 위해서는 공공부문의 재난 관련 조직만으로는 한계가 있으므로 중앙정부, 지방자치단체는 물론 국가재난대비 지정장례식장 등의 재난대비 장례지원 역량을 총체적으로 점검하고 발전 방안을 모색할 필요가 있다.

정부는 예측 불가한 국가적 재난·감염사태 발생 시 생활밀착형 재난 안전관리 대책이 필요하며, 사망자·감염 시신 발생이 불가피할 경우 시신처리 및 장례지원 대책이 필요하다. 이에, 국가재난 현장에서의 장례지원 절차와 방법 등 효율적인 대응과 전략이 필요해짐에 따라 지정장례식장을 도입하게 되었다. 대형 재난시 관련 부서의 일상 업무 수준을 넘는 다수의 사상자가 발생되고 이에 따른 구호, 의료, 장례 및 행정절차 등의 급격한 변화가 발생되므로, 대형 재난을 다루는 것은 일상 업무에 대한 부가적인 일이 아니라 비상시를 대비하는 전문적인한 분야를 이루어야 한다.

본 연구는 본 연구는 국가재난대비 지정장례식장을 대상으로 기본 운영방향과 신속한 장례지원방안을 도출하는 것을 목적으로 하며, 재난별 상황에 맞는 장례지원 및 체계를 조직화하고 필요 물품을 체계화하여 감염을 최소화 하고자 한다. 더불어 장례서비스의 개선방안을 제시하고자 한다.

Keywords: 국가재난대비 지정 장례식장, 대량 사망자, 감염, 재난관리, 장례지원

<sup>\*</sup> 을지대학교, 바이오융합대학, 장례지도학과 조교수, jslee@eulji.ac.kr