

Community Knowledge and Perception on Autopsy in Jatinangor, West Java from August to October 2013

Siaw Carwen,¹ Berlian Isnia Fitrasanti,² Budi Darmawan³

¹Faculty of Medicine Universitas Padjadjaran, ²Department of Forensic & Legal Medicine Faculty of Medicine Universitas Padjadjaran/Dr. Hasan Sadikin General Hospital Bandung, ³Department of Nuclear Medicine Faculty of Medicine, Universitas Padjadjaran/Dr. Hasan Sadikin General Hospital Bandung

Abstract

Background: Autopsy rate had declined dramatically throughout the world for the past decades. This phenomenon has raised concerns of the medical world. Factors that contributed to this decline include lack of knowledge regarding autopsy among the people, religious reasons, unenthusiastic pathologists and others. This study was conducted to discover the community knowledge and perception of autopsy at Jatinangor, West Java.

Methods: A descriptive study was conducted in Jatinangor during the period of August to October 2013. One hundred and ten respondents were included in this study by random sampling. After written informed consent, respondents were given a questionnaire. Collected data were presented in the form of percentages in tables.

Results: Most of the respondents were from the age group of 41–50, entrepreneur and senior high school. Eighty seven (79.09%) respondents had heard about the term “autopsy”, but only 66 (75.86%) of them claimed that they knew about autopsy. However, only 53 from 87 respondents (60.92%) truly knew about autopsy. From 110 respondents, 58 (52.72%) of them knew the reasons to perform autopsy. Fifty seven (51.81%) respondents would allow autopsy to be performed on themselves or family members. The main reason was given to discover the exact cause of death. The reasons of autopsy refusal were afraid of religion concerns and respect for the human body.

Conclusions: There are still members of the community who do not know about autopsy and its purposes. It is recommended that the government improves the community knowledge through various activities and programs. [AMJ.2015;2(3):303–307]

Keywords: Autopsy, knowledge, perception

Introduction

Autopsy is a special surgical operation performed on a dead body, mainly to find out the exact cause of death. Through autopsy, one is able to determine the accuracy of the diagnosis, the presence of comorbidities, and the involvement of a crime.¹ Autopsy rate had declined dramatically throughout the world for the past decades. According to Centers for Disease Control and Prevention, autopsy rate in the United States had fallen from 19% in 1972 to only 9% in 2007.² Another study showed that clinical autopsy rates in England and Wales had fallen from 8.9 in 1996 to

1.7% in 1991. The decrease in autopsy rates was also proven in other countries like China, Canada and France.³ This phenomenon was also observed in South East Asia countries, such as Malaysia, where the total number of clinical autopsy performed at the University Hospital in Kuala Lumpur had reduced from 28% in 1970–1974, to 12% in 1980–1984.⁴

There were many factors contributed to this decline, such as lack of knowledge regarding autopsy among the people, religious and cultural reasons, unenthusiastic pathologists, and the use of other techniques or procedure to make conclusive diagnosis, causing autopsy to be regarded as an unnecessary procedure.³⁻⁵

Correspondence: Siaw Carwen, Faculty of Medicine, Universitas Padjadjaran, Jalan Raya Bandung-Sumedang Km.21, Jatinangor, Sumedang, Indonesia, Phone: +62 83822837276, Email: carwen1312@gmail.com

There was a lack in research concerning autopsy in Indonesia. Jatinangor is an area in Sumedang, West Java, where the Faculty of Medicine of Universitas Padjadjaran is located and also where medical students live and interact with the community. It is expected that the presence of the medical students can contribute to the knowledge and perception of the community about the various issues on health including autopsy. The objective of this study was to discover the community knowledge and perception of autopsy in Jatinangor.

Methods

A descriptive study was conducted during the period of August to October 2013 in all the 12 villages of Jatinangor. One hundred and ten respondents, age between 21 to 50 years old were included in this study by random sampling. The number of respondents interviewed in each village was approximately according to the total number of villagers staying in the particular village. People who refused to participate were excluded. This study was approved by Health Research Ethics

Committee.

The selected respondent was given information of the study and if the respondent agreed to participate, a written informed consent could be obtained. Moreover, an interview was carried out based on a questionnaire, which consisted of a total of 15 questions. Out of the 15 questions, 3 questions consisted of characteristics of the respondent (age, occupation and level of education), 7 questions were designed to assess the knowledge of the respondents, and score of 1 was given for each correct answer given by the subject. The 5 other questions were to discover the perception of the respondents. Next, the collected data were presented in the form of percentages in tables.

Results

Most of the respondents were from the 41-50 age group. Entrepreneur was the top occupation among the respondents, whereas, senior high school was the level of education of most of the respondents (Table 1).

Eighty seven (79.09%) respondents have heard of the term "autopsy", but only 66

Table 1 Characteristic of the Respondents

Characteristic	N=110	%
Age group (years old)		
21-30	37	33.64
31-40	33	30.00
41-50	40	36.36
Occupation		
Laborer/employee	23	20.91
Housewife	18	16.36
Entrepreneur	43	39.09
Trader	21	19.09
Government servant/police	5	4.55
Level of education		
Elementary school	20	18.18
Junior high school	31	28.18
Senior high school	45	40.09
Diploma	7	6.36
Undergraduate	7	6.36
Postgraduate	0	0
Total	110	100

Table 2 Reasons for Granting Permission for Autopsy

Reason	n	%
Only permit if necessary	13	22.80
Mandatory	4	7.02
Wish to know the exact cause of death	40	70.16
Total	57	100

Table 3 Reasons for Autopsy Refusal

Reason	n	%
Time and money consuming	1	4.00
Religious concerns	6	24.00
Respect for the human body	7	28.00
Afraid of mutilation	10	40.00
Lack of understanding of autopsy	1	4.00
Total	25	100

(75.86%) of them claimed that they knew about autopsy. However, when asked to explain about autopsy, it was found that only 53 from 87 respondents (60.92%) truly knew about autopsy. Ten (11.49%) respondents have heard about autopsy but had difficulty in explaining about it. Four (4.60%) respondents misunderstood autopsy for adoption of child or amputation of some parts of the body.

Out of 110 respondents, 58 (52.72%) respondents knew the reasons for performing an autopsy, and 53 (48.18%) respondents knew that the type of autopsy performed when there was a suspicious death involving a crime, was the forensic or coroner's autopsy. Most (66.36%) of the respondents knew that there was a need to consent for autopsy.

Not all of the respondents gave their opinion of granting permission or not for autopsy. Fifty seven (51.81%) respondents would allow autopsy to be performed on themselves

or family members. The main reason given by the respondents to consent for autopsy was to discover the exact cause of death (Table 2), while the main reason of autopsy refusal was afraid of mutilation (Table 3).

Half of the respondents believed that autopsy is important. Eighty (72.73%) respondents believed that the community should increase their knowledge on autopsy (Table 4). Two (1.82%) respondents felt that it was not necessary for the public to know more about autopsy, unless they work as polices, lawyers or forensic doctors who are needed for crime investigations.

Discussion

Most of the respondents responded that the reason to consent for autopsy was to discover the more exact cause of death, while a number

Table 4 Reasons that the Community Should Increase Their Knowledge on Autopsy

Reason	n	%
Only for the sake of knowing/extra information	35	43.75
People would be more willing to consent for autopsy	13	16.25
It is mandatory to know	2	2.50
The knowledge among the people is still insufficient	12	15.00
Criminal rate is rising	10	12.50
People should know more about its benefits and purposes	8	10.00
Total	80	100

of the respondents only allow autopsy to be performed if it is truly necessary, for example, by the police to solve a crime issue. This is probably the reason why the decline in forensic autopsy rates is less drastic compared to clinical autopsy rates, proven in studies conducted in Pekanbaru, Indonesia, and Kuala Lumpur, Malaysia.^{4,6} The similar scenario is also shown in a study conducted in Northern Ireland, where the rate of medico-legal autopsies remained fairly stable despite the decrease in the rate of clinical autopsies.⁷ Medico-legal or forensic autopsy is generally guided by law, and it is usually performed when there is a murder or suspicious death. Hence, people tend to allow this type of autopsy so that evidences can be gathered to solve the crime.

On the other hand, clinical autopsy is performed in a natural death, usually caused by disease. Therefore, the society usually regards this as an unnecessary procedure because the reasons to perform autopsy in a natural death do not outweigh the reasons to refuse it, such as the time and cost required for the autopsy, religious concerns, lack of understanding, respect towards the human body and fear of mutilation. Despite the fact that discrepancy is proven between clinical and autopsy diagnoses, the rate of autopsy continues to decline.^{8,9,10} In Indonesia, clinical autopsy was reported to be less favored.¹¹ While the rate of clinical autopsy in United Kingdom has decreased to 10% or less. This phenomenon is mainly due to development of modern diagnostic tools, causing autopsy to be considered unnecessary.¹² Moreover, fear of probable jurisdiction problems and lack of enthusiasm among pathologists also contributed to decline in autopsy rates.⁸ Refusal of autopsy by the public is also caused by inappropriate portrayal of autopsy in movies and mass media. Education to family members regarding the advantages of autopsy was observed as one of the factors that caused constant autopsy rates in some institutions.¹² The main reason to reject autopsy by family members of the deceased in the study conducted in Nigeria is the fear of mutilation of the body.³ Majority of the people living in Jatinangor are Muslims (97.17%). In Islam, the dead body must be buried within 24 hours of death as a sign of respect. Some of the participants responded that "Muslims are not allowed for an autopsy." A response such as "my religion is against it" was given by one of the respondents.

There were several limitations in this study.

The questionnaire in this study was designed to discover the knowledge and perception on autopsy. The answers given by the respondents may, however, be dissimilar to their actual responses. Moreover, Indonesian or Bahasa Indonesia, which is the national language of Indonesia, was used during the interview with the respondents. Whereas communities living in Jatinangor, mostly speak Sundanese as their motherlanguage. A few of the respondents experienced difficulties in answering the open questions.

In conclusion, there are still members of the community who do not know about autopsy and its purposes. The main reason of respondents who grant permission for autopsy if it is needed, is to know the exact cause of death, whereas the main reason of the respondents who refuse to give permission for autopsy is afraid of mutilation, followed by respect for the human body and religious concerns.

It is recommended that the government improves the knowledge of Jatinangor people regarding autopsy through various activities and programs. Campaigns can be carried out to reduce religious objections to autopsy. Moreover, by providing a clear picture on autopsy and its benefits, people would be more likely to opt for an autopsy when it is needed.

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