

## Original Article

### Description of Dead Bodies Cases at RSUP Haji Adam Malik Medan in Year 2018-2022

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**Abstract:- Background:** In general, death is divided into two, natural and unnatural death. Natural deaths are caused by disease or old age, while unnatural deaths are caused by various cases of violence (homicide, suicide, work accidents, and traffic accidents), medical intervention deaths, drowning, intoxication, and deaths with no clear cause. The United States reports that 1.7 million people experience blunt trauma each year and more than 52,000 people die, with the majority of victims were male. Data on corpse cases reported by RSUP dr. Hasan Sadikin Bandung in 2013-2017 was also dominated by male corpses and of the total cases external examinations were carried out more often than autopsies. Case Death on Arrival (DOA) is the most cases, followed by traffic accident cases. **Objective:** To find out the characteristics and prevalence of the dead victims sent to the RSUP Haji Adam Malik Medan in 2018-2022. Method: This research is a descriptive study with a cross-sectional design based on data obtained from the visum et repertum in the mortuary installation at RSUP Haji Adam Malik Medan in 2018-2022. **Results:** Based on data on the death victim cases at RSUP Haji Adam Malik Medan in 2018-2022 a total of 76 cases were found, majority consisting of 52 male bodies (68.42). The largest age group was 12-25 years old (43.4%), followed by the toddler category 0- 5 years (1.3%) found the least. Of the total cases, only 71 cases (93.4%) underwent an external examination and 5 cases (6.6%) performed an autopsy (external and internal examination). The most common types of cases were traffic accident cases with 96.1%, followed by homicides with 3.9%. From all the VeRs that were processed, it was found that the Letters of Request for Visum addressed to the Forensic Installation of RSUP Haji Adam Malik Medan in 2018-2022 came from 9 different police agencies. The agency was the Kepolisian Pancur Batu with 53 letters (68.83%). Based on the type of work, was dominated by private employee and unemployed, 21 cases (27.6%). **Conclusion:** Based on the results of data analysis and discussion that has been carried out in the research on the description of the dead victims sent to the RSUP Haji Adam Malik Medan in 2018-2022, it is concluded that the dead victims are dominated by men. The majority of them are private employees and unemployed. Based on age, the victims who died were dominated by the youth category (12- 25 years). The dead victims sent were dominated by traffic accident deaths. The type of inspection that is most often performed is an external examination. Based on the agency submitting a letter requesting a post-mortem examination, the agency that sent the most was the Pancur Batu Police.

**Keywords:** Dead Bodies Cases, Characteristic, External Examination

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## Introduction:

In general, death is divided into two categories: natural death and unnatural death. Natural death is caused by disease or old age ( >80 years), while unnatural death is caused by various forms of violence (murder, suicide, occupational accidents, and traffic accidents), deaths resulting from medical actions, drowning, intoxication, and deaths with unclear causes. In cases of unnatural death, forensic autopsy is required to determine whether criminal events occurred. Prolonged conflicts in proving criminal liability make it challenging to handle death cases in Indonesia. The importance of forensic autopsy in death cases is evident in the conclusions of the examination detailed in the "visum et repertum."

In the United States, each year, around 1.7 million people experience blunt trauma. Over 52,000 people die, and nearly 80% are treated and referred to emergency facilities. More male individuals experience head trauma compared to females.

The Department of Forensic Medicine and Medicolegal at Hasan Sadikin General Hospital in Bandung found that, from 2013 to 2017, they examined 1,258 male corpses (74%), 430 female corpses (25%), and 4 corpses with unidentified gender (1%). Out of these cases, 76% underwent external examination only, and 24% underwent autopsy (external and internal examination). Death on Arrival (DOA) cases accounted for the highest percentage at 28%, followed by Traffic Accidents at 26%, sudden deaths at 22%, infanticide at 7%, train accidents at 5%, and murder at 5%.

Based on the above explanation, the author is interested in discussing deceased victims sent to Adam Malik General Hospital in Medan from 2018 to 2022 to understand the overview of all cases related to deaths brought to the Forensic Department at Adam Malik General Hospital.

## Method

This study is a descriptive research with a cross-sectional design aimed at describing deceased victims sent to Adam Malik General Hospital from 2018 to 2022. The research was conducted at Adam Malik General Hospital in Medan. The population for this study includes all deceased victims sent to Adam Malik General Hospital in Medan from 2018 to 2022. Sampling was done using the total sampling technique, where the entire population was used as the research sample. The sample selection was based on the total sampling technique, specifically all "visum et repertum" documents at Adam Malik General Hospital in Medan from 2018 to 2022. This research has obtained ethical approval for the implementation of health research under No. 370/KEPK/USU/2023.

## Result

The results of this research are gathered from secondary data, specifically "Visum et Repertum" (VeR) data of deceased victims at Adam Malik General Hospital in Medan from 2018 to 2022. The research sample includes the entire dataset (total sampling). The total number of deceased victims sent to Adam Malik General Hospital in Medan, based on VeR that met inclusion and exclusion criteria, is 76 cases.

The data obtained from this research were then analyzed in univariate form to examine the frequency distribution of deceased victims based on independent variables in the study. These independent variables are demographic variables that depict the characteristics of the victims, including gender, age, occupation, and the type of examination conducted. The proportion of deceased victims sent to Adam Malik General Hospital in Medan from 2018 to 2022 is analyzed based on gender.

**Table 1.** Proportion of Deceased Victims Sent to RSUP Haji Adam Malik Medan from 2018 to 2022 Based on Gender.

Gender	2018	2019	2020	2021	2022	Total	Percentage (%)
Male	17	14	4	9	8	52	68.42
Female	5	4	1	12	2	24	31.57
<b>Total</b>	<b>22</b>	<b>18</b>	<b>5</b>	<b>21</b>	<b>10</b>	<b>76</b>	<b>100</b>

In Table 1, it can be observed that from 2018 to 2022, the gender of deceased victims was predominantly male, accounting for 52 cases (68.42%), while females accounted for 24 cases (31.57%). It can be concluded that the gender ratio of deceased victims is 2.16:1.

**Table 2.** Proportion of Deceased Victims Sent to RSUP Haji Adam Malik Medan from 2018 to 2022 Based on Age.

Age (years)	2018	2019	2020	2021	2022	Jumlah	Percentage(%)
<b>Toddler(0-5)</b>	0	1	0	0	0	1	1.3
<b>Adolescent(12-25)</b>	9	11	3	6	4	33	43.4
<b>Adult(26-45)</b>	10	5	0	10	4	29	38.2
<b>Elderly (46-65)</b>	3	1	2	5	1	12	15.8
<b>Not identified</b>	0	0	0	0	1	1	1.3
<b>Total</b>	<b>22</b>	<b>18</b>	<b>5</b>	<b>21</b>	<b>10</b>	<b>76</b>	<b>100</b>

In Table 2, it is found that out of the total 76 cases of deceased victims sent to Adam Malik General Hospital in Medan from 2018 to 2022, the majority of victims were in the adolescent category (12-25 years old), accounting for 33 cases (43.4%). Following this, the adult category (26-45 years old) had 29 cases (38.2%), followed by the elderly category (46- 65 years old) with 12 cases (15.8%), and the toddler category (0-5 years old) with 1 case (1.3%). Not all victims could be precisely identified due to unknown patient identities or decomposed bodies, making age identification challenging. This occurred in a small fraction of cases, specifically 1 case (1.3%).

**Table 3.** Proportion of Forensic Cases of Deceased Victims Sent to RSUP Haji Adam Malik Medan in the Year 2018-2022 Based on Types of Examination.

Types of Examination	2018	2019	2020	2021	2022	Total	Percentage (%)
<b>External</b>	21	17	4	19	10	71	93.4
<b>External and internal (Autopsy)</b>	1	1	1	2	0	4	6.6
<b>Total</b>	<b>22</b>	<b>18</b>	<b>5</b>	<b>21</b>	<b>10</b>	<b>76</b>	<b>100</b>

In Table 3, it is found that the most frequently performed forensic examination for deceased victims by the Forensic Installation at Adam Malik General Hospital in Medan from 2018 to 2022 is external examination ("visum luar"). External examination was conducted in 71 cases, accounting for 93.4%, followed by combined external and internal examination (autopsy) in 5 cases, or 6.6%.

**Table 4.** Proportion of Deceased Victims Sent to RSUP Haji Adam Malik Medan from 2018 to 2022 Based on Types of Cases

Type of case	Total	Percentage (%)
Traffic accidents	73	96.1
Murder cases	3	3.9
<b>Total</b>	<b>76</b>	<b>100</b>

In Table 4, based on the total 76 cases of deceased victims sent to Adam Malik General Hospital in Medan from 2018 to 2022, the predominant type of case is Traffic Accidents, accounting for 73 cases (96.1%), followed by murder cases with 3 cases (3.9%). It can be concluded that the ratio of deceased victims based on the type of case is 24.3:1.

**Table 5.** Proportion of Forensic Cases of Deceased Victims Sent to RSUP Haji Adam Malik from 2018 to 2022

Based on the Institution Requesting the Visum Inquiry Letter.

Installation Name	2018	2019	2020	2021	2022	Jumlah	Percentage (%)
Pancur Batu Police	16	14	4	11	8	53	68.83
Delitua Police	3	3	-	9	2	17	22.07
Tanah Karo Police	-	-	-	1	-	1	1.29
Medan Baru Police	-	-	-	-	1	1	1.29
Sunggal Police	3	-	-	-	-	3	3.89
Pattimura Military Police	-	-	1	-	-	1	1.29
Komando Bukit Barisan MP	-	1	-	-	-	1	1.29
<b>Total</b>	<b>22</b>	<b>18</b>	<b>5</b>	<b>21</b>	<b>10</b>	<b>76</b>	<b>100</b>

In Table 5, it is found that from the overall "Visum et Repertum" (VeR) processing, the Request Letter for Autopsy (Surat Permintaan Visum - SPV) directed to the Forensic Installation at Adam Malik General Hospital from 2018 to 2022 originated from 9 different police agencies. The police agency that sent the most SPVs is Pancur Batu Police with 53 SPVs, equivalent to 68.83%. This total includes SPVs from the Pancur Batu Police Chief (38 SPVs) and Pancur Batu Police Station (15 SPVs). Deli Tua Police also sent a considerable number of SPVs, totaling 17 SPVs (22.07%).

**Table 6.** Proportion of Deceased Victims Sent to RSUP Haji Adam Malik Medan from 2018 to 2022 Based on Types of Occupations.

Occupation Type	Total	Percentage (%)
Private Workers	21	27.6
Driver	1	1.31
Entrepreneur	9	11.8
Civil Servant (Teacher)	2	2.63
Civil Servant (others)	3	3.94
Student	6	7.89
Laborer	4	5.26
Student (College)	2	2.63
Farmer	3	3.94
Unemployed	21	27.6
Nurse	1	1.31
Police Officer (POLRI)	1	1.31
Army Personnel (TNI AD)	1	1.31
Unknown	1	1.31
<b>Total</b>	<b>76</b>	<b>100</b>

In Table 6, based on the type of occupation, the majority of deceased victims sent to Adam Malik General Hospital in Medan are private workers and unemployed individuals, each accounting for 21 cases (27.6%). Occupations such as drivers, nurses, police officers (POLRI), and army personnel (TNI AD) have the smallest proportions, each with only 1 case (1.31%). Not all victim occupations can be precisely identified, as in some cases, patient identities are unknown, leading to empty information fields. This occurred in only 1 case.

## Discussion

This data reveals that the study of deceased victims sent to Adam Malik General Hospital in Medan from 2018 to 2022 provides a clear overview of case characteristics and forensic examination patterns. Key points from this discussion involve gender, age, types of cases, forensic examination types, the low implementation of autopsies, victims' occupations, and police agencies submitting requests for autopsy.

It's crucial to note that the dominance of male victims, especially in traffic accident cases, aligns with similar findings in various countries. Factors such as more aggressive behavior and impulsivity in males, along with outdoor activities, can influence the higher mortality rate in this group. Additionally, the low implementation of forensic autopsies in Indonesia highlights challenges in the identification and analysis of deaths, primarily due to families rejecting the process.

The significance of external examination in this study underscores the need for robust external data to understand death cases. However, the low implementation of autopsies also sheds light on the constraints faced, such as fear of mutilation and cultural or religious factors.

Furthermore, the characteristics of victims' occupations provide insights into groups vulnerable to the risk of death, with private workers and the unemployed dominating the number of deceased victims. Ultimately, collaboration between medical institutions and the police, as seen in the various police agencies submitting autopsy requests, emphasizes the importance of cross-sector cooperation in handling death cases.

## Conclusion

This study offers valuable information about the profile of deceased victims sent to Adam Malik General Hospital in Medan, serving as a foundation for improving public health policies and forensic approaches in the future.

## Suggestion

Based on the quantity and variety of cases mentioned above, the researcher suggests conducting comprehensive and detailed case documentation and writing. This would enable the identification of all cases and serve as a better learning resource.

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