

RESEARCH ARTICLE

**Types of Wounds on Living Persecution Victims Who Come to the
Emergency Installation of Drs. H. Amri Tambunan Hospital, Deli
Serdang, in 2020-2021**

Abdul Gafar Parinduri¹, Muhammad Reza Restu Fauzi¹

¹Forensic Department, Faculty of Medicine, Universitas Muhammadiyah Sumatera Utara

Corresponding Email : abdulghafar@umsu.ac.id

Abstract

Background. Injuries or trauma account for 50-70% of cases that arrive at the Emergency Installation. Accidents, abuse, attempted suicide, natural disasters, and terrorist attacks can all result in injuries to these patients. **Aim:** The purpose of this study is to describe the types of injuries sustained by living victims of abuse who came to the Emergency Installation of Drs. H., Amri Tambunan Hospital, Deli Serdang, From January 1, 2021 to December 31, 2021. **Method:** The research design is an observational study using analytical descriptive methods and a retrospective approach using data from the visum et repertum report of persecution survivors who came to Drs. H. Amri Tambunan Hospital, Deli Serdang. Results: Out of 273 survivors of abuse, 69.6% had mechanical trauma, with females receiving the majority of mechanical trauma (52.6%) and abrasions being the most common pattern of injury (58.2%). **Conclusion:** According to the findings of this study, the most common type of wound encountered was mechanical trauma with an abrasion pattern.

Keywords: VeR, trauma, type of wound

INTRODUCTION

In everyday life, a doctor's job entails performing diagnostic exams, treating and caring for patients, and conducting medical examinations of patients, which can be used to assist law enforcement. This medical examination is performed on both living and deceased victims and results in a visum et

repertum (VeR) report.

Visum et repertum is a report written by a doctor, in this case a general practitioner or forensic specialist, in response to an official request from an authorized investigator, such as a police officer, on what the doctor saw and found on the subject he examined while adhering

to the doctor's oath.²

According to Admaja³, approximately 50-70% of cases that present to the Emergency Department are cases of injury or trauma. Accidents, abuse, attempted suicide, natural disasters, and terrorist attacks can all result in injuries to these patients. According to Badan Pusat Statistik (BPS), the number of crimes in Indonesia is expected to decrease between 2017 and 2019. In 2017, there were 333,652 crimes, while in 2018 and 2019, there were 294,281 and 269,324 cases, respectively. North Sumatra Province was ranked second nationally on a provincial level, with a total of 30,831 cases in 2019.

Crimes against the body (violence) in Indonesia also tended to decrease between 2015 and 2019. In 2015, there were 47,128 cases, which decreased to 46,706 cases in 2016, 42,683 cases in 2017, 39,567 cases in 2018, and 38,983 cases in 2019. North Sumatra Province had the highest number of cases of physical/corporate crimes in Indonesia, with a total of 4,817 cases. Minor maltreatment, severe abuse, and domestic violence are examples of violent crimes against the physical/corporate body.⁴

According to *Riset Kesehatan Dasar* (Riskesdas) Indonesia data from 2018, the proportion of injuries nationally increased for three specific years. . The proportion of injuries was 7.5% in 2007, and it increased to 8.2% in 2013. In 2018, the percentage of injuries increased by 9.2%. The lower limbs were found to have the highest incidence of injuries (67.9%), followed by the upper limbs (32.7%), head (11.9%), back (6.5%), chest (2.6%), and abdomen (2.2%).⁵ Wounds, specifically abrasions/contusions, were the

most common type of injury, accounting for 70.9% of all injuries.⁶

METHOD

This study is an observational study using analytical descriptive methods and a retrospective approach with data from visum et repertum from persecution survivors who came to Drs. H. Amri Tambunan Hospital is located in Deli Serdang, North Sumatra Province, Republic of Indonesia.

This study's population consisted of all victims of abuse who visited the Emergency Installation at Drs. H. Amri Tambunan Hospital will be open from January 1st, 2020 to December 31st, 2021.

In this study, total sampling was used to select participants who met the inclusion criteria.

The following are the inclusion and exclusion criteria for this study:

(a) Inclusion Criteria

The following inclusion criteria are used as data:

- a. All persecuted victims who came to the Emergency Installation of RSUD drs. H. Amri Tambunan.
- b. Doing visum et repertum.
- c. Bring an official visum request letter et repertum.

(b) Exclusion Criteria

The following exclusion criteria are not used as data:

- a. Did not bring a visum et repertum request letter
- b. Rape Victim
- c. Dead Victim

In this study, 392 samples were included and excluded based on the inclusion and exclusion criteria.

RESULT

During the study period, 392 Ver reports were written, and data from Ver reports of a total of 273 patients were taken according to the inclusion and exclusion criteria. The information collected included age, gender, type of trauma, type of injury, and location of injury.

According to table 4.1, the largest age group of respondents is young adults, with a total of 159 people (40.6%) ages 18-35, and the smallest age group of respondents is early elders, with a total of 3 people (0.8%) ages >65.

According to gender characteristics, there were 186 male (47.4%) and 206 female (52.6%) respondents. According to the year of the visum et repertum, 118 people (30.1%) received a post-mortem in 2020, and 274 people (69.9%) received a post-mortem in 2021.

According to table 4.2, out of 392 people who had a post-mortem in the year 2020-2021, 273 (69.9%) were trauma cases and 119 (30.4%) were non-trauma cases. This could be because patients did not have a physical examination right away. As a result, by the time the wound was examined, it had already healed.

According to table 4.2, the most common type of trauma found was blunt injuries, which affected 221 people (81.0%), followed by sharp injuries, which affected 28 people (10.2%), and combination injuries,

E-ISSN: 2528-410X which affected 24 people (8.8%). According to table 4.2, the head was the most commonly injured location in 210 people (57.7%), followed by the upper extremities in 61 people (16.7%), lower extremities in 38 people (10.4%), neck in 31 people (8.5%), thorax in 18 people (5.0%), and the abdomen in 6 people (1.7%).

Table 4.1 Distribution of respondents based on characteristics.

Characteristics	Number of people)	Percentage (%)
Age group		
<18	108	27.5
18-35	159	40.6
36-45	62	15.8
46-55	42	10.7
56-65	18	4.6
>65	3	0,8
Total	392	100.0
Gender		
Man	186	47,4
Woman	206	52,6
Total	392	100.0
Inspection Period		
2020	118	30.1
2021	274	69.9
Total	392	100.0

Table 4.2 Distribution of respondents based on the variables studied

Variable	Number of people	Percentage (%)
Trauma		
Trauma	273	69.6
Non-trauma	119	30.4
Total	392	100.0
Type of Trauma		
Blunt trauma	221	81.0
Sharp Trauma	28	10.2
Combination Trauma	24	8,8
Total	273	100.0
Trauma Location		
Head	210	57.7
Neck	31	8.5
Thorax	18	5.0
Abdomen	6	1.7
Upper Extremity	61	16.7
Lower Extremities	38	10.4
Total	364	100.0
Wound Type		
Bruises	75	27.5
Iris Wound	3	1.1
Abraded	33	12.1
stab wound	0	0
Gunshot wounds	0	0
Blisters	159	58.2
Stab wound	3	1.1
Total	273	100.0
Wound Degree		
Minor injuries	235	86,1
Moderate Wound	38	13.9
Serious Injury	0	0
Total	273	100.0

In table 4.2, it can be seen that patients who experienced abuse had a variety of wounds, the most common of which were abrasions in 159 people (58.2%), contusions in 75 people (27.5%), lacerations in 33 people (12,1%), incision wounds in 3 people (1.1%), stab wounds in 3 people (1.1%), gunshot wounds and chop wounds in 0

E-ISSN: 2528-410X people (0%). According to Table 4.2, the most common type of injury in patients is light injury, which affects 235 people (86.1%), followed by moderate injury, which affects 38 patients (13.9%). Moderate injuries are defined as injuries that require treatment and prevent patients from performing normal activities for a few days.

RESULT

The results of the study based on table 4.2 shows that of the 392 survivors who were treated at Drs. H. Amri Tambunan Hospital in January 2020-December 2021, 273 victims (69.6%) experienced mechanical trauma. It can be concluded that many alive patients who are being treated at the Drs. H. Amri Tambunan Hospital's forensic department were victims of violence.

According to table 4.1, the frequency of female victims experiencing violence is 52.6%, while male victims are 47.4%. Several other studies have found that women outnumber men in VeR reports of injuries. According to Wiraagni et al.¹⁸, there were 51.24% of cases of injuries in women based on VeR reports at the forensic and Medicolegal Installation of RSUP dr. Soeradji Tirtonegoro Klaten from 2014 to 2016. Tumewu et al study 's yielded similar results.¹⁹ The level of domestic violence in Manado in the academic year 2018-2019 at RSU Haji Medan revealed that 91% of injuries were sustained by women.

According to the researcher, this may occur because women and the young

adults are often involved in violent physical conflicts and women are often targeted by domestic violence. According to Table 4.1, the age group of 18-35 years old has the highest frequency of cases, accounting for 40.6% (n=159). The age group over 65 years old had the lowest frequency of cases, with 0.8% (n=3). According to Wiraagni et al.¹⁸ research, there were 35.5% of cases of injuries in the 18-35 year age group based on VeR reports at the forensic and Medicolegal Installation of RSUP dr. Soeradji Tirtonegoro Klaten from 2014 to 2016. Similarly, the study by Tumewu et al.¹⁹ on the level of domestic violence in Manado in the year 2018-2019 at RSU Haji Medan revealed that 79% of the cases of injury occurred in people aged 18 to 35. Furthermore, this study looked at the description of the age group in Drs. H. Amri Tambunan Hospital. As a result, cases of injury are more common in women and young adults.

According to table 4.2, the mechanical trauma types found in VeR reports at Drs. H. Amri Tambunan Hospital is a trauma center. There was evidence of blunt trauma in approximately 81% of cases, sharp trauma in 10.2% of cases, and combined trauma in 81% - 8.8% of cases. According to Wijaya et al.²⁰ research, the most common type of violence or mechanical trauma found in VeR reports was blunt trauma (78%). Afandi et al.²¹ found that blunt trauma was the most common type of mechanical trauma, accounting for 79.56% of all mechanical trauma.

The types of injuries discovered on the victim are listed in Table 4.2. Based on these findings, abrasions are the most

common wound pattern, accounting for 159 cases (58.2%). This is consistent with Wardani²² findings that abrasions were the most common type of violence-induced injury (40%).

The distribution of injuries to victims of mechanical trauma is depicted in Table 4.2, which includes the head, neck, thorax, abdomen, upper extremities, and lower extremities. According to these findings, the pattern of mechanical trauma injuries was most commonly found on the head and face (57.7% (n=210), followed by the upper extremities (16.7% (n=61), and the abdomen (1.7% (n=6).

Tyas conducted a study in 2018²³ that yielded similar results, with the head region having the highest number of mechanical trauma events (69.1%). This was also discovered in a Wardani²² study, with 36.7% of violence occurring at the head.

Table 4.2 also describes the degree of injury in patients, with the highest number being 86.1% (n=235) for minor injury. This is consistent with the findings of a study conducted by Wijaya et al²¹, who discovered a total of 48.8% of minor injuries.

According to the researcher, physical violence in the community that results in injuries frequently occurs in the head and face area. Mechanical trauma, which is common in the head area, will undoubtedly harm the brain, which is a vital organ.

CONCLUSIONS

Based on the findings of this study, the

following conclusions were reached:

1. The prevalence of mechanical trauma survivors in Drs. H. Amri Tambunan Hospital is 69.6%.
2. The gender that experienced the most mechanical trauma was female (52.6%).
3. The age group experiencing most mechanical trauma are young adults of 18-35 years (40.6%).
4. Blunt trauma was the most common type of mechanical injury found in victims (81%) and the most common pattern of injury was abrasions (58.2%).
5. The most common location for injuries due

to mechanical trauma was the head area (57.7%).

6. The most common type of injury discovered was minor injury (86.1%)

REFERENCES

1. Budiyo A, Widiatmaka W, Sudiono S. Forensic Medicine, Faculty of Forensic Medicine. Jakarta : Department of Forensic Medicine, Faculty of Medicine, University of Indonesia; 1997
2. S. Dahlan, PRACTICUM GUIDELINES for Making visum et repertum. Semarang: Diponegoro University Publishing Agency, 2000.
3. Atmadja DS. Symposium on Management of visum et repertum of Living Victims in Cases of Injury & Poisoning in Hospitals. Jakarta: Mitra Keluarga Kelapa Gading Hospital, Wednesday 23 June 2004.
4. Central Bureau of Statistics Indonesia 2020, Criminal Statistics 2020, Central Bureau of Statistics of the Republic of Indonesia, Jakarta.
5. Health Research and Development Agency, Ministry of Health of the Republic of Indonesia 2018, National Report on Riskesdas 2018, Agency for Health Research and Development of the Ministry of Health of the Republic of Indonesia, Jakarta.
6. Health Research and Development Agency, Ministry of Health of the Republic of Indonesia 2013, Main Results of Riskesdas Indonesia 2013, Health Research and Development Agency of the Ministry of Health of the Republic of Indonesia, Jakarta.
7. Sampurna B, Gani HM, visum et repertum and Legislation and Discussion, Section of Forensic Medicine FK- Andalas University, Padang 2003.
8. Waluyadi, Judicial Medicine in the Perspective of Judiciary and Legal Aspects of Medical Practice, Djambatan Publisher, Jakarta 2000
9. Amir A, Series of Forensic Medicine 2nd Edition, Division of Forensic Medicine and Medicolegal FK-USU, Medan 2005.
10. Soerjono Soekanto, Herkutanto, Budi Sampurna, visum et repertum of preparation and description techniques, IND-HILL-CO Jakarta 1987
11. Dahlan S, Forensic Medicine, Guidelines for Doctors and Law Enforcers, 3rd Edition, Diponegoro University, Semarang 2000.
12. Murtika I. K, Prakoso Dj, Fundamentals of Judicial Medicine,

- 2nd Edition, Rineka Cipta 1992.
13. Solahuddin, The Criminal Code, Criminal and Civil Procedures, 2nd Printing, ViaMedia Jakarta 2008.
 14. Amir. A. Capita Selecta of Forensic Medicine, Faculty of Medicine, University of North Sumatra, Medan, 1995. pp. 101-9.
 15. Harianja DD. CASE REPORT MEDICOLEGAL ASPECTS OF VICTIMS OF TRAUMA BUTUAL WOUNDS. Published 2019. <https://documents.tips/documents/laporan-case-aspect-medikolegal-korban-luka-due-trauma-tumpuldocx.html>
 16. Prof. Dr. Amri Amir Sp.F(K), DFM S. FORENSIC MEDICINE. RAMADHAN; 2010.
 17. Petty Cs, Death by trauma : Blunt and sharp instruments and firearms. In : Currtan WJ, Mc. Garry AL, Petty Cs (Eds). Modern Legal Medicine, Psychiatry and forensic science., FA Davis Company, Philadelphia, 1980: 363-75.
 18. Wiraagni, IA and Widihartono, E. Characteristics of cases on visum et repertum at RSUP dr. Soeradji Tirtonegoro Klaten 2014-2016, Pharmacia Vol.6, No.2, November 2016, p. 171-178 ISSN: 2088 4559; e-ISSN: 2477 0256 DOI: 10.12928/pharmacia. v6i2. 4214 . Yogyakarta, 2016
 19. Tumewu, R., Tomuka, D., & Kristanto, E. Number of Domestic Violence Cases in Manado City in 2018-2019. e-Clinic. 9. 10.35790/ecl.v9i1.31704. Manado, 2021.
 20. Wijaya, A., Umar, D. & Nugroho, H, Overview of Visum et Repertum (VeR) Injuries in Forensic Medicine and Medicolegal Installations at Abdul Wahab Sjahranie Hospital Samarinda 2015-2019, JSK (Journal of Science & Health), vol. 3, no.4, pp. 412-423. Semarang, 2021
 21. Afandi, D., Restuastuti, T. & Kristanti, W, Quality of visum et repertum Injuries at Idragiri Hulu General Hospital for the Period 1 January 2009-31 December 2013, JIK, vol. 9, no.1, pp. 11-16. Riau, 2015.
 22. Wardani. Kindergarten, Description of Wounds due to Blunt and Sharp Violence on Victims of Persecution in the ER Dr. RSUP. Soeradji Tirtonegoro. Thesis. Yogyakarta: Faculty of Medicine UGM. Yogyakarta, 2021.
 23. Tyas, M. N, Description of the Degree of Wounds Due to Blunt Violence at Dr. RSUP. M. Djamil Padang 2016. Thesis. Padang, 2018.