Level Of Knowledge General Practitioner About Determination Of Natural Death And Unexpected Unnatural Death At Rsd Gunung Jati Kota Cirebon 2022

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ARTICLE INFO	ABSTRACT
Keywords: *General practitioners, Natural Death, Unexpected Unnatural Death, Level of Knowledge.*	Cases of death have two sides, namely natural cases due to the occurrence of illness and cases unexpected to be unnatural due to the involvement of elements of violence/crime. General practitioners have competence in medicolegal procedures in death cases, namely determining natural and unexpected unnatural deaths so that they can provide an explanation to the patient's family for further procedures. The purpose of this study was to describe the level of knowledge of general practitioners regarding medico-legal procedures in determining natural and unexpected unnatural cases of death at RSD Gunung Jati Kota Cirebon. The research design that has been done is descriptive cross sectional by using a questionnaire guide and free interviews. The results of this study can be concluded that the general practitioner's level of knowledge regarding the determination natural death and unexpected unnatural cases of death was overall good. Of the 42 respondents who have been studied, 90.5% have a good level of knowledge, and 9.5% have a enough level of knowledge. Being a general practitioners at RSD Gunung Jati Kota Cirebon have good and enough knowledge about the determination natural death and unexpected unnatural cases of death
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1. INTRODUCTION

Forensic medicine is a multi-disciplinary science that sheds light on a criminal case by seeking evidence of physical evidence. 1,2 Death can occur naturally due to disease, this condition is called a natural case. Deaths that are not caused by disease are called presumed unnatural cases. In reality, in medical services, there are reasonable cases due to illness and unnatural cases due to the involvement of elements of violence. 3 Presumed unnatural deaths are deaths that can be caused by homicide, suicide, and accidents such as injuries, traffic accidents, drowning, poisoning, and other violence.4,5,6 Suspected unnatural deaths are not always sudden, and sudden deaths do not always occur unnaturally, but the two are often present together in a case. Natural death and suspected unnatural death are very different when viewed from a legal aspect where natural death has nothing to do with the law, there is no suspicion of a criminal act so no further investigation is necessary. While the death is suspected to be accidental, the legal aspect is that there is a suspicion of a criminal act, so further investigative action is needed to clarify a case. 3,6,7

Medicolegal procedures are procedures or procedures for the management of various aspects related to medical services for the purpose of legal purposes. Medicolegal procedures in general refer to the laws and regulations in force in Indonesia and the doctor's oath and medical ethics. Doctors in carrying out their obligations to help patients, also general practitioners have an obligation to carry out requests from investigators in handling cases of acts of violence for the benefit of justice. The doctor carrying out the investigator's request is one of the medicolegal procedures. In other

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medicolegal procedures, doctors dealing with death cases must be determined as reasonable cases and suspected cases

Medical education in Indonesia requires general practitioners to be able to carry out medicolegal procedures, clinical forensic examinations, examination of dead victims, know autopsy techniques, know and perform sampling techniques, and propose supporting examinations in the form of a forensic laboratory. 13 Therefore, in handling death cases, doctors The general public must be able to determine death so that the death that occurs can be determined as reasonable or suspected to be unnatural. The competency standard for general practitioners is to know and be able to determine natural and suspected unnatural cases of death. 14,15 This study was conducted to describe the level of knowledge of general practitioners at the Gunung Jati Regional Hospital, Cirebon City regarding the determination of natural and suspected unnatural cases of death. The purpose of choosing the location of this research is also to evaluate in the field of forensic medical education, because Gunung Jati Hospital is an Unjani satellite teaching hospital and is a regional referral hospital for Cirayumajakuning or Cirebon, Indramayu, Majalengka, Kuningan

2. METHOD

This study used a descriptive research method with a cross sectional design. Observation of respondents was carried out by filling in the answers to statements based on a questionnaire guide and free interviews. Observation of research on general practitioners at Gunung Jati Hospital, Cirebon City in December 2022. The inclusion criteria in this study were general practitioners at Gunung Jati Hospital, Cirebon City in 2022 who work in medical services, structural work status, permanent employee status, doctor internship status and willing to be a respondent in this study is proven by signing an informed consent and filling out a questionnaire. Based on the calculation of the categorical descriptive sample size formula, the required minimum sample size is determined as 96 people.

3. RESULTS AND DISCUSSION

There are only 42 general practitioners. Then based on the calculation of the categorical descriptive sample size formula, it becomes total sampling. This research uses descriptive univariate analysis method which aims to describe the characteristics of the respondents consisting of gender, age, last education, length of work and level of knowledge about the determination of natural and presumed unnatural deaths.

The basic characteristics of the research in the form of the age and gender distribution of the respondents are shown in Table 1 and Table 2 as follows:

The results of the analysis are presented in Table 4.1 based on age. It can be seen that the frequency distribution of respondents is mostly 26-35 years old, 32 respondents (76.2%), 36-45 years old 9 respondents (21.4%) and 45-55 years old as much as 1 respondent (2.4%)

Table 1 Frequency Distribution of Respondent Characteristics by Age

Age	Frequency (N)	Percentage (%)
26-35 years	32	76.2
36-45 years	9	21.4
46-55 years	1	2.4
≥56 years	0	0.0
Total	42	100.0

According to the Ministry of Health of the Republic of Indonesia in 2009, the age group was divided into 9 groups from toddlers 0-5 years to seniors 65 years and over. years and over with the majority of general practitioners being in the early adult group of 26-35 years as much as 76.2%. The results of the analysis presented in Table 2 show that based on the gender of the respondents, it can be seen that the frequency of women is more, namely 26 respondents (61.9%) while men are as many as 16 respondents (38.1%).

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Table 2 Frequency of Respondent Characteristics by Gender

Gender	Frequency (N)	Percentage (%)
Male	16	38.1
Female	26	61.9
Total	**42**	**100.0**

Gender characteristics of general practitioners working at Gunung Jati Hospital in Cirebon City are in accordance with the statement of the Ministry of Health in 2019 which shows that the majority of general practitioners in West Java are female.[17] he results of the analysis presented in Table 3 are based on recent education. It can be seen that the frequency of respondents who have Bachelor of Medicine & Doctor Profession education is 37 respondents (88.1%) and Masters of Medicine & Doctor Profession is 5 respondents (11.9%).

Table 3 Frequency of Respondent Characteristics Based on Last Education

Last education	Frequency (N)	Percentage (%)
Bachelor of Medicine & medical profession	37	88.1
medical graduate & medical profession	5	11.9
doctor of medicine & medical profession	0	0.0
Total	42	**100.0**

The distribution of the characteristics of the respondents based on their last education was grouped into the first Doctor's Professional education with S1 Medicine. The second is Doctor Professional education with a Masters in Medicine. The last is Doctor Professional education with Doctor of Medicine. Master's and Doctoral's degree in Medicine can provide additional thinking skills for a doctor, even though Master's and Doctoral's education does not necessarily have a direct connection with the science of determining natural and suspected unnatural cases of death.

A high level of education will increase the ability to think maturely, so that by thinking rationally it is expected to produce good quality work. According to Mubarak (2007), that the higher a person's education level, the easier it will be to manage information so that the more information one has in this case, especially about health.[18]

The results of the analysis presented in Table 4 based on only the length of work at Gunung Jati Hospital in Cirebon City, it can be seen the frequency distribution of respondents who have worked for ≥3 years as many as 24 respondents (57.1%), working for 1-3 years as many as 9 respondents (21.4%) and length of work 0-1 year as many as 9 respondents (21.4%).Table 4 Frequency Distribution of Respondents' Characteristics Based on Length of Service

Length of work	Frequency (N)	Percentage (%)
0-1 Years	9	21.4
1-3 Tahun	9	21.4
≥3 Tahun	24	57.1
Total	**42**	**100.0**

Knowledge level
Variable level of knowledge of respondents include good, enough, and less. The research results can be seen in Table 5The results of the study in Table 5 regarding the level of knowledge regarding the determination of natural and suspected unnatural case deaths, that the research respondents had a good level of knowledge as many as 38 respondents (90.5%), an adequate level of knowledge as many as 4 respondents (9.5%) and no one had a good level of knowledge. less knowledge. Based on

the level of knowledge of general practitioners regarding the determination of natural and suspected unnatural case deaths, most of them had a good level of knowledge with a percentage of 90.5%.

Table 5 Frequency of Knowledge Level on Determination of Death in Reasonable and Suspected Unnatural Cases

Knowledge level	Frequency (N)	Percentage (%)
Good	38	90.5
Enough	4	9.5
less	0	0.0
Total	42	**100.0**

The results of data collection based on age in Table 6 can be seen that the knowledge of respondents aged 26-35 years is 32 respondents, with good knowledge there are 29 respondents (90.7%) and respondents who have sufficient knowledge are 3 respondents (9.3%). There were 9 respondents aged 36-45 years, 8 respondents with good knowledge (89.0%) and 1 respondent with sufficient knowledge (11.0%). In respondents aged 46-55 years, there was 1 respondent with a good level of knowledge. The results showed that most of the respondents who had good knowledge were aged 26-35 years (90.6%).

Table 6 Distribution of Knowledge Levels by Age

No	Age	Knowledge level						Total	
		Good		Enough		less			
		n	%	n	%	n	%	N	%
1	26-35 years	29	90.7	3	9.3	0	0.0	32	100
2	36-45 years	8	89.0	1	11.0	0	0.0	9	100
3	46-55 years	1	100.0	0	0.0	0	0.0	1	100
4	≥56 years	0	0.0	0	0.0	0	0.0	0	0.0
	Total	38	90.5	4	9.5	0	0.0	42	100.0

This is in accordance with research conducted by Pangesti (2012), that the productive age is the most active age and has solid activities and has good cognitive abilities.[19] Sehingga, pada usia produktif memiliki pengaruh terhadap tingkat pengetahuan. Analisis ini juga didukung penelitian dari Hasriani (2014), bahwa usia seseorang mempengaruhi tingkat pengetahuan. Hal ini dikarenakan, semakin bertambahnya usia seseorang maka pengetahuan yang dimiliki akan semakin luas dan meningkat karena makin banyaknya pengalaman yang diperolehz.[20]

The results of data collection based on the latest education in Table 7 can be seen the level of knowledge of respondents who have Bachelor of Medicine & Doctor Profession education totaling 37 respondents, with good knowledge of 34 respondents (91.8%) and respondents with sufficient knowledge of 3 respondents (8.2%). There were 5 respondents (100%) who had a Masters degree in Medicine & the Doctor Profession with a good level of knowledge.

Table 7 Distribution of Knowledge Levels by Last Education

No	Last education	Knowledge level						Total	
		Good		enough		less			
		n	%	n	%	n	%	N	%
1	Bachelor of Medicine & Doctor Profession	34	91.8	3	8.2	0	0.0	37	100
2	medical graduate & Doctor Profession	5	100.0	0	0.0	0	0.0	5	100
3	Doctor of medicine &	0	0.0	0	0.0	0	0.0	0	0.0

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Doctor Profession								
Total	39	90.5	3	9.5	0	0.0	42	100.0

The existence of the last educational relationship with the level of knowledge cannot be denied that the higher a person's education, the easier it is for that person to manage information. Educational status will reflect a person's ability to be able to overcome the problems of a job properly.[19]

Table 8 Distribution of Knowledge Level based on Years of Service

No	Last education	Knowledge level						Total	
		Good		Enough		less			
		n	%	n	%	n	%	N	%
1	0-1 years	6	66.7	3	33.3	0	0.0	9	100
2	1-3 years	9	100.0	0	0.0	0	0.0	9	100
3	>3 years	23	95.8	1	4.2	0	0.0	24	100
	Total	38	90.5	4	9.5	0	0.0	42	100

The results of data collection based only on length of service at Gunung Jati Hospital in Cirebon City in Table 8 can be seen from 9 respondents with a working period of 0-1 years as many as 6 respondents (66.7%) have good knowledge and 3 respondents (33.3%) have sufficient knowledge. Of the 9 respondents with 1-3 years of service, 9 respondents (100%) had good knowledge. Furthermore, 24 respondents with a length of service > 3 years, 23 respondents (95.8%) had good knowledge and 1 respondent (4.2%) had sufficient knowledge. The length of work of a doctor in this study was calculated based on only the length of work at Gunung Jati Hospital, Cirebon City. However, researchers did not make observations on how long they worked before working at Gunung Jati Hospital, Cirebon City. So that in this observation table, the researcher only made observations on the level of knowledge of respondents who worked at Gunung Jati Hospital, Cirebon City. Statements on the questionnaire sheet are divided into 3 categories, namely determining the manner of death, indications of alleged abnormal events, and handling of death. The researcher made Table 9 to find out how many respondents answered incorrectly and correctly for each statement based on the three categories.

Table 9 Categorization of Questionnaire Answers

No	Statement	Incoreect		True	
		N	%	N	%
	Determining the Manner of Death				
1	All events of death are natural events	10	23.8	32	76.2
2	Doctor's examination in cases of death in the form of alloanamnesis and physical examination	0	0.0	42	100.0
3	Information from the alloanamnesis and abnormalities found on autopsy should be compiled to identify normal or suspected abnormal events	0	0.0	42	100.0
4	Natural/natural death is death that has nothing to do with a crime	1	2.4	41	97.6
5	Information about death that was preceded by a crime/crime event and the presence of trauma is an alloanamnesis indicating suspected abnormality	3	7.1	39	92.9

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No	Statement	Incorrect		True	
		N	%	N	%
6	Death from food poisoning is a natural occurrence	1	2.4	41	97.6
7	Someone who died as a result of being run over by a truck is a normal occurrence	7	16.7	35	83.3
8	Sudden death always occurs as a result of organ failure due to disease	7	16.7	35	83.3
9	Death on the way to a health service facility/Death On Arrival (DOA) is not a disease diagnosis	13	31.0	29	69.0
10	Someone who drowns and then dies because he can't breathe is an unnatural death	6	14.3	36	85.7
	Indications of Alleged Unreasonable Eventsp				
11	Physical examination of the body for injuries is an absolute indication that an event of death is suspected to be unnatural	17	40.5	25	59.5
12	Any injury to the body must be considered as the result of an alleged abnormal event until proven by a forensic examination	3	7.1	39	92.9
13	Physical examination of the corpse found cyanosis all over the skin mucosa to be alerted as an unreasonable suspected event	5	11.9	37	88.1
14	Signs of suffocation is a natural disorder due to lack of oxygen	10	23.8	32	76.2
No	**Statement**	**Incorrect**		**True**	
		N	%	N	%
15	Physical examination of the corpse that did not find any abnormalities is a natural occurrence	12	28.6	30	71.4
16	Signs of suffocation on post mortem examination are always due to poisoning	3	7.1	39	92.9
17	Signs of drowning skin spots like goose skin on post-mortem examination is a sure sign that death has occurred by drowning	16	38.1	26	61.9
18	Signs of suffocation from capillary bleeding in the skin mucosa is a sign that the corpse died from disease and could also be due to violence	11	26.2	31	73.8
	Management of Death				
19	Alloanamnesis which is not clearly known and on physical examination there is cyanosis, petechiae on the corpse, is a case of death that has something to do with suspected unnatural death	3	7.1	39	92.9
20	Determination of death as a natural event or suspected to be unnatural, has an interest in the case of doctors providing counseling and	1	2.4	41	97.6

education to the victim's family

The results of the analysis presented in Table 9 are a categorization of the level of knowledge of the respondents based on the percentage of the majority of respondents who answered incorrectly and correctly for each statement. In category 1 respondents answered statements with the majority correct based on the average percentage of 88.5%. In category 2 respondents answered statements with the majority correct based on the average percentage of 77.1%. In category 3 respondents answered statements with the majority correct based on the average percentage of 95.3%.

In category 1 respondents answered statements with the majority being wrong based on the average percentage of 11.5%. In category 2 respondents answered statements with the majority being wrong based on the average percentage of 22.9%. In category 3 respondents answered statements with the majority being wrong based on the average percentage of 4.7%.

4. CONCLUSION

Based on the results of research and discussion obtained from 42 respondents regarding the level of knowledge of general practitioners regarding the determination of natural and suspected unnatural case deaths at Gunung Jati Hospital, Cirebon City in 2022, it can be concluded that 90.5% have good knowledge and 9.5% have sufficient knowledge .

CONFLICT OF INTEREST

The author hereby declares that there is no conflict of interest in the scientific articles written.

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REFERENCES

[1]. Monita Y, Wahyudhi D. Peranan Dokter Forensik Dalam Pembuktian Perkara Pidana. 2013;6(7):127-141.
[2]. Afandi D. Visum Et Repertum Pada Korban Hidup. *J Ilmu Kedokt Forensik Dan Med*. 2008;3(2):79-84.
[3]. Petrus A. Tingkat Pengetahuan Mahasiswa Program Pendidikan Dokter Stase Forensik Periode November 2021 Fakultas Kedokteran Universitas Sumatera Utara Tentang Perbedaan Lebam Mayat Dengan Memar. Published Online 2022.
[4]. Ango Cp, Tomuka D, Kristanto E. Gambaran Sebab Kematian Pada Kasus Kematian Tidak Wajar Yang Diautopsi Di Rs Bhayangkara Tingkat Iii Manado Dan Rsup Prof. Dr. R. D. Kandou Manado Tahun 2017-2018. *E-Clinic*. 2019;8(1):10-14. Doi:10.35790/Ecl.8.1.2020.26928
[5]. Bhaskara Dsm. Hasil Autopsi Sebab Kematian Mendadak Tak Terduga Di Bagian Forensik Blu Rsup. Prof. Dr. R. D. Kandou Manado Tahun 2010-2012. *E-Clinic*. 2014;2(1):3-8. Doi:10.35790/Ecl.2.1.2014.4397
[6]. Roser Hr And M. Causes Of Death. Published 2019. Https://Ourworldindata.Org/Causes-Of-Death
[7]. Sasongko Jp. Kronologi Kasus Mirna Hingga Penahanan Jessica. Published 2016. Https://Www.Cnnindonesia.Com/Nasional/20160201085309-12-107972/Kronologi-Kasus-Mirna-Hingga-Penahanan-Jessica
[8]. Kambey Gsay, Tomuka D, Mallo Jf. Aspek Medikolegal Tatalaksana Kematian Di Kota Manado. *J E-Biomedik*. 2013;1(1). Doi:10.35790/Ebm.1.1.2013.1173

[9]. Prof. Dr. Veronica Komalawati, S.H., M.H. Dan Dr. Dk. Kompetensi Dan Kewenangan Praktik Kedokteran: Perspektif Hukum Di Indonesia. *J Ilm Huk*. 2018;40132.

[10]. Vitaloka Dm, Sutarman N, Nur R, Et Al. Death On Arrival. Published Online 2014.

[11]. Murni A, Adriany D, Alita Satria Nugraha Igk, Hanurafinova D, Furnandari F. Referat Death On Arrival. Published Online 2011.

[12]. Fitriyanti My, Fitri Agustina Huspa, Ali Sodikin. An Overview Of Dead On Arrival Patients At Rsup Hasan Sadikin Bandung Year 2014-2018. 2020;2(1):92-98.

[13]. Kki. Standar Pendidikan Profesi Dokter Indonesia. *Kons Kedokt Indones*. Published Online 2019:169.

[14]. Senduk Ea, Mallo Jf, Tomuka Dc. Tinjauan Medikolegal Perkiraan Saat Kematian. *J Biomedik*. 2013;5(1). Doi:10.35790/Jbm.5.1.2013.2604

[15]. Al Muhdar As, Indria Dm, Rusnianah F. Efektifitas Pemberian E-Booklet Tentang Permasalahan Menyusui Terhadap Peningkatan Pengetahuan Dokter Umum Di Puskesmas Kota Malang. *J Kesehat Islam*. 2018;7(1):1-10.

[16]. Amin M Al, Juniati D. Klasifikasi Kelompok Umur Manusia Berdasarkan Analisis Dimensi Fraktal Box Counting Dari Citra Wajah Dengan Deteksi Tepi Canny. *J Ilm Mat*. 2017;2(6):34. Https://Media.Neliti.Com/Media/Publications/249455-None-23b6a822.Pdf

[17]. Darmawan D. *Profil Kesehatan Indonesia 2019*.; 2019.

[18]. Hastuti Ap. Hubungan Antara Tingkat Pengetahuan Remaja Tentang Penyakit Menular Seksual Dengan Sikap Dalam Mencegah Penyakit Menular Seksual Di Sma 1 Sambung Macan. *J Matern*. 2014;10:51. Ejournal.Stikesmhk.Ac.Id

[19]. Putra Aws, Podo Y. Faktor-Faktor Yang Mempengaruhi Tingkat Pengetahuan Masyarakat Dalam Mitigasi Bencana Alam Tanah Longsor. *Urecol 6th*. Published Online 2017:305-314. Http://Journal.Unimma.Ac.Id/Index.Php/Urecol/Article/View/1549

[20]. Ariasti D, Ningsih Ed. Hubungan Tingkat Pengetahuan Dan Lingkungan Sosial Dengan Perilaku Merokok. *Kosala J Ilmu Kesehat*. 2020;8(1):34-44. Doi:10.37831/Jik.V8i1.186