

The Relationship between Perceptions of the Availability of Hospital Facilities and Infrastructure to the Level of Fire Disaster Preparedness among Clinical Clerkship Students in Zainoel Abidin Hospital

T. Husni TR¹, Yulia Agustina² and Taufik Suryadi^{3,*}

¹ Department of Otorhinolaryngology, Head and Neck Surgery, Faculty of Medicine, Universitas Syiah Kuala, Banda Aceh, 23111, Indonesia.

² Medical Doctor, Faculty of Medicine, Universitas Syiah Kuala, Banda Aceh, 23111, Indonesia.

³ Department of Forensic Medicine and Medico-legal, Faculty of Medicine, Universitas Syiah Kuala, Banda Aceh, 23111, Indonesia.

*Corresponding author: taufik.suryadi.ts@gmail.com

Received February 27 2021; Received in revised form 6 June 2021; Accepted June 22 2021

Abstract

Clinical clerkship students are one of the communities who are always in the hospital environment and have been provided with fire disaster management materials through training and simulations. The hospital has provided complete fire disaster management facilities and infrastructure. However, the problem is that there is no information about clinical clerkship student preparedness for fire disasters in hospitals. The purpose of this study is to determine the relationship between perceptions of the availability of hospital facilities and infrastructure to the level of fire disaster preparedness among clinical clerkship students in the Zainoel Abidin Hospital. This study used an analytical method with a cross-sectional design. The sample of this study was the clinical clerkship students of the Faculty of Medicine, Syiah Kuala University, who were taken by proportional stratified random sampling, totaling 117 people. The data was collected using an online questionnaire that has been tested for its validity and reliability. Data analysis was performed univariate and bivariate using the chi-square test. The results showed that the clinical clerkship student had a good perception regarding facilities and infrastructure in the hospital (68.4%), while the attitude of preparedness to face fire disasters in the hospital showed a high level (80.3%). The Chi-square test results showed that there was a significant relationship between the clinical clerkship student perception regarding facilities and infrastructure in hospitals and fire disaster preparedness ($p = 0,000$). The conclusion of this study showed that the good perceptions of clinical clerkship students about the availability of fire disaster management facilities and infrastructure increase fire disaster preparedness in the hospital. This study recommends the importance of training and fire disaster management simulation to be continuously carried out on clinical clerkship students to improve the quality of disaster preparedness communities.

Keywords: hospital fire; clinical clerkship student; disaster preparedness.

Introduction

Indonesia is a disaster-prone country. Almost all types of disasters can occur in Indonesia. This is due to geographic location, demographic conditions, and the psychosocio-cultural condition of the community (Ministry of Health, Republic of Indonesia, 2009). Disasters are events or series of events that threaten and disrupt people's lives, all by natural, non-natural, and human factors, resulting in human casualties, environmental damage, property losses, and certain psychological impacts (Toha, 2007). When viewed from this definition, the term disaster does not only refer to natural disasters but also other forms of a disaster such as fire.

Fire is an internal disaster that has the potential to occur in a hospital. Based on data from the National Disaster Management Agency- *Badan Nasional Penanggulangan Bencana* (BNPB), there were 985 fire cases that



occurred in Indonesia during 2011-2015, consisting of 979 fires in residential areas and 6 cases of fires from hospitals. From 2011 to 2015, at least 41 cases of fires occurred in Aceh. Even though most of these fires occur in residential areas, caution must be exercised because around 90% of the causes of fires are short circuits, one of the triggers for fires in hospitals (BNPB, 2015; Hesna et al., 2019).

The hospital is one of the buildings that have a high risk of fire disaster. The high risk of fire in hospitals, apart from being triggered by short circuit electricity, can also be triggered by the use of electrical equipment, the use of pressurized gas cylinders, and the use of various kinds of chemicals, both liquid and solid, which are flammable, corrosive and harmful (Raehanayati, 2012). The high risk of fire in the hospital is also exacerbated by the condition of the people who are in the hospital, where some residents are sick people who are unable to save themselves in the event of a fire (Sinaga, 2015).

Based on the provisions of Article 7 of Indonesian Law Number 44 the Year 2009 concerning hospitals, it can be seen that "Hospitals must meet the requirements for location, building, infrastructure, human resources, pharmaceuticals, and equipment." Management of facilities and infrastructure in dealing with such disasters are tools used to prevent, overcome and cope with disasters (Suprpto, 2008; Indonesian Law No. 44 of 2009).

Protection of the community from the threat of disaster by the government is a form of protection as a human right of the people, and not solely because of the government's obligation. Disaster management is no longer solely the responsibility of the government but also a common concern of the community. Priorities for disaster risk reduction actions are the importance of knowledge, innovation, education to build a culture of safety and resilience at all levels /resilience (NFPA, 2002).

One way of assessing that fire safety management that has been implemented properly was understanding and paying attention to the overall fire safety strategy, fire emergency action plans that are generally known to all building occupants, good appreciation of fire hazard, and willingness to change hazardous behavior. The involvement of all components of the community is very necessary to jointly increase awareness of the risk of disasters to emergency events, can occur around them, start from recognizing the risk of fire, how to extinguish a fire on a small scale, and then it cannot be put out, how to avoid fire and be safe against smoke, how to help people who are at risk from fire and where to find safe shelter is needed to minimize panic and help save lives (NFPA, 2002).

As a top referral hospital in Aceh, Zainoel Abidin Hospital (ZAH) should have complete facilities and infrastructure to deal with fire disasters. The facilities and infrastructure used in overcoming fire disasters are no smoking signs, exit signs, fire alarms, heat detectors, smoke detectors, light fire extinguishers, hydrants, evacuation routes, exit doors, sloping paths, and gathering points as an evacuation route. Knowledge of facilities and infrastructure is also a priority to reduce casualties in the event of a fire disaster. This knowledge of facilities and infrastructure is related to the preparedness of clinical clerkship students in the hospital.

Knowledge of disasters in the medical community prior to the 2004 tsunami departed from preparedness in the face of mass casualty incidence and outbreaks of epidemics of infectious diseases. Doctors are educated to be able to handle mass accidents and control disease. After the 2004 tsunami, educators in the medical sector realized that this ability is not enough. It is necessary to include the topic of disaster management as a whole (not only in the emergency phase), namely from prevention, mitigation, preparedness, rapid response to post-disaster reconstruction and rehabilitation. In essence, doctors must understand their role in each phase of the disaster management cycle, just like any other part of the disaster prepared community. With this ability, it is hoped that doctors will be able to work well with the community in overcoming various types of disasters, both natural disasters and disease outbreaks and conflicts in the community (Rahman et al., 2017; Suryadi & Kulsum, 2020; TDRMC, 2019).

Inspired by the various actions of doctors in response to the 2004 tsunami disaster, several medical faculties in Indonesia decide to develop a special subject. Indirectly, the 2004 tsunami became the starting point for massive curriculum changes in Indonesia. Since 2006, the Faculty of Medicine at Syiah Kuala University has developed a medical education curriculum that includes a special block/course called the disaster management block. This block is structured to prepare future doctors who understand their role in disaster management (Rahman et al., 2017; Suryadi & Kulsum, 2020; TDRMC, 2019).

The role of education is very influential in the realization of disaster preparedness. The function of education is one of the best media to prepare communities for disasters. In disaster education, the level of individual readiness will be discussed, which will be improved in learning. The preparedness of individuals for disasters is also demonstrated by the presence of knowledge, skills, and abilities gained through learning from experiences that are actually applied during an emergency. Clinical clerkship students are agents of change who will act as educators of disaster preparedness, be ready to be deployed to the community, and change appropriate interventions when a disaster occurs. Therefore it is important for clinical clerkship students to be able to improve fire disaster preparedness (Rahman et al., 2017; Suryadi & Kulsum, 2020).

Clinical clerkship students (CCS) are trained to compile hazard maps in their practice area to determine the potentiality have to cause disasters, geographical structures, and community habits. Not only making hazard maps but medical students are also trained to work with the community in reducing the impact of disasters, including increasing community resilience in the health sector. Medical Faculty of Universitas Syiah Kuala (MF-USK) also educates graduates to respond to emergency situations by holding a complete disaster simulation held annually, involving representatives from all health stakeholders in Aceh. This annual simulation provides prospective doctors with the ability to provide first aid (Basic life support / BLS), including triage (prioritizing patients who receive treatment first). In addition, students must also be skilled in disaster victim identification (DVI). Mobilizing patients to safer locations, providing assistance (advance trauma and life-saving / ATLS), understanding the chain of command in early disaster management, Incident Command System (ICS), and working with other community components, including the military, police, Search and Rescue (SAR), Fire Department, Indonesian Red Cross, and city governments (including the health service and health crisis centers) and the provincial government (Rahman et al., 2017; TDRMC, 2019; Suryadi & Kulsum, 2020).

Of course, there is great hope for further enhancing disaster education in the health sector. It is hoped that changes in the medical curriculum in the future can place disaster education longitudinally, as long as education is ongoing, not only segmentally focused on the disaster management block. In addition, medical education is expected to bring doctors closer to the community and eliminate the hierarchies and gaps that have occurred so far. The ability to build better effective communication and empathy will make the relationship between doctors and the community more harmonious. Collaboration between doctors and the community, both healthy and sick, will harmonize in health care (Rahman et al., 2017; TDRMC, 2019).

Based on the description above, it is significant that a study is conducted to assess the relationship between perceptions of the availability of hospital facilities and infrastructure to the level of fire disaster preparedness among clinical clerkship students in the Zainoel Abidin Hospital (ZAH). Therefore, the current research is intended to answer the following research questions: (1) what is the level of CCS perceptions of the availability of hospital facilities and infrastructure in the ZAH? (2) Is there a relationship between CCS perceptions of the availability of hospital facilities and infrastructure to the level of fire disaster preparedness? The aim of this study is to obtain information about CCS perceptions of the availability of hospital facilities and infrastructure to increase the level of fire disaster preparedness.

Methods

This type of research is an analytical study, while the design used is cross-sectional, which is a study to find a relationship between the perception of the availability of hospital facilities and infrastructure to the level of fire disaster preparedness in clinical partnership students of the Faculty of Medicine, Syiah Kuala University. This research was conducted based on the perceptions of students in 7 inpatient rooms at Zainoel Abidin Hospital. The data collecting period starts on January 15 - January 21, 2021, by online questionnaire. This is because this research was carried out during a pandemic, so it was not possible to do it face-to-face with respondents.

The samples in this study were clinical clerkship students of the MF-USK at ZAH who met the inclusion criteria and exclusion criteria. Inclusion criteria: 1) registered and active as CCS of medical faculty, Universitas Syiah Kuala, 2) have been a CCS for at least three months, 3) have attended fire fighting training. Exclusion Criteria: 1) CCS who is taking academic leave, 2) CCS who has never done a clerk in an inpatient room.

The sampling technique used in this study is probability sampling with the simple random sampling method, namely, taking members of the sample from the population, which is done randomly without paying attention to the strata in the population. The minimum sample size used in this study was 72 people. To prevent dropouts, namely respondents who did not complete the questionnaire or could not be contacted and participants who left the study, the sample was increased to 117 people.

The instrument used to study was a questionnaire. The researchers developed the guideline questionnaire based on indicators made by LIPI /UNESCO, and the availability of facilities and infrastructure was made based on the Health Office guideline. Before the questionnaire in this study was used, it will be tested for its validity and reliability. This test was carried out on 15 Clinical Clerkship Students at the Meuraxa Hospital. The validity test used is the product moment validity test of the Pearson correlation. This test uses a two-sided test with a significant rate of 0.05. The questionnaire is valid with a calculated or value higher than the r table value (0.514). The reliability test results obtained a Cronbach's alpha coefficient value is 0.955.

This study uses univariate analysis. Each variable is grouped into their respective categories and presented in the form of a frequency distribution table, and then the percentage of acquisition for each category is determined. Bivariate analysis was used to find the relationship between the dependent variable and the independent variable. In this study, the statistical test used was the Chi-square test with the criteria for the relationship set based on the value (probability) generated with a 95% Confidence interval. The conclusion in this study is based on the p-value, which will be compared with the value of $\alpha = 0.05$ as follows: (1). If pvalue > 0.05, then the relationship between the two variables is not significant at 95% CI, and (2) If p value ≤ 0.05 , then the relationship between the two variables is significant at CI = 95% and $\alpha = 0.05$ (Dahlan, 2010).

Results

Table 1. Characteristics of Respondents.

Characteristics of Respondents	N	%
Age (years old)		
21-23	74	63.2
24-26	36	30.8
27-29	7	6
Total	117	100
Sex		
Male	49	41.9
Female	68	58.1
Total	117	100

Data collection was carried out from January 15 to January 21, 2021, using an online questionnaire given directly to clinical clerkship students at ZAH Aceh and the following characteristics can be seen in Table 1.

Based on table 1 above, the results show that from 117 samples of the respondent. Most of them are in the age range 21-23 years, as many as 74 people (63.2%), followed by 36 people aged 24-26 years (30.8%). Based on gender, it can be seen that there were fewer male respondents, 49 people (41.9%) compared to 68 women (58.1%). The distribution of perceptions of the availability of fire disaster management facilities and infrastructure at ZAH can be seen in Table 2.

Table 2. Perceptions of the availability of fire disaster management facilities and infrastructure at ZAH.

Perceptions	N	%
Positive	80	68.4
Negative	37	31.6
Total	117	100

Based on table 2 above, it is found from 117 samples that as many as 80 people (68.4%) were found in rooms with a positive perception of fire facilities and infrastructure. The distribution of the clinical clerkship student preparedness against a fire disaster at ZAH can be seen in Table 3.

Table 3. Clinical clerkship student preparedness against fire disaster at ZAH.

Fire Disaster Preparedness	N	%
Prepared	94	80.3
Not prepared	23	19.7
Total	117	100

Based on table 3 above, the results show that from 117 samples, 94 people (80.3%) are ready to face fire disasters, and as many as 23 people (19.7%) were not ready to face disasters. The relationship between the perception of facilities and infrastructure and the preparedness of clinical partnership students can be seen in Table 4.

Table 4. The relationship between the perception of facilities and infrastructure and the preparedness of clinical partnership students

Perceptions	Preparedness				Total	Asym p. Sig
	Prepare		Not prepare			
	n	%	n	%		
Positive	77	67	17	16	94	0,000
Negative	20	17	3	0	23	
Total	97	84	20	16	117	

Table 4. shows the relationship between perceptions of facilities and infrastructure in hospitals with fire disaster preparedness among respondents. There is a relationship between perceptions of facilities and infrastructure in hospitals with fire preparedness (p-value = 0,000).

Discussion

Based on table 1, the results show that from 117 samples, the most respondents were in the age range 21-23 years with a total of 74 people (63.2%), followed by 36 people aged 24-26 years (30.8%). Age must pay attention because it will affect a person's mental condition, physical condition, workability, and responsibility

(Nastiti et al., 2017). Based on table 1, it is also found that out of 117 samples, there were fewer male patients with a total of 49 people (41.9%) than women totaling 68 people (58.1%). In a similar study on fire preparedness, it was found that there was no relationship between sex and preparedness. This is in line with previous research conducted by Fitriana, which concluded that differences in gender proportions had not brought a significant relationship to preparedness efforts (Fitriana et al., 2017).

Based on table 2 above, it is found that in 117 samples, only 37 people (31.6%) were found in rooms that have poor fire facilities and infrastructure. This can be explained because before CCS started the clinical clerkship station, they were first provided with fire fighting training with light fire extinguishers and given orientation to the tool's location. In addition, ZAH has placed instructions on where the fire extinguisher is in each room and the direction of evacuation in the event of a fire.

This was different from the research conducted by Pratamaningtyas at dr. Soediran Mangun Sumarso, Wonogiri district, said that the disaster management facilities and infrastructure found in the Regional General Hospital dr. Soediran Mangun Sumarso Wonogiri Regency had not met the existing standards. This could be seen from the unsuitable quality of disaster management facilities and infrastructure, such as the placement of one of the hydrants which were blocked by plants, the wrong placement of a light fire extinguisher, the existence of an exit facility that was difficult to see, there were no lights for the exit, and there were no exit inspection procedures, signs of exit directions that were not easily seen (Pratamaningtyas et al., 2016).

Based on table 3 above, the results show that from 117 samples, 94 people (80.3%) are prepared to face fire disasters, and as many as 23 people (19.7%) were not prepared to face disasters. This fire disaster preparedness is the same as the results of a similar study conducted by Qirana on *Instalasi Prasarana dan Sarana Rumah Sakit* (IPSRs) officers. It was reported that 11 people (73.3%) of IPSRS officers were prepared, while four people (26.7%) were less prepared (Qirana & Daru, 2018). In Muafiroh's research, it is said that fire preparedness is related to the identification of fire-hazardous places and areas. According to researchers, there was a significant relationship between preparedness, socialization, and implementation of emergency response procedures because most fire officers have been socialized and implemented fire emergency response procedures in hospitals so that the ability to socialize and implement them can be implemented properly (Muafiroh et al., 2017).

Table 4 shows the relationship between perceptions of facilities and infrastructure in hospitals with fire disaster preparedness among respondents. There is a relationship between perceptions of facilities and infrastructure in the hospital with fire preparedness (p-value = 0.000). This research is in line with previous research conducted by Muafiroh, which states that there was a relationship between emergency protection facilities and occupational safety and health - emergency response preparedness at the Chemical Laboratory of Department X, Faculty of Y, Diponegoro University (Muafiroh et al., 2017). Research conducted in Tanzania, Kenya, Nigeria, and Ghana confirms that lack of availability and poor conditions of facilities are factors that contribute to a lack of awareness of preparedness (Kihila, 2017).

This research is also in accordance with research conducted by Linuwih, which states that there was a relationship between the perception of facilities and infrastructure on fire emergency response preparedness (Linuwih, 2015). This is because when fire protection equipment is installed, members and all employees must be given training so that employees know how to use fire extinguishers properly (Anggitasar, 2014). Research by Aditiansyah and Mahawati at the Pekunden Flats in Semarang obtained results showing that there was a relationship between facilities and fire emergency response preparedness (p-value 0.015, 95% confidence level, and $\alpha = 0.05$). This means that the better the facilities owned, the better the preparedness for fire emergency response (Aditiansyah & Mahawati, 2014).

Based on the results of research by Qirana, it was stated that there was no relationship (p -value = 0.089) between fire protection facilities and fire disaster preparedness for the Hospital Facilities & Infrastructure Maintenance Installation (IPSRS) officers of the Salatiga City Hospital. However, this happened because there was no socialization about the existence of protection facilities installed in the hospital to IPSRS officers. Some research respondents said these facilities did not exist (Qirana & Daru, 2018).

Fitriana et al., in the cross-sectional study, said that the availability of protective facilities and infrastructure supported by component conditions in accordance with the provisions had an effect on fire preparedness efforts on existing human resources (p -value 0.001). Fitriana said the level of a person's knowledge is very much determined by the facilities and infrastructure, accompanied by guidelines (Fitriana et al., 2017).

A limitation of the present study is that the collection of data was limited to respondents at the time of the study, so the results of the study may not reflect all respondents who had undergone clinical rotation in previous years.

Conclusions

This study found a relationship between perceptions of facilities and infrastructure in the hospital with the preparedness of clinical partnership students to fire disasters with a value of 0.000. It is hoped that this research can become the evaluation for clinical clerkship students in increasing their preparedness in the face of fire disasters in hospitals. Hospitals can also be used as input in improving facilities and infrastructure and more socializing to all hospital stakeholders, including clinical clerkship students who are part of the hospital.

Ethical Approval

This study was approved by the health research ethics committee at the Syiah Kuala University/dr. Zainoel Abidin Regional Public Hospital No. 349 / EA / FK-RSUDZA/2020.

Acknowledgments

The authors express their deepest thanks to the participants who took part in this study.

References

- Aditionsyah, I., & Mahawati, E. (2014). Hubungan antara Tingkat Pengetahuan Penghuni dan Fasilitas Rumah Susun terhadap Kesiapan Tanggap Darurat Bencana Kebakaran di Rumah Susun Pekunden Kota Semarang 2014. Jakarta : Jurnal Kesehatan Masyarakat.
- Anggitasar, P., & Sulaksmo, M. (2014). Penilaian Emergency Respnse Preparedness Untuk Proteksi Ledakan Pada Area Peleburan Besi Pada PT . "X" (Berdasarkan Internasional Sefety Rating System). Jakarta: Indonesia Jurnal Occupation Safe Health.
- BNPB. (2015). Kerangka Kerja Sendai untuk Pengurangan Risiko Bencana 2015-2030. Jakarta.
- BNPB. (2015). [homepage on Internet]. Jakarta: The Association; [cited 2020 Des 03]. Data Kejadian Bencana Kebakaran di Aceh Tahun 2011-2015. Available from: http://geospasial.bnpb.go.id/pantauan_bencana/data
- Dahlan, M.S. (2010). Statistik Untuk Kedokteran dan Kesehatan. Jakarta: Salemba Medika.
- Fitriana, L., Suroto, S., & Kurniawan, B. (2017). Faktor-Faktor Yang Berhubungan Dengan Upaya Kesiapsiagaan Karyawan Bagian Produksi Dalam Menghadapi Bahaya Kebakaran di PT Sandang Asia Maju Abadi. Jakarta: Jurnal Kesehatan Masyarakat Universitas Diponegoro.
- Hesna, Y., Hidayat, B., & Suwanda, S. (2009). Evaluasi Sistem Keselamatan Kebakaran pada Bangunan Gedung Rumah Sakit dr. M. Djamil Padang. Jurnal Rekyasa Sipil.
- Kihila, J. M. (2017). Fire disaster preparedness and situational analysis in higher learning institutions of tanzania. Jamba Journal Disaster Risk Study.
- Linuwih, R. (2015). Faktor-faktor Yang Mempengaruhi Kesiapsiagaan Tanggap Darurat Bencana Kebakaran Pada Penghuni Mess PT. Sango Ceramics Indonesia Semarang Tahun 2015. Br J Psychiatry.

- Muafiroh, D. F., Suroto, S., & Ekawati, E. (2017). Faktor – Faktor Yang Berhubungan Dengan Upaya Kesiapsiagaan Tanggap Darurat Keselamatan Dan Kesehatan Kerja (K3) Di Laboratorium Kimia Departemen X Fakultas Y Universitas Diponegoro. *J Kesehat Masy.*
- Ministry of Health, Republic of Indonesia. (2009). *Pedoman Perencanaan Penyiagaan Bencana bagi Rumah Sakit*. Jakarta: Kementerian Kesehatan RI.
- Nastiti, A. S., Denny, H. M., & Kurniawan, B. (2017). Analisis kesiapsiagaan perawat instalasi rawat inap kelas 3 terhadap bencana kebakaran di Rumah Sakit X Kota Semarang. *Jurnal Kesmas.*
- National Fire Prevention Association (NFPA).(2002). *Standard for Fire Portable Extinguisher.*
- Pratamaningtyas, A. B., Jayanti, S., & Wahyuni, I. (2016). Analisis Kesiapsiagaan RSUD dr. Soediran Mangun Sumarso Wonogiri Dalam Penanggulangan Bencana. Jakarta: *Jurnal Kesmas.*
- Qirana, Q. M., & Daru, L. B. K. (2018). Faktor-Faktor Yang Berhubungan Dengan Kesiapsiagaan Petugas Dalam Menghadapi Bahaya Kebakaran. *J Chem Inf Model.*
- Rahman, S., Oktari, R. S., Suryadi, T., Jasa, Z. K., Andayani, H., & Akbar T. I. S. (2017). *Buku tutor Blok Disaster Manajemen*. Fakultas Kedokteran Universitas Syiah Kuala.
- Raehanayati, R. (2012). Kesiapsiagaan Menghadapi Bencana Kebakaran Gedung Graha Sainca (GS) Lantai II Universitas Brawijaya Menggunakan Metode Campus Watching. *Jurnal Erudio.*
- Sinaga, S. N. (2015). Peran Petugas Kesehatan dalam Manajemen Penanganan Bencana Alam. *J Integritas.*
- Suprato, S. (2008). Tinjauan Eksistensi Standar-standar (SNI) Proteksi Kebakaran dan Penerapannya dalam Pendukung Implementasi Peraturan Keselamatan Bangunan. *J Prosiding PPIS.*
- Suryadi, T, & Kulsum, K. (2020). Disaster victim identification (DVI) training for medical student. *Jurnal Pendidikan Kedokteran Indonesia.* 9(2): 95-102.
- TDRMC. (2019). [homepage on Internet]. Aceh: The Association; [cited 2021 January 20]. Mendidik Dokter agar Memahami Bencana. Available at: <http://tdmrc.unsyiah.ac.id/smong/2017/07/19/mendidik-dokter-agar-memahami-bencana/>
- Toha, M. (2007). Berkawan dengan Ancaman: Strategi dan Adaptasi Mengurangi Risiko Bencana. *J Walhi.*
- Undang-undang No.44 Tahun 2009 Tentang Rumah Sakit. Lembaran Negara Republik Indonesia Tahun 2009. Jakarta: Sekretariat Negara.