IMPLEMENTATION OF SAFETY WORK FOR NURSE IN HANDLING HIV/AIDS PATIENTS

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ABSTRAK

Perawat adalah sebagian besar pekerja kesehatan di rumah sakit yang memiliki risiko kontak terlama dengan pasien seperti darah, cairan tubuh pasien, dan bahaya lain yang bisa menjadi media penularan penyakit seperti HIV/AIDS jika aturan keselamatan dilanggar. Tujuan dari penelitian ini adalah untuk melihat pelaksanaan keselamatan perawat dalam penanganan pasien HIV/AIDS sesuai dengan kebijakan dari RSUD Dr. Soetomo Surabaya, termasuk bagaimana bekerja dengan aman menggunakan Kewaspadaan Universal, pelatihan, dan Penyediaan Personal Protective Equipment (PPE). Dari aspek analisis data merupakan penelitian deskriptif, dalam jangka waktu, dengan pendekatan cross sectional. Obyek penelitian ini tentang pelaksanaan keamanan oleh tujuh perawat di UPIPI RSUD Dr.Soetomo Surabaya. Data digunakan adalah data primer (kuisioner, observasi dan wawancara) dan data sekunder yang diperoleh dari rumah sakit. Penelitian dimulai dari 3-31 Mei 2010. Hasil penelitian menunjukkan bahwa mayoritas telah diterapkan. Namun ada komponen yang belum diaplikasikan, seperti pelaksanaan mencuci tangan terlebih dahulu sebelum memakai sarung tangan (14,3 %) dan penggunaan pakaian pelindung (16,7%). Beberapa perawat belum menerima pelatihan lagi dalam penyediaan APD, persediaan masker dan sarung tangan terkadang masih tidak cukup. ***(FMI 2012;48:32-36)***

Kata kunci: *penerapan keselamatan kerja, kebijakan rumah sakit*

ABSTRACT

Nurse is the most health workers in hospital which has the longest risk of contact with patients like bloods, body fluids of patients, and other dangers which can become a medium of transmission of diseases such as HIV/AIDS if the rules of safety are violated.The purpose of this study is to see the nurses on implementation of safety in the handling of HIV/AIDS patients according to the policy of RSUD Dr.Soetomo Surabaya, including how to work safely using Universal Precautions (UP), training, and the Provision of Personal Protective Equipment (PPE).From aspect of data analysis is a descriptive research, in term of time, including cross sectional. The Object of this research about implementation of safety on seven nurses in UPIPI of RSUD Dr. Soetomo Surabaya. Data that has been used were primer data (questionnaires, observation and interviews) and secondary data obtained fromhospital. Duration of this study from 3-31 May, 2010.Result showed that the majority had been applied. However there were components that have not been already applied yet, like implementation of UP wash hands first before wearing gloves (14,3%) and the use of protective clothing (16,7%). Some of nurses have not already received training again yet and in the provision of APD, mask inventory and gloves sometimes are not still enough. ***(FMI 2012;48:32-36)***

Keywords: *implementation of work safety, hospital policies*

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INTRODUCTION

The hospital is a place of unique and complex, not only provide health services to the community, but also a place of education and research. The more extensive health services and functions of the hospital , the more complex a source of danger to the safety of the potential transmission, especially for health workers in hospitals (Aditama & Hastuti 2006). Nurses are the largest health workers in hospitals that have the most risk of long contact with patients such as contact with blood, body fluids, used needles punctured the patient, and other hazards that may be the medium of transmission of diseases such as HIV and AIDS (Ibrahim et al 2007).

In Indonesia, since 1987 growth in the number of cases of AIDS or HIV- positive tend to increase every year. Based on data from the East Java Provincial Health Office, until 30 September 2009 there were 3,030 AIDS cases in East Java. Among of them, 665 people have died. For HIV- positive cases, the number reached 7,019 people (Jawa Pos 2009). The increasing number of HIV and AIDS, increases the risk of health workers who can be infected with HIV and AIDS. According to reports http://www.avert.org site, in the United States in 2001 there were 57 cases of health workers infected HIV due to occupational hazards. Based on 24 cases of 57 cases in which (most) experienced by nurses (Ibrahim et al 2007).

Regional General Hospital (RSUD) Dr. Soetomo Surabaya is one of the referrals for people living with HIV and AIDS (PLWHA). This was deemed necessary in order to treatment, prevention, and to provide quality services for PLWHA. Thus the widespread incidence of HIV and AIDS cases to various areas including Surabaya, nurses at the hospital has got the risk of transmission, if the safety rules are not implemented . Therefore this research wants to reveal how the implementation of nurse safety in the treatment of patients with HIV and AIDS.

MATERIALS AND METHODS

Study design was a descriptive data analysis conducted with cross-sectional and observational and performed in the field. Study target is a nurse at the Infectious Disease Care Unit Intermediates (UPIPI) RSUD Dr. Soetomo Surabaya who is always in direct contact with blood and body fluids at work every day for the treatment of HIV and AIDS patients in the inpatient ward UPIPI. Based on this, there were 7 of 10 nurses qualified with study objectives. The study was conducted at UPIPI RSUD Dr. Soetomo Surabaya and executed on 3- 31 May 2010. The data have been obtained through primary and secondary data collection further processed to create a documentation of all the data, from the questionnaire, observation, and interviews. The data obtained were compared with the applicable theory rules. The data presented have been obtained with a percentage after the data were analyzed descriptively.

RESULTS

Application of Safety aims to prevent and suppress the possibility of accidents, cope and manage in the event of accident, that its impact can be reduced as small as possible. RSUD Dr. SoetomoSurabaya policies about safety workplace has an important role in ensuring and improving safety on nurses in the management of patients with HIV and AIDS in particular.

To improve safety workplace for nurse, especially with patients HIV and AIDS is necessary control include 1) Implementation of safe working practices; 2) Training; 3) Provision of Personal Protective Equipment (PPE). Implementation of safe working practices in RSUD Dr. Soetomo using Universal Precautions based on Standard Operating Procedure (SOP). Its components include the hand washing, use of personal protective equipment (PPE), management of used medical equipment, management of needles and sharp objects, and waste management and sanitary room. Nurses using the application of Universal Precautions (UP) for handwashing were 7 nurses (14.3 %) did not apply before using gloves. During the research 14.3 % was not associated with patient's blood or body fluids. But the nurse still wearing gloves in treating patients (Table 1).

The use of Personal Protective Equipment (PPE). Glasses. the use of glasses 100 % is not applied because there is not possibility of exposure to blood and body fluids of the eye later. Mask, the use of masks 100 % has been applied by nurses. Nurse wearing a mask in one shift unless exposed to dirt and then replaced their mask. Gloves, the use of glove 100 % has been applied by nurses in contact with blood, body fluids and contaminated materials and when handling sharp objects. The use of used gloves for 2 times and the use of antiseptic prior conditional on the patient's blood and body fluids of HIV and AIDS. Protective Clothing, During the study from 7 people 6 are in contact with blood and body fluids, and 1 person was not in contact with blood and body fluids. Table 2 shows that 83.3% have implemented the use of the protective clothing. Protective boots, the use of boots worn when handling liquid waste in significant amounts.

Table 1. Data Implementation Distribution of Universal Precautions (UP) perform Hand Washing

Hand washing	Information			
	Do	%	Do not	%
1. Before using gloves.	6	85.7	1	14.3
2. After using gloves	7	100	0	0
3. After dealing with blood or body fluids of patients	6	85.7	1	14.3
4. Caring for patients.	7	100	0	0

Table 2. Data Implementation Distribution of Universal Precautions (UP) usage

The use of protective gown	Information			
	Do	%	Do not	%
Use when there is a possibility of exposure to blood and body fluids	5	83.3	1	16.7

Management of used medical equipment, medical instruments decontamination with 0.5 % chlorine solution for 10 minutes and then washed, dried, sterilization in Integrated Surgery Center if medical instruments are used for the next day (medical devices are often used in everyday life) and in the Lung Surgery Unit if the medical equipment that is used is a surgical lung instrument. Management of needles and sharp objects, in the management of needles and sharp tools 100 % of nurses have applied, namely using one hand techniques if the closure re-used needles, avoid bending, breaking used needles by hand, and inserting needles and sharps intsrumen to places that are not see-through puncture.

Waste management and sanitary room is divided into 3 treatment rooms, namely 1) Body fluids (blood, feces, and urine), 2) Solid waste contaminated, and 3) Sharp waste. Body fluids (blood, feces, and urine), move the wet linen affected by folding fabric body fluid located inside the trash. Then rinse and soak them in spoel hook with 0.5 % chlorine solution for 10 minutes. After 10 minutes then drain and transfer to prepared laundering. Solid waste contaminated, collect solid waste in a bag that does not leak. Then do the binding with ropes when it is filled ¾ of the trash bag and replace with a new one and called to the sanitation (1553) when there is a delay. Sharp waste, insert a sharp waste (needles, lancet, end infusion set, ampoule former drug bottles and other waste into special containers sharp. Ensure no sharp objects sticking in or out of the container and call to the sanitation (1553) when there is a delay.

Training, nurses have been trained that relating to the safety work implementation include infection control, handling and care of HIV and AIDS patients, emergencies, patient safety. When placed in UPIPI there are some nurses who attend training again, including training on VCT (Voluntary Counseling and Testing), PMTCT (Preventions of Mother to Child Transmission), PICT (Provider Counseling Initiative Test), CST (Care Support a Treatment), Dalin (Infection Control), and others. Provision of Personal Protective Equipment (PPE) has been provided from the hospital for nurses in UPIPI RSUD Dr. Soetomo Surabaya are as follow a) Glasses: 6 pieces; b) Mask: 7 Boxes week or 1 box (50 pieces) a day; c) Gloves: 250 pairs a week or 35 pairs a day; Protective Gowns: 12 pieces; and Boots: 6 pieces.

DISCUSSION

The implementation of the safety work for nurses in the management of patients with HIV and AIDS by Undang-Undang No. 1 Tahun 1970 and Kepmenaker-trans RI No.KEP.68/MEN/2004 reinforced with hospital policies in Undang - Undang 44 of 2009, Peraturan Daerah (Perda) East Java No.11 Tahun 2008 (Pemda Jatim 2008a), and Peraturan Gubernur (Pergub) East Java No.112 Tahun 2008 (Pemda Jatim 2008b) in IRNA Medic section space infection intermediates care, namely: Safety Work Implementation, the implementation safe working in RSUD Dr.Soetomo Surabaya using Universal Precautions (UP) based on Standard Operating Procedure (SOP).

Hand washing, 14.3 % of nurses did not wash their hands before wearing gloves. According Nursalam and Kurniawati ND (2007), hand washing should always be done right before and after treatment despite wearing gloves or other protective device. This action is necessary to eliminate or reduce microorganisms on hands so the spread of infection can be reduced and the working environment protected from infection. Use of Personal Protective Equipment (PPE) like Glasses, on the use of glasses is not 100% done because there is no possibility of blood and body fluids splashes will be hit the eyes. Mask, the use of masks 100 % has been applied by nurses. Nurse wearing a mask in one shift unless exposed to dirt and then replaced their mask. It should be, mask replacement is 2-3 times or when the mask is already uncomfortable. Gloves, the use of gloves 100 % has been applied by nurses when contact with blood, body fluids and contaminated materials. In addition it is also used gloves when handling sharp objects.

According to the research, the use of gloves is not all used gloves immediately discarded. There are also used gloves re-use again but in condition the gloves is sterile from blood and body fluids of patients with HIV and AIDS. The use of second-hand glove used for 2 times. But before being used again, after the first usage gloves have been sterilized with antiseptic. Protective clothing, 83.3 % of nurses have implemented the use of protective clothing during contact with blood and body fluids and 16.7 % did not apply. Boots, the use of boots worn when handling liquid waste in significant

amounts. According Nursalam and Kurniawati (2007) the use of personal protective equipment should not be worn at the same time, depending on the type of action to be undertaken. The management of used medical equipments have been applied. Management of used medical equipments is to prevent the spread of infection through medical equipment, or to ensure that such tools in a sterile condition and ready for use (Ibrahim et al 2007).

The management of needles and sharp objects has been applied. According to Ministry of Health of Republic of Indonesia (2003) stated a major cause of HIV transmission through accident at work, for exsmple needle stick accidents contaminated sharp instruments. Injury due to the sharp tool may result in HIV transmission, usually because of a deep puncture of the needle is hollow. The jab as often happens when the back cover with the needle by using a one-handed technique. Additionally container used to dispose of needles and sharps objects are puncture resistant.

Waste management and sanitation room has been applied. In the theory of non-medical waste vigilance is the waste that is not in contact with blood or body fluids so low-risk, and medical waste is waste that is in contact blood or body fluids (Parsinahingsih & Supratman 2008). Based on the research results, (100 %) had received training before they are assigned to work at RSUD Dr. Soetomo. When placed in UPIPI there are some nurses who attend training again. Although there are some nurses who have not been trained yet, knowledge of specialized training such as infection control and others, they get from other colleagues who are trained. In addition, before being placed in UPIPI they have received training again.

Along with the development of science and knowledge, then follows the latest developments in science is a necessity that can still undergo profession well. And also, it can improve the understanding, especially regarding its safety and on HIV and AIDS (Ibrahim et al 2007). Provision of Personal Protective Equipment (PPE) is one of the efforts that can be given to minimize the risk of harm received by nurses. The PPE has been provided from the hospital for the nurses who treat patients with HIV and AIDS, namely, glasses, masks, gloves, protective clothing, boots. Provision of PPE is not only used for nurses, the provision is also used by doctors, young doctors, and students who are interns. Provision of PPE has been set in Undang - Undang No.1 Tahun 1970 Article 14 Point C: caretaker is required to provide PPE for free of charge (Presiden Republik Indonesia 1970).

According to the research, the provision sometimes nurses still often inadequate, especially in the provision of masks and gloves. This often occurs when the number of patients increases particularly severe patients increases, the handling of patient increased so the use of PPE increased too and also rise in the use of PPE is not necessary sometimes still happen. This can result in a waste of PPE usage, so nurses use repeatedly.

CONCLUSION

Hand washing implementation as many (14.3%) that is implementation before using gloves did not. The use of PPE, glasses (100%) was not done, masks and gloves (100%) done, protective clothing (16.7%) was not done, and boots used in the treatment of waste water in significant amounts. Management of used medical devices have been applied. Needles and sharps objectives management (100%) has been applied. Waste management and sanitation room has been applied. Training has been given before the nurses work, but after work, there are some nurses who have not received training again. Provision of Personal Protective Equipment (PPE) has been provided, but the supply is insufficient. When the number of patients increase and PPE usage also increase and the use of PPE is not necessary sometimes still do.

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