Analysis Of Competition Level Factors Of Clinical Practices In Vk Institute Use Of Personal Protective Equipment (PPE) In Wide Care Post Op Section Cesarea (SC) In Sidoarjo Hospital

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ABSTRACT

The use of PPE should be carried out by health officers and students of clinical practice. The general objective of this research is to analyze the factors that influence the compliance of clinical practice students in using personal protective equipment of PPE In Wide Care Post Op Section Cesarea (SC) In Sidoarjo Hospital.

The design of this research is quantitative with cross sectional approach. The population of this study is all students clinical practice in the VK (Verlos Kamer) room in Sidoarjo Hospital. The sample size is 27 respondents taken by Total Sampling technique. Variable dependent compliance student clinical practice, independent variable knowledge, experience, organization policy. The result of analysis using logistic regression.

The result of the research shows that the respondents have high knowledge that is 19 respondents (70,4%), the respondents have experience of wound care that is 18 respondent (66,7%), the respondent do organizational policy that is 18 responden (66,7%), do wound care using PPE (personal protective equipment) that is 19 respondents (70,4%). Result of data analysis got p value = 0,000 <(0,05), which means that there is correlation between knowledge with level of compliance of clinical practice student in Sidoarjo Hospital. Result of data analysis got result p value = 0,037 <(0,05), meaning that there is relation between organization policy with level of compliance of clinical practice student in Sidoarjo Hospital.

Knowledge is very influential on the behavior of students in using PPE (personal protective equipment). A person's behavior will be better and can last longer if based on good knowledge and awareness. As a Facilitator a clinical counselor is able to facilitate the student and as an evaluator able to evaluate whether the achievement of the student has been in accordance with the determined competency.

I. BACKGROUND

Personal Protective Equipment is a tool that a person uses in performing his or her work to protect himself or herself from certain hazards, whether from work or the work environment and useful in preventing or reducing the likelihood of injury or illness (Siburian, 2012).

The use of Personal Protective Equipment (PPE) should be performed by health care workers and clinical practice students. Safety and security of all healthcare providers including student practice is an important part of maintaining safety (Maja, 2009). Contamination of the disease may pose a risk to a health worker if during the course of action the patient does not pay attention to preventive measures, the spread of infectious diseases through the medium of body fluids and blood (MOH, 2003 by Kurnia, 2012).

Sectio Caesarea (SC) is a surgery to give birth to a child by incision on the abdominal wall and uterus. Any situation where a normal birth is impossible is an absolute
indication for a relative abdominal relative indication, vaginal birth may be possible but because circumstances do not allow the patient to be prescribed sectio caesarea to be safer for mother, child or both (Oxorn, 2010).

WHO recorded cases of nosocomial infection in the world of Hepatitis B (39%), Hepatitis C (40%), and HIV (5%) in health workers worldwide (Maja, 2009). The incidence of nosocomial infections in Europe and the Middle East is 8.7%, while Southeast Asia is about 10% higher. (WHO, 2002 in Sahara, 2011, pp. 1-2) assigned 2 million health workers exposed to Hepatitis B Viruses 0.9 million exposed workers to Hepatitis C Virus, and 170,000 exposed HIV / AIDS virus workers. In the United States more than 8 million health workers are exposed to blood or other body fluids while in the hospital, including through contact types of wounds with contaminated sharp instruments such as needles and scalpels (82%).

Infection rate in Indonesia is one of the main causes of maternal mortality. Maternal mortality caused by post Sectio Caesarea (SC) infection in Indonesia in 2013 reached 7.3% (Ministry of Health RI, 2015), while the incidence of postcare infection in Central Java was 3.54% (Central Java DHO, 2014).

Komplikasi utama persalinan SC adalah kerusakan organ-organ tubuh seperti pada vesika urinaria dan uterus saat dilangsungkan operasi, komplikasi anestesi, perdarahan, infeksi dan tromboemboli. Kematian ibu lebih besar pada persalinan SC dibandingkan persalinan pervagina (Oxorn, 2010). Infection after childbirth is wound labor, mastitis, thrombophlebitis, and pelvic inflammation (Rasjidi, 2009).

The use of personal protective equipment (PPE) in health care agencies sometimes not done well. One of the factors that influence it is the level of adherence of health workers and prospective health workers in the hospital. Sidoarjo Hospital is a health institution commonly used for practice by practicing students. Students learn to apply the knowledge they have in real life and to support these competencies.

Sidoarjo Hospital is one of the educational hospitals and as a referral hospital in Sidoarjo District. Based on data obtained from Sidoarjo Hospital in 2016 there are students of clinical practice of 1.391 consisting of nursing profession 610 students, nursing S1 66 students, DIII nursing 623 students, midwifery DIV 22 students, DIII obstetric 70 students, and in 2017 there are 743 students who practice clinics consisting of nursing professions 336 students, nursing S1 65 students, nursing DIII 245 students, midwifery DIV 23 students, DIII obstetric 74 students. In November 2017 in the VK (Verlos Kamer) room there were 32 students who did clinical practice such as 24 students of D-III Midwifery and 8 students of D-III Nursing. Personal protective equipment should be used when doing wound care in the VK (Verlos Kamer) room is a sterile handscone, mask and apron. From the results of observations and interviews of health workers, students do not follow the rules of clinical practice rules that apply 3 people in the VK (Verlos Kamer) room. As an educational hospital then as a health officer must always adhere to the rules that apply properly and use PPE properly and correctly because the risk of infection is greater.

According to MDG's in 2015, the target for Maternal Mortality Rate (MMR) is 102 per 100,000 live births. In 2014, Maternal Mortality Rate (MMR) of East Java Province reaches 93.52 per 100,000 live births. The most infected cause of MMR and bleeding.

Based on the above, the researcher is interested in conducting research by formulating in the title of research "Clinical Practice Factor Level Analysis of Clinical Practice In the Use of Personal Protective Equipment (PPE) in Post Section Cesarean Post Wound Treatment in Sidoarjo Hospital ".

This study aims to analyze the factors that influence the compliance of clinical practice students in using personal protective equipment PPE in post op care seksi cesarea (SC) treatment in Sidoarjo Hospital.
RESEARCH METHODS

This research is a quantitative research with cross sectional approach that is type of research that emphasizes at measurement time or observation data of independent and dependent variable only once at one time. In this study the population used is all students clinical practice in the VK (Verlos Kamer) room in using PPE in post op care seksio cesarea wound care in Sidoarjo Hospital amounted to 32 Students.

The number of samples of this study were 27 respondents with sampling technique using total sampling. Data analysis using Regresi Logistik.

RESULTS

Table 1. Distribution of Frequency of Knowledge In Students practice in Sidoarjo Hospital

<table>
<thead>
<tr>
<th>Criteria Knowledge</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>19</td>
<td>70,4</td>
</tr>
<tr>
<td>Medium</td>
<td>8</td>
<td>29,6</td>
</tr>
<tr>
<td>Low</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on table 1 above is known that most respondents have a high knowledge of 19 respondents (70.4%).

Table 2. Frequency distribution of organizational policy in Students practice in Sidoarjo Hospital

<table>
<thead>
<tr>
<th>Criteria Organization Policies</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do</td>
<td>18</td>
<td>66,7</td>
</tr>
<tr>
<td>Not Done</td>
<td>9</td>
<td>33,3</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on table 2 above it is known that most respondents do policy organization that is 18 respondents (66,7%).

Table 3. Distribution of frequency of compliance to Student practice in RSUD Sidoarjo

<table>
<thead>
<tr>
<th>Criteria Obedience</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obedient</td>
<td>19</td>
<td>70,4</td>
</tr>
<tr>
<td>Not obey</td>
<td>8</td>
<td>29,6</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on table 3 above it is known that most respondents are obedient in doing wound care using PPE (personal protective equipment) that is 19 respondents (70.4%).
Data analysis

Based on the result of statistic test conducted by using logistic regression test to 27 respondents got significant ρ value = 0,000 < α = 0,05 on knowledge variable, significant value ρ value = 0,233 > α = 0,05 on experiential variable, and significant value ρ value = 0,037 < α = 0,05 on organizational policy variable.

Based on the analysis results obtained significant value ρ value = 0,000 < α = 0.05 on the variable knowledge which means knowledge factors that most influence the compliance of clinical practice students in the use of PPE.

**DISCUSSION**

**Clinical Practice Students' Knowledge at Sidoarjo Hospital**

The results of the research note that from a total of 27 respondents, almost half of respondents have a high knowledge of 19 respondents (70.4%).

Knowledge or cognitive is a very important predominant in shaping one's actions (overt behavior) (Setiasi, 2013). Knowledge-based behaviors are generally long-lasting, before people adopt new behaviors that occur in a sequential process.

In conducting clinical practice, students must have high knowledge to perform medical action. Without the knowledge of students will be confused and make mistakes. The basic knowledge that must be known by the students is the use of PPE (personal protective equipment).

This is to protect yourself so as not exposed by the fluid of patients who contain lots of bacteria. It can also prevent students from contracting the disease. As a student it is very important to use PPE (personal protective equipment), so students avoid disease transmission. Therefore knowledge of the use of PPE (personal protective equipment) should be given in advance so that students can protect themselves from disease transmission.

**Clinical Practice Student Experience at Sidoarjo Hospital**

The result of the research shows that from the total of 27 respondents, almost half of respondents have experience of wound care that is 18 respondents (66,7%).

Experience is a source of knowledge whereby one can acquire the truth of knowledge by repeating the knowledge gained in solving problems encountered in the past (Notoatmodjo, 2010). However, Not all experiences can lead one to draw conclusions correctly so critical and logical thinking is required.

In this research, some respondents are experienced in doing wound care using PPE (personal protective equipment). Experience is quite important for a student. This is because if the student never did at all would feel confused and do not know what will be done first. With the lack of experience the student will forget to use the APD (personal protective equipment) and just follow what he got while on campus. In college students at level one will feel strange and confused when given the competence of wound care. Because at the level of one student is still just doing clinical practice directly.

Therefore mahasiswa need to have experience in doing acts wawat. And also the more experience students have, the students will realize the importance of using PPE (personal protective equipment) for health workers.

**Clinical Practice Student Organization Policy at Sidoarjo Hospital**

The results of the study note that from a total of 27 respondents, it is known that more than half of respondents conducted. Organizational policy that is 18 respondents (66.7%).
An organization’s policy is a supervision of the activities of an authorized person to observe, examine and monitor the activities of the worker during his work. Supervision aims to improve the discipline of workers to be able to perform work in accordance with established procedures or in accordance with Standard Operating Procedure (SOP). With the supervision of an agency, will greatly affect the quality of services provided by health workers (Swansburg, 2011).

As a Facilitator a clinical counselor is able to facilitate the student and as an evaluator able to evaluate whether the achievement of the student has been in accordance with the specified competence. Students need direction from clinical counselors. This is because students are still familiar with the clinic practice and also do not know what will be done. For students who are new to clinical practice for the first time, guidance from the field or clinical guide is needed. At this stage students will feel embarrassed if you want to ask questions and feel confused about what to do while in the room. Therefore, students need to get guidance from clinical counselors in order not to make mistakes.

Compliance Level of Clinical Practice Students in Sidoarjo Hospital

The result showed that total of 27 respondents, it is known that more than half of respondents were obedient in doing wound care by using PPE (personal protective equipment) that is 19 respondents (70,4%).

Compliance is the level of a person in implementing a rule in and suggested behavior. Health compliance is the level of a person in performing the care, treatment and behavior suggested by nurses, doctors or other health workers (Bart, 2010).

Obedience is the level of a person in implementing a suggested rule and behavior. Compliance is divided into two, namely compliance (total compliance) where in this condition the students dutifully adhere to the use of PPE (personal protective equipment), and students who are non compliance (non compliance) where in this state students do not use the PPE (Personal Protective Equipment).

In this study there are students who are not adherent in using PPE (Personal Protective Equipment), because students have often plunge in the field or clinical practice, which then resulted in underestimated students in the use of PPE (personal protective equipment). Students are also usually reluctant to use PPE (personal protective equipment) because they feel uncomfortable to use it, such as apron in the room oversize, handscone that students take out, and students tend to be lazy if using PPE (personal protective equipment) such as handscone and mask when performing actions not too dangerous. Students are always lazy to carry personal protective equipment such as handscones and masks. This is because students do not want to buy handscone and mask for personal protective equipment, provided by practice area and no supervision by nurse or head of room. Students are also sometimes lazy to wear scored in the room or while doing the action. Because students feel hot or uncomfortable if wearing layers of clothing. Students who do not adhere to the use of PPE do not understand the benefits and risks of using PPE (Personal Protective Equipment). The supervisor also supervises every action the student undertakes, but there are times when the land supervisor has other busyness not having time to supervise the students. When conditions like this can be used by students to disobey the use of PPE (Personal Protective Equipment).

Compliance behavior is temporary because this behavior will persist when there is supervision. If supervision is lost or loosened there will be non-compliance behavior. This compliance behavior will be optimal if the student himself considers this positive value behavior to be integrated through the act of nursing care or midwifery. This behavior will be achievable if the clinical counselor is a credible and motivational person. Sometimes a student feels laziness in using PPE (Personal Protective Equipment). Compliance of
students in infection control is an action done by students by following the standards or rules that have been set up in upacaya to prevent cross-infection in performing post op treatment action seksio sesare. Motivation and compliance are things that are directly proportional in the sense that the higher the motivation that exists within the self will be the higher the level of compliance. Students need extra supervision to make the students obedient.

Analysis of Compliance Factors of Clinical Practice Students in VK Room In Use of Personal Protective Equipment (PPE) In Post Section Cesarea (SC) Sukao Post Treatment In Sidoarjo Regional Hospital

The result of analysis of Logistic Regression test obtained significant value $\rho$ value $= 0,000 < \alpha = 0,05$ on knowledge variable, significant value $\rho$ value $= 0,233 > \alpha = 0,05$ on experiential variable, and significant value $\rho$ value $= 0,037 < \alpha = 0,05$ on organizational policy variables.

Based on the analysis results obtained significant value $\rho$ value $= 0,000 < \alpha = 0,05$ on the variable of knowledge which means knowledge factors that most influence student compliance.

Obedience comes from obedient basic words which means obedient. The level of compliance is the measurement of the implementation of activities, in accordance with the steps that have been set, the compliant level of compliance can be controlled that the program implementers have carried out activities according to the standards. According Sacket in Niven (2012) compliance is the extent to which student behavior in accordance with provisions provided by health professionals.

Knowledge is the result of knowing and this happens after people make sense to a particular object. Sensation occurs through the five senses, namely the sense of sight, hearing, smell, taste and touch. Much of human knowledge gained through the eyes, ears, knowledge or cognitive is a very important domain for the formation of one's actions (over behavior) (Notoatmodjo, 2010).

The measurement of the respondents 'knowledge level uses the question of the students' understanding of the importance of using PPE in accordance with the standards that should be known by every student who practices in the inpatient room. According to Bloom in Marlina (2010), that behavior is divided into 3 (three) domains of knowledge of matter, attitudes toward the material and action in connection with the material.

From result of research concluded that significant value $\rho$ value $= 0,233 > \alpha = 0,05$ on experiential variable. Seen from the research that experience has no relation with student obedience in the use of PPE. This is because the practice students may have little or no experience. Anyone having experience when doing wound does not wear scored and mask. There are also students who use the handscone is not sterile when doing wound care. Of these various things we can not conclude that experience can make a student obedient in the use of PPE.

From result of research concluded that significant value $\rho$ value $= 0,037 < \alpha = 0,05$ at variable of organization policy. Viewed from the results of research that the organization's policy is related to the compliance of students in the use of PPE. This is because students will be obedient when supervising supervisors in the act of wound care. The counselor will provide an appropriate sample of the procedure to the student clinical practice. After that students will be given an opportunity to perform in accordance with existing procedures. Students will follow the directions given by the land supervisor. Because every action done by the student is the point or value that will be given the guidance to the institution. Therefore supervision from the land supervisor is very important in the adherence of the students, so that every action that students undertake
practices in accordance with the procedures and use of PPE will always be used in any action.

From the research result concluded that significant value $\rho$ value $= 0.000 < \alpha = 0.05$ on knowledge variable. It can be concluded that knowledge is the most influencing factor to the compliance of clinical practice students in the use of PPE (personal protective equipment).

Knowledge is a very important factor for the formation of a person's behavior, if the student has a lack of knowledge about the potential or the source of danger in his environment, then the individual will tend to make a wrong decision, in this case the behavior of PPE (personal protective equipment). In this case the new behavior starts from the students know first what the contents of the guidance PPE (personal protective equipment) so that will generate a new knowledge. Only then will there arise an inner response which is the attitude to the guidelines, after knowing and being aware of the importance of the guideline, the student will perform the behavior according to the quality procedure.

The results of this study indicate that knowledge is one of the predisposing factors that encourage or inhibit individuals to behave (in terms of use of PPE). Efforts to be used by students in increasing the use of PPE in the inpatient room in Sidoarjo Hospital is by increasing the supervision of the use of PPE (personal protective equipment) which has been done, but not routine. Knowledge is very influential on the behavior of students in using PPE (personal protective equipment).

Therefore, students should try to increase or maintain knowledge about PPE (personal protective equipment). A person's behavior will be better and can last longer if based on good knowledge and awareness. Students who have a good knowledge of PPE (personal protective equipment) are expected to have a good attitude about PPE (personal protective equipment) as well.

**CONCLUSION**

1. Most of the students of clinical practice In VK (Verlos Kamer) Room of Sidoarjo Hospital have high knowledge that is 19 respondents (70.4%).
2. Most of the Clinical Practice Students in VK (Verlos Kamer) Room of Sidoarjo Hospital have experience of wound care that is 18 respondents (66.7%).
3. Most of the students of clinical practice In VK (Verlos Kamer) Room, Sidoarjo Hospital conducts organizational policy that is 18 respondents (66.7%).
4. Most of the students of clinic practice In VK (Verlos Kamer) Room Sidoarjo Hospital obedient in doing wound care using PPE (personal protective equipment) that is 19 respondents (70.4%).
5. Factors that most influence Clinical Practice Practice In VK (Verlos Kamer) Room In Use Of Personal Protective Equipment (PPE) In Post Cesarean Section Cesarean (SC) In Sidoarjo Hospital Sample is knowledge variable ($p$-value $0.000 < \alpha = 0.05$).

**SUGGESTION**

1. For Respondent
   With the results of this study students should be able to further increase knowledge and vigilance in doing medical action. And students prefer the use of PPE in doing medical action and not holding a non sterile handscone or other tools that are not sterile when already using a sterile handscone.
2. For Research Sites
Can be input to provide policy to medical personnel or student clinic practice for the use of Personal Protective Equipment (PPE). As well as providing SOPs that can be affixed on each side of the wall of the room so that nurses, medical personnel and clinical practice students become more vigilant and use PPE according to the procedure.

3. For Educational Institutions
With the results of this study should provide clear explanation about the use of PPE and require students to bring PPE equipment and used when performing actions even though not supervised by the supervisor.

4. For Further Researchers
For further research is expected to conduct research by adding attitude and availability of tools with a larger number of samples and involve male sex respondents.

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