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### FACTORS ASSOCIATED WITH INTENTION OF NURSING STUDENT TO PERFORM BASIC LIFE SUPPORT BASED ON THEORY OF PLANNED BEHAVIOR

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#### ABSTRACT

**Background:** Quality of CPR performed by nursing students met in lower of standart that was American Heart Association established. Factors that associated with basic life support performed by nursing students could be predicted using theory of planned behavior. **Purpose:** The major aim of the study was to analyse the correlation between attitude with intention, to analyse the correlation between subjective norm with intention, and to analyse the correlation between perceived behavioral control with intention. **Methods:** The Study design was analytic study with cross sectional approach. The participants were 100 undergraduate nursing students at two school of nursing in Banyuwangi, Indonesia. participants were recruited from march one to march 30, 2020 by self administered questionnaire. The data collected was tabulated in MS Excel sheet and analyzed using SPSS version 16 software programme. **Result:** Majority of participants had good intention, positive attitude, good subjective norm and good perceived behavioral control. Attitude, subjective norm, and perceived behavioral control had correlation with intention of nursing students to perform basic life support. **Conclusion:** The factor that had strongly correlation with intention was attitude, followed by subjective norm and perceived behavioral control. By modifying positive attitude, good subjective norm and good perceived behavioral control could enhance intention of nursing students to perform basic life support.

**Keywords:** *nursing students, basic life support, theory of planned behavior, intention*

#### BACKGROUND

Basic Life Support (BLS) including Cardiopulmonary resuscitation (CPR) was early step of recognition and providing early emergency treatments as ventilation and circulation to respiratory and cardiac problem. BLS was a combination of providing ventilation by mouth to mouth and chest compression to achieve the normal blood circulation to the brain and other vital organs[1]. Previous study showed that early recognition of cardiac arrest, emergency medical services (EMS) activation, immediate cardiopulmonary resuscitation and

defibrillator could make a better result between life and death[2]. Other study also found that high quality of CPR could prevent mortality cases related to cardiac arrest[3].

Nursing students that had passed basic life support training could be competent to provide high quality of basic life support, because they were frequently as the first health care professional that frequently contacted with numoreus patients' hospital in emergency situation [4]. Quality of CPR performed by nursing students met in lower of standart that was American Heart Association established[5].

Factors associated with basic life support performed by nursing students could be predicted using theory of planned behavior. The theory explained that intention was the first factor that decided person to perform the behavior[6]. Previous study reported that theory of planned behavior could predict the past behavior by analysing the intention and factors as proportion of intention were attitude, subjective norm and perceived behavioral control[7]. The objective of the study was : 1) to analyse the correlation between attitude with intention, 2) to analyse the correlation between subjective norm with intention, 3) to analyse the correlation between perceived behavioral control with intention.

## METHODS

The Study design was analytic study with cross sectional approach. The purpose of analytic study was to analyse factors associated with intention of nursing students to perform basic life support. The factors were attitude, subjective norm, and perceived behavioral control. The cross sectional approach was measurement of independent variables (attitude, subjective norm, and perceived behavioral control) and dependent variables (intention) was conducted together at one section.

The participants were 100 undergraduate nursing students at two school of nursing in Banyuwangi, Indonesia. participants were recruited from march one to march 30, 2020. The inclusion criteria of participants were nursing students that had passed emergency nursing subject and willing as voluntary participants. The participants were informed about the objective of the study.

Data collection methods consisted of two steps. The first step was selection of the participants based on inclusion criteria that consisted of had passed from emergency nursing subject and willing as the participant. the second step was collection data from the participants using the questionnaire. The participants were informed about the objective of the study. The participants was

asked to fill each question of the questionnaire by choosing alternative answers (strongly disagree, disagree, agree, strongly agree). The result of correct responses of participant was collected to analyse.

The instrument was self-administered questionnaire that was adopted and developed from Theory of Planned Behavior. The questionnaire consisted of independent variable (attitude, subjective norm, and perceived behavioral control) and dependent variable (intention of nursing students to perform basic life support). Attitude variable had seven questions, subjective norm had six questions, perceived behavioral control had seven questions, and intention had four questions. The alternative answers of the questions using likert scale modified (1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree). The instrument had been tested to ensure the validity using Pearson test and reliability using Cronbach alpha.

The data collected were tabulated in MS Excel sheet and analyzed using SPSS version 16 software programme. The statistical analysis using SPSS was divided into two sections: descriptive analysis and bivariate analysis. Descriptive analysis presented distribution frequency (frequency and percentage) of each variable that consisted of demographic data and core variable on the study were independent variable (were attitude, subjective norm, and perceived behavioral control) and dependent variable was intention. Bivariate analysis was used to test correlation between two variables (independent and dependent) using rank Spearman analysis.

## RESULTS

Descriptive analysis.

Result of the descriptive analysis showed that majority of 100 participants were female (79%), 20 years old (40%), positive attitude toward basic life support (85%), good subjective norm (69%), good perceived behavioral control (72%), and good intention of nursing student to perform basic life support (82%). (table 1).

**Table 1.** Characteristic of the participants

| Variables                    | Category | N  | %  |
|------------------------------|----------|----|----|
| Sex                          | Male     | 21 | 21 |
|                              | Female   | 79 | 79 |
| Age (year)                   | 18       | 9  | 9  |
|                              | 19       | 25 | 25 |
|                              | 20       | 40 | 40 |
|                              | 21       | 24 | 24 |
|                              | 23       | 1  | 1  |
|                              | 25       | 1  | 1  |
| Attitude                     | Positive | 85 | 85 |
|                              | Negative | 15 | 15 |
| Subjective norm              | Good     | 69 | 69 |
|                              | Moderate | 16 | 16 |
|                              | Less     | 15 | 15 |
| Perceived behavioral control | Good     | 72 | 72 |
|                              | Moderate | 15 | 15 |
|                              | Less     | 13 | 13 |
| Intention                    | Good     | 82 | 82 |
|                              | Less     | 18 | 18 |

Bivariat analyzed

**Table 2.** Correlation between attitude with intention of nursing students to perform basic life support

| Attitude   | Intention |    |      |    |       |    |
|--|-----------|----|------|----|-------|----|
|  | Less      |    | Good |    | Total |    |
|  | n         | %  | N    | %  | n     | %  |
| Negative   | 15        | 15 | 0    | 0  | 15    | 15 |
| Positive   | 3         | 3  | 82   | 82 | 85    | 85 |
| Total  | 18        | 18 | 82   | 82 | 85    | 85 |
| Spearman correlation coefficient $r=0,897$ ( $p=0,000$ ) |           |    |      |    |       |    |

The result showed that there was correlation between attitude and intention of nursing student to perform basic life support ( $r=0,897$ ;  $p=0,000$ ). Majority of participants with positive attitude had good intention to perform basic life support (82%). It mean that attitude had positive correlation with intention to perform basic life support.

**Table 3.** Correlation between subjective norm with intention of nursing students to perform basic life support

| Subjective norm  | Intention |    |      |    |       |     |
|--|-----------|----|------|----|-------|-----|
|  | Less      |    | Good |    | Total |     |
|  | n         | %  | N    | %  | n     | %   |
| Less   | 15        | 15 | 0    | 0  | 15    | 15  |
| Moderate   | 1         | 1  | 15   | 15 | 16    | 16  |
| Good   | 2         | 2  | 67   | 67 | 69    | 69  |
| Total  | 18        | 18 | 82   | 82 | 100   | 100 |
| Spearman correlation coefficient $r=0,701$ ( $p=0,000$ ) |           |    |      |    |       |     |

The result showed that there was correlation between subjective norm with intention of nursing students to perform basic life support ( $r=0,701$ ;  $p=0,000$ ). Majority of participants with good subjective norm had good intention to perform basic life support (67%). It mean that subjective norm had positive correlation with intention to perform basic life support.

**Table 4.** Correlation between perceived behavioral control with intention of nursing students to perform basic life support

| Perceived Behavioral Control                             | Intention |    |      |    |       |     |
|--|-----------|----|------|----|-------|-----|
|  | Less      |    | Good |    | Total |     |
|  | n         | %  | n    | %  | n     | %   |
| Less   | 13        | 13 | 0    | 0  | 13    | 13  |
| Moderate   | 1         | 1  | 14   | 14 | 15    | 15  |
| Good   | 4         | 4  | 68   | 68 | 72    | 72  |
| Total  | 18        | 18 | 82   | 82 | 100   | 100 |
| Spearman correlation coefficient $r=0,617$ ( $p=0,000$ ) |           |    |      |    |       |     |

The result showed that there was correlation between perceived behavioral control with intention of nursing students to perform basic life support ( $r=0,617$ ;  $p=0,000$ ). Majority of participants with good perceived behavioral control had good intention to perform basic life support (68%). It mean that perceived behavioral control had positive correlation with intention to perform basic life support.

## DISCUSSION

The result showed that attitude, subjective norm, and perceived behavioral control had correlation with intention of nursing students to perform basic life support. The factor that had strongly correlation with intention was attitude, followed by subjective norm and perceived behavioral control. The result of study was consistent with previous study showed that attitude was the strongest predictor of intention to perform CPR among college students, followed by subjective norm and perceived behavioral control[8]. Other studies supported with result of the study that attitude and subjective norm were the factors that had strongly correlation with intention[9]. It indicated that intention of nursing students performed basic life support was appear from

internal (attitude) and external factors (subjective norm). The both factors walked together to enhance the intention of nursing students.

Another study reported that the two influenced factors with intention were attitude and self efficacy (perceived behavioral control), not subjective norm[10]. It proved that intention of person could be appear only because of the internal factors (attitude and self efficacy), did not need the external factors (subjective norm). Meanwhile, another study reported that subjective norm was the strongest factor that had correlation with intention of nurses to implement patient safety behavior[11].

Intention of nursing students to perform basic life support was associated with attitude, subjective norm and perceived behavioral control. Meanwhile, the closed factor or strongest factor that had correlation with intention in every person was different, depend on ability of individu to optimalize the internal factors (attitude) and accepting the external factors (subjective norm), or combining the both factors (attitude and subjective norm) to create “perceived behavioral control”.

## CONCLUSION

Attitude, subjective norm and perceived behavioral control had positive correlation with intention of nursing students to perform basic life support. The factor that had strong correlation with intention was attitude, followed by subjective norm and perceived behavioral control. By modifying Positive attitude, good subjective norm and good perceived control could enhance intention of nursing students to perform basic life support.

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