Analysis of Factors Affected to Community Nurses's Role in Promotive and Preventive Care

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Abstract: Community nurses had important role in promotive and preventive care in community. Aim of the study was to identify community nurses role in promotive and preventive care, identify factors affected to community nurses role, analysis of factors affected to community nurses's role in promotive and preventive care in community based on Health Promotion Model (HPM). Design of the study was explanatory with cross sectional approach. Sum of participant was 161. This study was conducted in 11 Public Health Center in Banyuwangi at 1 January to 30 January 2018. Methods of data collection was cluster sampling. The results showed behavior related cognition and effect of nurses had affected to commitment of nurses (t-stat=19,575); commitment (t-stat=4,490), interpersonal influences (t-stat=3,747), and situational influences (t-stat=5,796) directly had affected to community nurses role. That was important to enhance of community nurses role capacity through modifying commitment of nurses, interpersonal influence factors and situational influence factors.

1 BACKROUND

Health Promotion and prevention was a part of primary health care services conducted by community nurses to individu, family and community to achieve a higher quality of health through enhancing the ability, fulfilling basic personal need and self actualization (Pender, 2011). Health promotion and prevention was a part of primary programmes in Public Health Center to enhance the community' abilities to implement their health promoting lifestyle behaviors and preventing community illness (Ministry of Health Indonesia, 2007).

Health Promotion was an effort of communities' empowerment through counselling the community to promote health lifestyle choices. Implementing of Dengue Haemoragic Fever (DHF) in community was caused by failure of implementation of health promotion and prevention in community.

Kumat- Thome *et al*. (2017) reported that failure of implementation of health promotion and prevention in community caused by lack of community nurses's role to promote health lifestyle behaviors to community and unable to conduct intervention to prevent sickness. Whiehead (2017) proved that majority of community nurses who

health promoting behaviors include: taking responsibility for one's health, exercise and physical activity, spiritual involvement, proper nutrition, stress management, techniques and satisfying interpersonal relationship (Fuller, 2015). Meanwhile, health prevention was a kind of health care services that focusing on disease prevention (primary, secondary and tertiary level) through implementing of healthy lifestyle, conducting early disease screening, early disease treating, reducing impact of disease and rehabilitation (Thomas *et al*., 2014).

Incidence of Dengue Haemoragic Fever (DHF) in Banyuwangi during the period 2016 reached 1300 cases with 11 cases of them was died. This number was increasing compared to 2015, which was 900 cases with 9 cases of which died worldwide. The High incidence of giving health promotion in the community did not be supported by availability of regulation from regional government and community. Leak of sopporting system like poor of time, poor availability of facilities like computer etc.

The purpose of the study was to (1) identify community nurses role in health promotion and prevention, (2) identify factors affected to community nurses role, (3) analyse factors affected to community nurses's role in health promotion and

183

prevention in community based on Health Promotion Model (HPM).

2 METHODS

2.1 Design

This study used explanatory reseach design and cross sectional approach.

2.2 Instrument

We used questionnare that was developed upon Health Promotion Model (HPM) as instrument to measure community nurses role and factors affected to community nurses role that consisted of personal factors, behavior related cognntion and effect, interpersonal influences, situational influences, and commitment of nurses. 1) Personal factors questionnare consisted of age, sex, education level and working period. 2) behavior related cognition and effect questionnare consisted of cognitive aspect with 8 close ended questions and affective aspect with 10 close ended questions. 3) Interpersonal influences questionnare contained 16 close ended questions, 4) Situational influences questionnare contained 6 close ended questions. 5) commitment contained 6 close ended questions, 6) community nurses role questionnare contained 7 close ended questions.

2.3 Data Collection

In January 2018, 161 registered nurses working at 11 Public Health Center in Banyuwangi, Indonesia were invited to participate this study. Questionnare sheet that consisted of personal factors, behavior related cognition and effect, interpersonal influence, situational influence, commitment and community nurses role were distributed to nurses after willing as a participant. A participant must be met the inclusion criteria. Inclusion criteria were a nurse who worked at least one year experience in Public Health Center (PUSKESMAS) in Banyuwangi and having a health phyisic and mental condition.

2.4 Analysis

2.4.1 Descriptive

Descriptive analysis was conducted by displaying frequency distribution of each variable on the tables

that consisted of frequency and percentage of each variable.

2.4.2 Inferencial Analysis

We used smartPLS software to analysis of influence of independen variables (personal factors, behavior related cognition and effect, interpersonal influence, situational influence, commitment) to dependen variable (community nurses role in health promoting and preventing services). Result of this analysis was classified into two section: there was influence if t-stat value was more than 1,96, there was not influence if t-stat value was less than 1,96.

Table 1: *Personal factors* of community nurses in Public Health Center- Banyuwangi at January 2018.

Personal factors variable	Category	F	%
Age	21-30 years	53	32,9
	31-40 years	74	46,0
	40-50 years	27	16,8
	> 50 years	7	4,3
Sex	Man	87	54
	Women	74	46
Education level	Senior high school	16	9,9
	Diploma	113	70,2
	Bachelor	32	19,9
Working period	1-10 years	61	37,9
	11-20 years	73	45,3
	21-30 years	27	27

Table 2: *Behavior related cognition and effect* of community nurses in Public health Center Banyuwangi at Januari 2018.

Behavior related cognition and effect variable	Category	f	%
Cognitive	Low	34	21,1
	Moderate	36	22,4
	High	91	56,5
Affective	Negative	32	19,9
	Positive	129	80,1

3 RESULTS

3.1 Characteristic of Respondents

3.1.1 Personal Factors

Personal factors consisted of age, sex, education level, and working period as presented in this table 1:

Table 1 *personal factors* showed that majority of participant was age on range 31-40 years, sex was man, level of education was diploma of nursing, and working period was on the range 11-20 years.

3.1.2 Behavior Related Cognition and Effect

Behavior related cognition and effect variable consisted of cognitive and affective as presented in the table 2:

Table 2 showed that majority of participant cognition was on the high level, whereas participant affection was on the positive level.

Table 3: Interpersonal influences of community nurses in public health center- Banyuwangi at Januari 2018

Interpersonal Influences variable	Category	F	%
Supported by colleague	Low	33	20,5
	Moderate	67	41,6
	High	61	37,9
Supported by other health professional	Low	38	23,6
	Moderate	84	52,2
	High	39	24,2
Supported by chairman of Public Health Center	Low	32	19,9
	Moderate	77	47,8
	High	52	32,3
Supported by community	Low	34	21,1
	Moderate	62	38,5
	High	65	40,4

Table 4 Situational influences of community nurses in public health center- Banyuwangi at January 2018

Variabel Situational Influences	Category	f	%
Regulation	Low	33	20,5
	Moderate	44	27,3
	High	64	52,2
Facilities	Low	25	15,5
	Moderate	43	26,7
	High	93	57,8

Table 5: Commitment of community nurses in public health center- Banyuwangi at Januari 2018.

Commitment variable	Category	F	%
Affective	Negative	36	22,4
	Positive	125	77,6
Normative	Negative	36	22,4
	Positive	125	77,6
Continuance	Negative	22	13,7
	Positive	139	86,3

Table 6 Community nurses role in public health center- Banyuwangi at Januari 2018.

Community nurses role variable	Category	f	%
Promotive	Low	53	32,9
	Moderate	85	52,8
	High	23	14,3
Preventive	Low	50	31,1
	Moderate	80	49,7
	High	31	19,3

3.1.3 Interpersonal Influences

Interpersonal Influences variable consisted of supported by colleague, other health professional, chairman of Public health Center and community as presented in the table 3.

Table 3 showed that majority of supported by colleague was on the moderate level, supported by other health professional was on the moderate level, supported by chairman of public health center was on the moderate level, and supported by community was on the moderate level too.

3.1.4 Situational Influences

Situational Influences variable consisted of regulation and facilities as presented in this table below:

Table 4 showed that majority of regulation was on the high level, and the availability of facilities was on the high level.

3.1.5 Commitment

Commitment variable consisted of *affective, normative dan continuance* as presented in the table 5:

Table 5 showed that majority of *affective* indicator was on the positive level, *normative* indicator was on the positive level, dan *continuance* indicator was on the positive level too. It indicated

that community nurses had positive commitment to conduct health promoting dan preventing services to community.

3.1.6 Community Nurses Role

Community nurses role variable consisted of promotive dan preventive services as presented in table 6:

Table 6 showed that majority of promotive efforts that conducted by community nurses was on the moderate level, and preventive services that conducted by community nurses was on the mederate level too. It indicated that community nurses conducted promotive and preventive services to community goodly enough.

3.1.7 Analysis of Factors Affected to Community Nurses Role

The table showed that there was affected of the two variables if t-stat value (>1,96), there was not affecting of the variables if t-stat value (<1,96). By the above tables could be concluded that commitment (t-stat=19,575), commitment (t-stat=4,490), interpersonal influences (t-stat=3,747), and situational influences (t-stat=5,796) influenced community nurses role.

4 DISCUSSION

4.1 Affected of Commitment of Nurses to Community Nurses Role

Study result showed that commitment affected to community nurses role (t-stat=4,490). commitment of nurses also showed on the positive level, that mean community nurses had a positive commitment to conduct their role on health promotive and preventive care to the community.

The result of study was relevance with previous study that implementation of health promoting services in the community was influenced by commitment of community nurses and supported by organization culture (Garry *et al.*, 2017). Commitment could encourage a person to work fully dedication, having deseart to give his power and ability to work fully on purpose of organization so that could reach the optimum level (Maijala *et al.*, 2017).

Poghosyan *et al*. (2017) also showed that commitment of nurse had contribute to achievement of promotive and preventive care in community.

Nurses that had commitment to their self, organisation, and society could present a good promotive and preventive care behavior.

Commitment was as a part of importance role of community nurses in giving promotive and preventive care to community. So that was needed an effort to enhance commitment of nurses.

4.2 Affected of Interpersonal Influences to Community Nurses Role

Study result showed that interpersonal influences affected to community nurses role (t-stat=3,747). Interpersonal influences on the study also showed on the moderate level, that mean community nurses had a chance to conduct their role in giving health promotion and prevention services to community because they was supported by their nurses colleague, other health professional, chief of Public Health Center and community.

That was relevance with Pender (2011) statement that the goal of health promoting and preventing efforts were depended by interpersonal influences that consisted of supporting of colleague, other health professional and community. Grant *et al.* (2017) also reported supporting from colleague,

Table 7: Parameter of path coefficient to latent construct as direct influence and indirect influence.

Affected of independen variable to dependent variable	Path Coeffienct Parameter	T-Stat Value	P value
affected of behavior related cognition and effect to commitment	0,812	19,575	0,000
affected of commitment to community nurses role	0,297	4,490	0,000
affected of personal factors to community nurses role	0,062	1,294	0,197
affected of interpersonal influences to community nurses role	0,263	3,747	0,000
affected of situational influences to community nurses role	0,433	5,796	0,000

other health profession, and community could optimise the community nurses role in giving promotive and preventive care to community and enhancing of community awareness to implement health life style behaviors (Kurnat-Thoma *et al*., 2017) .

Interpersonal influence that consisted of supporting from colleague, other health profession, and community was the factors that affected to commnity nurses role in giving promotive and preventive care to community. That was important to encourage community nurses always making good relationship with colleague, other profession and community.

4.3 Affected of Situational Influences to Community Nurses Role

Study result showed that situational influences affected to community nurses role (t-stat=5,796). Situational influences on the study also showed on the high category, that mean there were regulation related to implementation of health promotive and preventive services in the community and availability of facilities that supported promoting and preventing efforts.

That was relevance with Pender (2011) statement that the goal of health promoting and preventing efforts were depended by situational influences that consisted of availability of regulation and facilities. Thomas *et al*. (2014) reported that situational influences that support implementation of promotive and preventive care in community was regulation and availabilty of facilities. Regulation could guide the community nurses about the scope that should be done and ensure the community nurses from many kinds of duty accident (Tingvoll *et al*., 2016). Whitehead (2017) also proved that availability of regulation and facilties had influenced to implementation of promotive and preventive care in community.

Situational influences that consisted of regulation and facilities was a part of importance role of community nurses in promotive and preventive care. To enhance affected of situational influences, could be done by ensure of availabity of regulation and facilities.

5 CONCLUSION

Community nurses of Public Health Center (PUSKESMAS) in Banyuwangi conducted

promotive and preventive care to community goodly enough. Commitment of nurses, interpersonal influences, and situational influences were factors that affected to community nurses role in promotive and preventive care. It was considered to enhance of community nurses role capacity through modifying commitment of nurses, interpersonal influence factors and situational influence factors.

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