

## The Diagnoses Of Community Nursing

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**Abstract:** *The diagnoses of community nursing is a clinical decision on community problems and community in which nurses have the authority to solve it. The recent problems occurs in nursing diagnoses assertion in the area of the community has not been yet formalized, and lack of participants referring to the determination of NANDA. This research aims to arrange mode of data analysis of community and to identify a diagnoses of community nursing referring to NANDA. The research design is a kind of case study, and the population is the villagers of Sumber Pakem Subdistrict of Sumber Jambe, Jember. The sample obtained from the research was 100 families chosen by using proportional random sampling. The data collection was conducted by doing an interview, windshield survey, examination, and document study conducted on May, 4-16 2015. Further, the data analysis was conducted by using qualitative method. The result of this research confirmed that there were three modes of data analysis of community nursing and the diagnoses of community nursing referring to NANDA occurred on overall aggregates: 1) The readiness to improve pregnancy and childbirth process on pregnant women, 2) The readiness to improve the breastfeeding on breastfeeding mothers, 3) the readiness to improve toddlers health management, 4) The deficiency risk of the health of teenagers community, 5) the readiness to improve fertile couples relationship, 6) ineffectiveness of therapeutic regimen management of the elderly people, 7) ineffectiveness of environmental health maintenance. The result showed that pregnant women, breastfeeding mothers, toddlers, and fertile couples have an optimal health, the teenagers are risky of susceptible health problems, the elderly people and environmental health are suffering from health problems. Thus, the determination of nursing diagnoses is likely to be identified for overall aggregates including environmental health by using appropriate modes of analysis.*

**Keywords:** -Nursing Diagnoses, Community, Model.

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### I. Introduction

The diagnoses of community nursing is a clinical decision on community problems and community in which nurses have the authority to solve it. The problems on the documentation of community nursing care is moderately complex until now, Rohman (2015) [1] states that the problem can be perceived as follows: the result of the study was real and accurate, but not fully complete, and not well-organized. Data clarification process, problems determination and cause of the problems were exist, but the formulation of diagnoses nursing was not standardized and not regarding the nursing diagnoses on NANDA. The identified problems did not fully represent the six aggregates yet in community nursing and not fully perform yet the problems occur in six primary programs of Health Center. The priority determination of community nursing problems used MUEKE standardization that consist of twelve points with 1-4 range. Goals and indicators of successful determination was not exist, so planning design strategy was not able to perform its relevance with the goals that would be reached.

The diagnoses of community nursing is a critical stage in a care plan. Diagnoses can show self-identity of profession, provide the needs of clients, and can be an information center of care direction given to the clients. If the nursing diagnoses was not formalized and not standardized, it would arise multiple interpretation to the diagnoses itself. It would be susceptible of misunderstanding among nurses who took care of them.

During this time, the determination standardization of community nursing diagnoses generally refers to Omaha classification. Hwang, Jee-In, Cimino, James J., and Bakken Suzanne. (2003) [2] mentioned Omaha system including the classification of scheme, intervention scheme, and mode result (for instance, rating scale). The classification of scheme consists of 40 clients' problems drawn up in four domain: environment (4 problems), psychosocial (12 problems), physiologic (15 problems), and behavior (9 problems) dealing with health. While Tastan et. al. (2013) [3] stated that there are two literatures mostly used to make a documentation of nursing diagnoses terminologies: 'North American Nursing Diagnoses-International' (NANDA), 'Nursing Interventions Classification (NIC)', 'Nursing Outcome Classification' (NOC), and (2) Omaha system. At the same formulation with Tastan et. al. (2013), Thoroddsen (2012) [4] stated that nursing diagnoses terminologies mostly used in European countries are NANDA, NOC, and NIC.

Nowadays, nursing diagnoses terminologies in Indonesia is drawn up whether in nursing care services or in educational institutions also refer to the terminologies determined by NANDA. In fact, however, care services of community nursing which had been applied recently was less for referring to NANDA. The greatest

obstacle was that NANDA still provides three nursing diagnoses that obviously applies target label of community, while others targets to families, specific groups, or “not written” target, but it shows individual target as client. This research aims to draw up the models of data analysis of community nursing and to identify the diagnoses of community nursing referring to NANDA.

## **II. Nursing Diagnoses**

Nursing diagnoses is an assertion that represents human responses (healthy condition or the change of actual or potential interaction pattern) from individual or groups in which nurses legally identify and are able to give intervention exactly to maintain the status of clients’ health or to reduce, to get rid of, or to prevent alterations. Nursing diagnoses is also meant as clinical assesment regarding individual responses, families or communities toward health problems or actual or potential life process as the basis for the selection of nursing intervention to achieve results, in which nurses are responsible for that diagnoses (Rohmah dan Walid, 2012) [5].

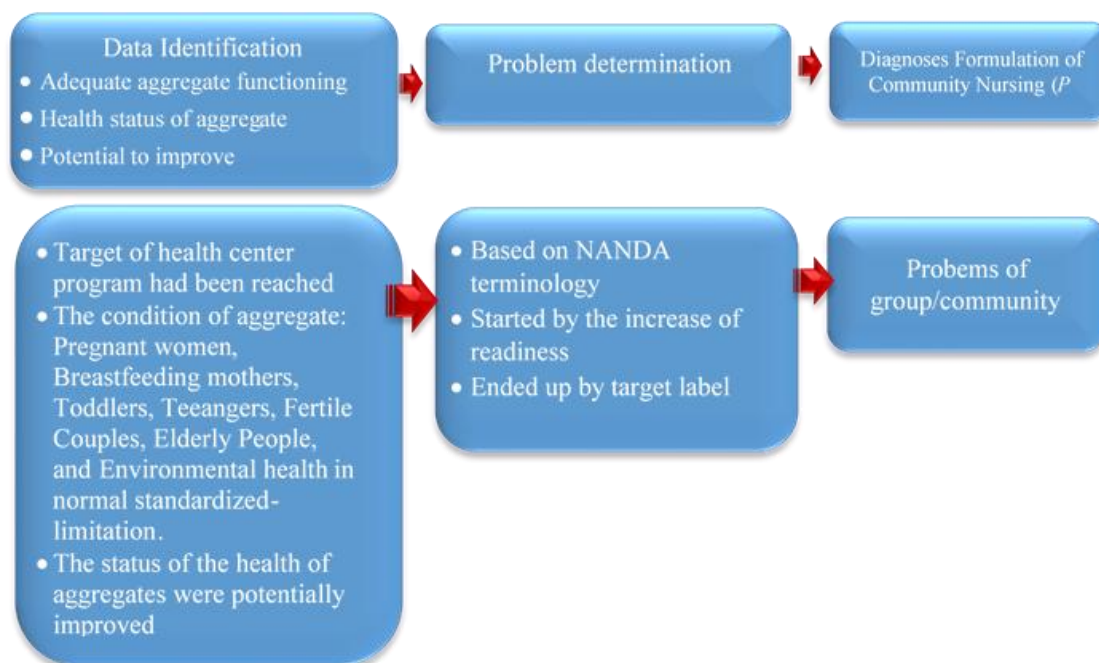
Several steps to establish nursing diagnoses includes: 1) Data Classification. The data classification was classifying the clients’ data or particular conditions in which the clients faced health problems or nursing based on problems criteria. The classification was based on the primary needs of human classifying into subjective and objective data. 2) Data interpretation, making an interpretation for classified data in the form of nursing problems or collaborative problems. 3) Determining Cause-Effect Relationship, from nursing problems that had been determined and then, nurses determine some factors dealing with or risk factors which possibly become the cause of related problems. The cause contingency should refer to group of provided data. 4) Formulating nursing diagnoses. A complete dignases formulation consists of Problem of Etiology Symtom (PES). However, for the risk or hish rish diagnoses, and it is quite enough to identify them in two parts, problem and etiology, while for the syndrome diagnoses and healthy, it is enough to identify them in one question only, problem. Whereas the types of nursing diagnoses includes: actual, risk.high risk, contingency, syndrome, and healthy/prosperous (Rohmah dan Walid, 2012) [5].

## **III. Research Method And Materials**

The research design was a kind of case study conducted in Sumber Pakem, Sumber Jambe Jember. The research stages include: 1) General study of community, study of families, individual study of chosen families, 2) Data analysis, 3) Nursing diagnoses formulation. The data collection was conducted by doing an interview, winshield survey or observation, examination, and document study that had been conducted on May, 4-16 2015. The population consisted of: 6 hamlests, they are Krajan I, Krajan II, Karang people (2937 male; 3106 female). The sample is 100 families taken by using proportional random sampling inlcuding: 14 pregnant women, 10 breasfeeding mothers, 39 toddlers, 39 teeangers, 84 fertile couples, 14 elderly people, 2 single family. The data was analyzed by using qualitative method through 4 steps: 1) Data classification based on aggregate, 2) community problems determination, 3) determining cause-effect relationship, and 4) formulating the diagnoses of community nursing. The first step to the third step of analysis was formulated in the modelof data analysis of community nursing. At the step of determining cause-effect relationship, it was intended to make a decision of cause or risk factors so that at healthy or prosperous nursing problems, this step would not be applied. Whereas nursing diagnoses formulation refered to the following literature: actual nursing problems using PES, Problem related to Etiology that was marked by Symtom. Risk nursing problems using PE, Problem related to Etiology. Also, healthy or prosperous nursing problems using P only was that it made an assertion of problem. The reference on NANDA was applied in two ways: first, if in the diagnoses of NANDA it was identified regarding community target, then nursing diagnoses would be set upon NANDA, second, if in the diagnoses of NANDA it was not identified regarding community target, then nursing diagnoses would be set by applying diagnoses based on NANDA which then it would be completed through the appropriate target label, e.g., it happened to PUS group, then it would likely to be added by the words “on fertile couples”.

## **IV. Research Result And Discussion**

- A. Model and data analysis of community nursing on ‘healthy’ diagnoses
1. Model of data analysis of community nursing diagnoses with ‘healthy or wellnes’ type.



**Figure 1.** Mode of data analysis of community nursing diagnoses healthy type;

2. Data analysis of community nursing on pregnant women aggregate, breastfeeding mothers, toddlers, and fertile couple.

**Table 1. Data analysis of Pregnant women Aggregate in Sumber Pakem on May 2015**

Data Collection	Problems
<ol style="list-style-type: none"> <li>1. Number of pregnant women was 14%</li> <li>2. Number of pregnant women up to 35 years old was 75% (10 people)</li> <li>3. Number of parental checking up their pregnancy was 80% (11 people)</li> <li>4. Number of pregnant women checking up their pregnancy three times was 63% (7 people)</li> <li>5. Pregnant women who did not check up their pregnancy said: "I'm afraid of checking up my pregnancy because I don't want to lose my child"</li> <li>6. Number of childbirth in health services was 100%</li> </ol>	The readiness improves pregnancy and childbirth process

**Table 2. Data Analysis of Breastfeeding Mothers Aggregate in Sumber Pakem on May 2015**

Data Classification	Problems
<ol style="list-style-type: none"> <li>1. Number of breastfeeding mothers was 72%</li> <li>2. Mothers who breastfed her child was 93%</li> <li>3. Breastfeeding period &lt;1 month (7%), 1-4 months (75%), 5-12 months (75%), and &gt;12 months (16%)</li> </ol>	The readiness improves the breastfed of breastfeeding mothers

**Table 3. Data Analysis of Toddlers in Sumber Pakem on May 2015**

Data Classification	Problems
<ol style="list-style-type: none"> <li>1. Number of toddlers was 39%</li> <li>2. Toddlers who had Health ID Card (KMS) was 98%</li> <li>3. Toddlers who came to health center was 91%</li> <li>4. Toddlers who got immunized was 95%</li> <li>5. Toddlers who were in green line was 89%</li> <li>6. Toddlers who were BGM was 3%</li> <li>7. Toddlers who were above the green line is 8%</li> <li>8. Exclusive breastfeeding was 30%</li> </ol>	The readiness improves toddlers health management

**Table 4. Data Analysis of Fertile Couples in Sumber Pakem on May 2015**

Data Collection	Problems
<ol style="list-style-type: none"> <li>1. Fertile couples was 42%</li> <li>2. Fertile couples who became KB acceptor was 84%</li> <li>3. Contraception followed by pills was 73%, injection was 20%, IUD was 3%, implantation was 6%</li> </ol>	The readiness improves fertile couples relationship

B. Model and data analysis of community nursing on diagnoses of risk

1. Model of data analysis of community nursing on diagnoses of risk

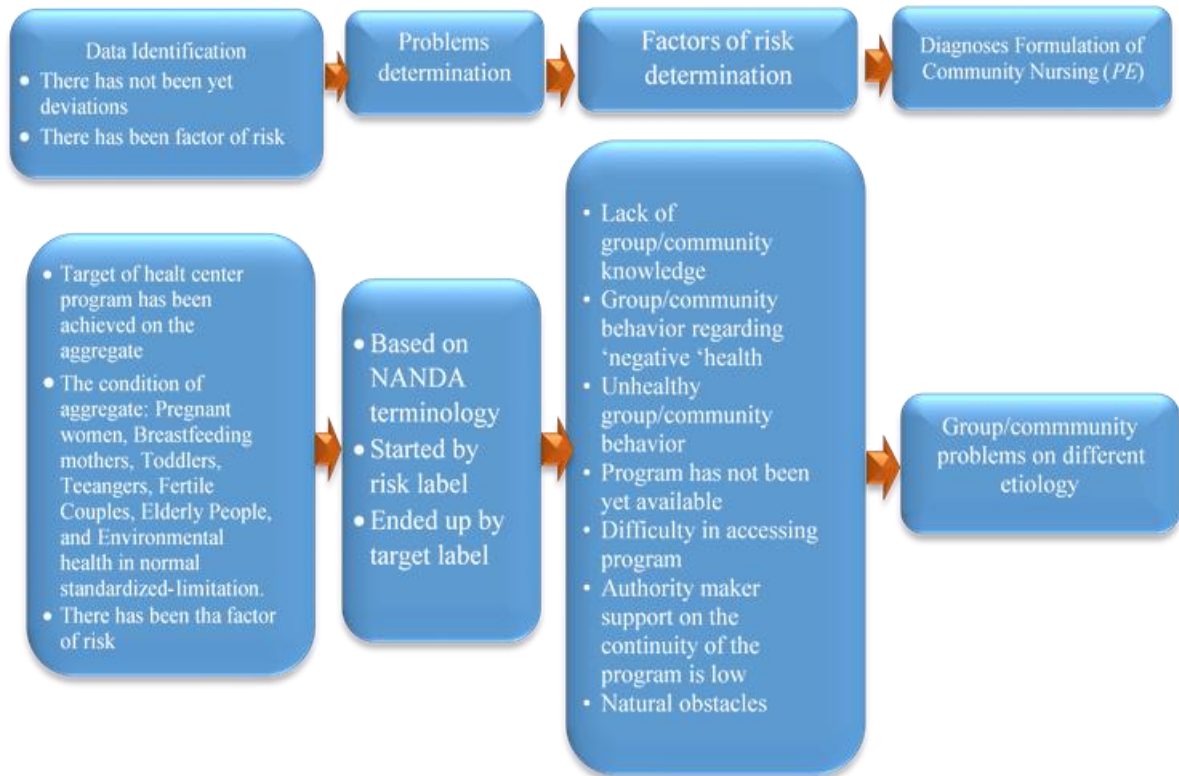


Figure 2. Model of data analysis of community nursing on diagnoses of risk

2. Data analysis of community nursing on daignosis of risk

Table 5. Data Analysis of Teenagers Aggregate in Sumber Pakem on May 2015

Data Collection	Problems	Cause Contingencies
Teenagers 1. Smoking teenagers were 33%, alcoholic drinkers were 5% 2. Free time usage: music was 42%, religion was 33%, sports was 24% 3. Number of one school of SMPN 1, one shcool of MTs of Private School (in a Boarding School), School Health Center (UKS) in SMPN has been formed, but it is nonactive because there were no trainee students and no available trainers. The School Health Center of MTs had not been yet formed. 4. There were 24 male students and 44 female students 5. There were 12 students who were sick in April by the diseases of: headache, stomachache, itching, and thypoid.	The deficiency of the group of teenagers health	No available health prevention program for the group of teaangers

C. Model and data analysis of community nursing on actual diagnoses

1. Model of data analysis of community nursing on actual diagnoses

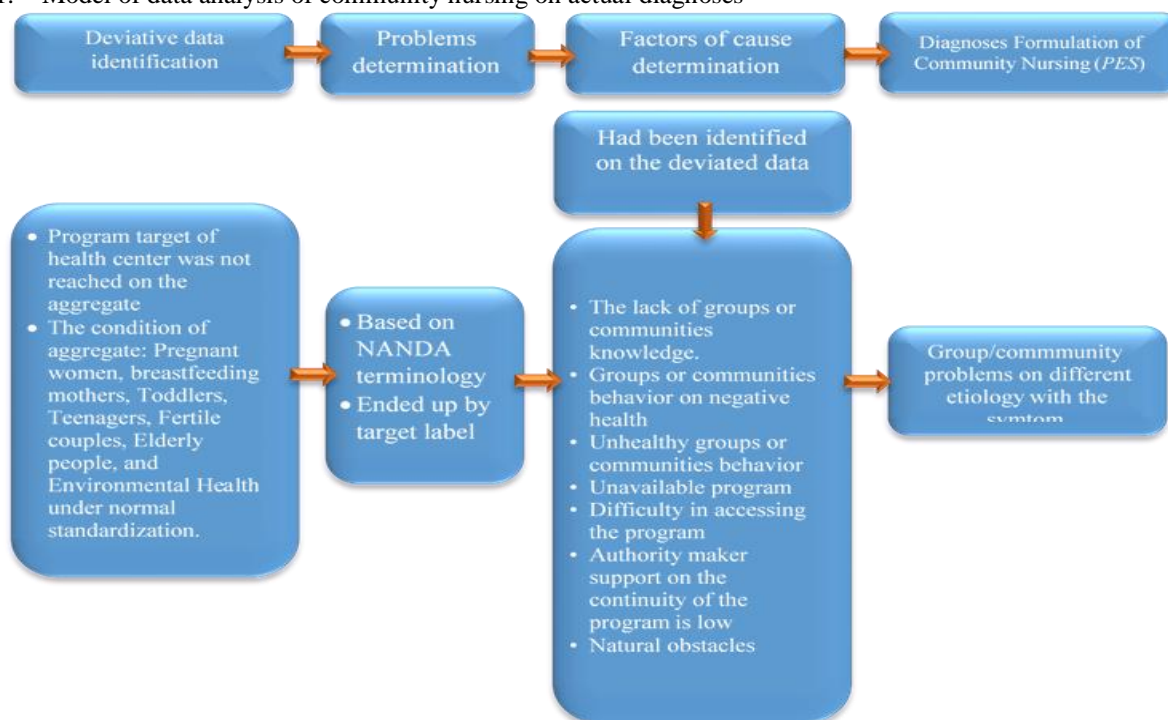


Figure 3. Model of data analysis of community nursing on actual diagnoses

2. Data analysis of community nursing on actual diagnoses

Table 6. Data Analysis on the Aggregate of Elderly People in Sumber Pakem on May 2015

Data Collection	Problems	Cause contingency
Elderly people 1. Hospitalized elderly people was 72% including: (rheumatic 39% 2. Hypertension was 15%; asthma was 15%; Tubercular pulmonary was 4%, and Cataract was 4%) 3. The elderly people who got the cure in health service center was 74% 4. The elderly people who spent the time by gardening was 86% 5. The elderly people who did not attend posyandu was 93% 6. There was only one posyandu for elderly people in the area of Sumber Pakem and it had not been disactivated due to the health workers problems.	Ineffectiveness of therapeutic regimen management of the elderly people	The lack of health service functioning system

Table 7. Data Analysis on Environmental Health in Sumber Pakem on May 2015

Data Collection	Problems	Cause contingency
Environmental Health: 1. 'Bathing, Washing, Defecating' behavior in river was 71% 2. The river was divided into two flows of water (the big one was for bathing and washing, and another one was for defecating) 3. The characteristics of the river: murky color, sometimes getting flood, the water level of the small flow was as high as adults knee, the water level of the big one was as high as adults stomach, heavy flow. 4. The source of drinking water from PAM was 51,1%, from wells was 40,4%, and from mineral water was 8,5% 5. The families who had closet was 26%, the distance between the water source with the septic tank more than 10 meters was 43% and less than 10 meters was 26%. Whereas those who did not had was 74%, public toilets with two closets per hamlet was not used because of no water, the worst condition of the closets, 7 (58,3%) was in a good condition, 5 (41,7%) was in broken closets. 6. Garbage disposal: burned 64%, hoarded 21%, any place 7%, in the river 8% 7. The people who had livestock was 56%, cage outside the house was 87%, cage inside the house was 13% 8. Houses with window was 85%, rooms with window was 75%, good lighting was 65%, dim 33%, dark 2%	Ineffectiveness of environmental health maintenance	The lack of the interest of improving healthy behavior



D. Model of nursing diagnoses formulation

1. Model of nursing diagnoses formulation

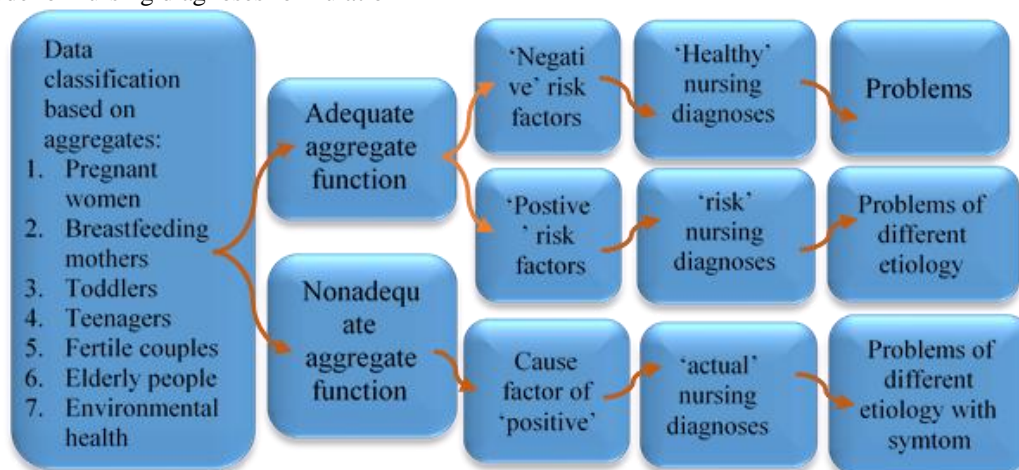


Figure 4. Model of the diagnoses of community nursing formulation

2. Nursing diagnoses formulation

Table 8. The diagnoses of community nursing formulation

No	Aggregates	The Diagnoses of Community Nursing
1	Pregnant women	The readiness to improve pregnancy and childbirth process of pregnant women in Sumber Pakem
2	Breastfeeding mothers	The readiness to improve the breastfed of breastfeeding mothers in Sumber Pakem
3	Toddlers	The readiness to improve toddlers health management in Sumber Pakem
4	Teenagers	The deficiency risk of the health of teenagers community regarding nonavailability to prevent health problems of teenagers community in Sumber Pakem.
5	Fertile couples	The readiness to improve fertile couples relationship in Sumber Pakem
6	Elderly people	Ineffectiveness of therapeutic regimen management of the elderly people in Sumber Pakem related to the lack of health services functioning system that was marked by hospitalized elderly people 72% and those who did not attend posyandu for elderly people 93%
7	Environmental health	Ineffectiveness of environmental health maintenance regarding the lack of interest in improving healthy behavior that was marked by 'BATHING, WASHING, DEFECATING' in river 71%, public toilets with 2 privy per hamlet had not been used because of no water and the worst condition of the closets.

Terminology reference of nursing diagnoses: Herdman, T.H. & Kamitsuru, S. (2014) [6]

V. Discussion

Based on the research result, it can be seen that overall aggregates in the community can be enforced with the diagnoses of community nursing referring to NANDA. It indicates that the standardization of nursing diagnoses with NANDA terminology can be greatly applied. This standardization needs to reduce misunderstanding due to wrong perceptions in both written communication or oral communication. Keenan, Gail et al. (2013) [7] gave the primary recommendation to overcome the vulnerability of wrong direction of the information by using format, content, and words standardization used to make a documentation regarding the main nursing information. Schwirian, Patricia M. (2013) [8] also emphasized that standardization of nursing terminology provides the basic consistency in communicating nursing information and is able to be used for conducting research. In pretest-posttest experimental design by Müller-Staub et al. (2007) [8] with Quality of Nursing Diagnoses, Interventions, and Outcomes (Q-DIO), the implementation of NANDA, NIC, and NOC (NNN) nursing diagnoses, intervention, and result leads to the increase of the quality of nursing diagnoses documentation. Green, Pauline M., Polk, Laura V., Slade, Diann S., (2003) [10] stated that diagnostic label from the problems of community enables the nurses to be responsive to the intervention, in which they are able to overcome the problems, or prevent from the risk of physical environment and socio-cultural exposures.

The data of this research confirmed that four of the nursing diagnoses that occurs in the health services is defined healthy or prosperous. Healthy or prosperous diagnoses reflects the individual or groups in the community gets into adequate condition and shows the willingness to improve more positive conditions. It indicates the government program for the community was quite successful. On the other hand, nursing diagnoses of healthy or prosperous conditions in the community could also reflect society role to keep their health, or society role to prevent the possibility of the moderate high possibility of health deviations. This

diagnoses also provided a direction for behavior planning design that would be determined by nurses of the community, and also emphasized on the promotive and preventive aspects.

Nowadays, the document of community nursing care reported by the students of Ners profession was rarely to have healthy nursing diagnoses. There were sort of possibilities lied on it: 1) the practitioners tend to prioritize the current problems or risky to occur, 2) they thought if community functioning had been effective, there would not become a consideration to prioritize care services, 3) the number of actual and risky problems had been more than two aspects, if they still applied healthy or prosperous nursing diagnoses, the number of nursing diagnoses would be too much, 4) there was no adequate guidance from the supervisors while determining diagnoses of community nursing. The four aspects should not happen, the basic thought about this are: first, community nursing paradigma was promotive and preventive, it should be like that if the portion of healthy nursing diagnoses become a study which had to be balance with either actual or risky community nursing. Second, the priority of care services in the community should also tend to emphasize on an effort to maintain and to improve the potential of effective society, then it was likely to apply an effective behavior. It was so because in the area of community nursing, was well-known as 'early primary prevention', and became pressurized-point distinguishing on care services applied in hospital. Third, if the diagnoses of community nursing only focused on the actual and risky community nursing related to high number, then the care services given by the nurse to the community could not be applied comprehensively, and it was in contrast with the principal care services that plenary to overall aggregates in the community. It should, therefore, be better if each care service givers in the community could understand it to prevent the late matter of identification problems in ealry, and the late matter of preventing complication problems sustainably. Fourth, if the problems occurred in the deviations while the practitioners were nforcing nursing diagnoses, then the key was in the mode of guidance. Theoretically, care services of community nursing had been much more comprehensive given in academic affair, but the practitioners should get an adequate guidance when interacting in the community directly because their sensitiveness needed to trained to be able to identify every single need in each aggregate of the community they took care of in detail.

If it is seen on teenagers aggregate, it will have risky nursing diagnoses. It indicated the teenagers health that was in great condition, but there was still the factors of risk which could make them susceptible for any health problems. The needs of teenagers seen from this diagnoses was a kind of the government program dealing with teenagers. Health program of children and teenagers had, of course, been in charge, but it was still got in the application that some obstacle caused the program could not be applied yet well.

The aggregate of elderly people and environment health showed actual nursing diagnosis. The characteristics limitation of this aggregate had in fact showed current problems. Factors that thought to be the cause of the problems was that unhealthy society behavior, such as the lack of health services functioning and the lack of interest in improving healthy behavior. This nursing diagnoses reflected the government program for the health of elderly people and environment which had been run, but their support could not been applied yet optimally and independently to improve their health. Yet, it had not maximum for them to be responsible of the health of their environment.

Seven nursing diagnoses could be identified in this research confirmed that the needs of each aggregate should be met by the community nurses, and was able to give clear direction in establishing design of community nursing act plans. Paans et. all (2012) [11] stated that the accuracy of nursing diagnoses is influenced by the use of structured record, the age of nurses, and the skills of reasoning form data deduction and analysis. Zamanzadeh et. all. (2015) [12] also provide the fact that the implementation of nursing process has sort of obstacles, such as: understanding the concept of nursing process, different views pf the process, the lack of knowledge and awareness among the nurses related to the implementation of nursing process, and the problems related to recording nursing process is the main obstacle. Thus, it should be applied by community nurses and the students of Ners profession in the area of community to commit assigning nursing diagnoses accurately and comprehensively through nursing diagnoses related to NANDA which was being analyzed in overall aggregates, including environmental health.

## **VI. Conclusion**

The diagnoses of community nursing is able to use the standardization of NANDA and is able to be identief in overall aggregates in the community, such as: 1) the aggregate of pregnant women: the readiness to improve pregnancy and childbirth processes of pregnant women, 2) the aggregate of breastfeeding mothers: the readiness to improve breesfed of breastfeeding mothers, 3) the aggregate of toddlers: the readiness to improve the management of toddlers health, 4) the aggregate of teenagers: the deficiency risk of the health of teenagers community regarding nonavailability to prevent health problems of teenagers community, 5) the aggregate of fertile couples: the readiness to improve the fertile couples relationship, 6) the aggregate of elderly people: ineffectiveness of therapeutic regimen management of the elderly people community regarding the lack of health service functioning system that was marked by hospitalized elderly people is 72%, and those who did not

attend posyandu is 93%, 7) the environmental health: ineffectiveness of environmental health maintenance regarding the lack of interest in improving healthy behavior that was marked by 'BATHING, WASHING, DEFECATING' in river 71%, public toilets with 2 privy per hamlet had not been used because of no water and the worst condition of the closets.

## VII. Recommendation

1. The diagnoses of community nursing should be able to apply the standardization of NANDA with aggregate approach in the community and environmental health.
2. It should be observed continuously regarding the design of community nursing act plans in the area of community.

## References

- [1]. Rohmah, N. 2015. The Evaluation of The Documentation of Community Nursing Care Proceeding Book. The 1st International Nursing Conference "Evidence Based Practice of Entrepreneur In Pediatric Nursing to Optimize Growth & Development" June 2015 at University of Muhammadiyah Jember. ISBN: 978-602-72494-7-9. p. 69-74.
- [2]. Hwang, Jee-In, Cimino, James J., and Bakken Suzanne. 2003. Integrating Nursing Diagnostic Concepts into the Medical Entities Dictionary Using the ISO Reference Terminology Model for Nursing Diagnoses. *J Am Med Inform Assoc.* 2003. Jul-Aug; 10(4): 382-388. doi: 10.1197/jamia. M1203. PMID: PMC181989.
- [3]. Tastan Sevinc, Linch Graciele C. F. Keenan Gail M., Stifter Janet, 'Bathing, Washing, Defecating' inney Dawn, Fahey Linda, Lopez Karen Dunn, Yao Yingwei, and Wilkie Diana J., and Werley Harriett H. 2013. Evidence for the Existing American Nurses Association-Recognized Standardized Nursing Terminologies: A Systematic Review. *Int J Nurs Stud.* Author manuscript; available in PMC 2015 Aug 1. Published in final edited form as: *Int J Nurs Stud.* 2014 Aug; 51(8): 1160-1170. Published online 2013 Dec 18. doi: 10.1016/j.ijnurstu.2013.12.004. PMID: PMC4095868. NIHMSID: NIHMS590418
- [4]. Thoroddsen Asta, Ehrenberg Anna, Sermeus Walter, dan Saranto Kaija, 2012. A survey of nursing documentation, terminologies and standards in European countries. 11 th International Congress on Nursing Informatic. Montreal Canada. *Nurs Inform.* 2012; 2012: 406. Published online 2012 Jun 23. PMID: PMC3799179.
- [5]. Rohmah, N. dan Walid, S. (2012). *Proses keperawatan, teori dan aplikasi.* Arrus Media Jogjakarta.
- [6]. Herdman, T.H. & Kamitsuru, S. (2014). *NANDA International. Nursing Diagnoses Definitions and Classification 2015-2017.* Tenth Edition. Oxford: Wiley Blackwell.
- [7]. Keenan, Gail., Yakel, Elizabeth. Lopez., Karen Dunn., Tschannen, Dana., Ford, Yvonne B. 2013. Challenges to nurses' efforts of retrieving, documenting, and communicating patient care information. *Journal of the American Medical Informatics Association.* Mar 2013, Vol. 20 Problems 2, p245-251. 7p. 4 Charts.
- [8]. Schwirian, Patricia M. 2013. Informatics and the Future of Nursing: Harnessing the Power of Standardized Nursing Terminology. *Bulletin of the Association for Information Science & Technology.* Jun/Jul 2013, Vol. 39 Problems 5, p20-24. 5p.
- [9]. Müller-Staub, Maria; Needham, Ian; Odenbreit, Matthias; Lavin, Mary Ann; Theo van Achterberg. Improved Quality of Nursing Documentation: Results of a Nursing Diagnoses, Interventions, and Outcomes Implementation Study. *International Journal of Nursing Terminologies and Classifications* 18.1 (Jan-Mar 2007): 5-17.
- [10]. Green, Pauline M., Polk, Laura V., Slade, Diann S., 2003. Environmental nursing diagnoses: A proposal for further development of Taxonomy II. *International Journal of Nursing Terminologies and Classifications* 14.1 (Jan/Mar 2003): 19-29.
- [11]. Paans Wolter, Sermeus Walter, Nieweg Roos MB, Krijnen Wim P, dan Schans Cees P van der. 2012. Do knowledge, knowledge sources and reasoning skills affect the accuracy of nursing diagnoses? a randomised study. *BioMed Central Nurs.* 2012; 11: 11. Published online 2012 Aug 1. doi: 10.1186/1472-6955-11-11. PMID: PMC3447681
- [12]. Zamanzadeh, Vahid., Valizadeh, Leila., Tabrizi, Faranak Jabbarzadeh., Mojghan, Behshid., dan Lotfi, Mojghan. 2015. Challenges associated with the implementation of the nursing process: A systematic review. *Iranian Journal of Nursing Midwifery Research.* 2015 Jul-Aug; 20(4): 411-419. doi: 10.4103/1735-9066.161002. PMID: PMC4525336.