# THE CORRELATION BETWEEN THE A DIET AND THE INCIDENCE OF PSEUDODEMENSIA HAPPENING TO THE SIXTH SEMESTER STUDENTS OF S1 NURSING PROGRAM OF UNIVERSITY NAHDLATUL ULAMA SURABAYA

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#### Abstract

Pseudodemensia is not a normal things, but it is still assumed as a common thing, which can be slowed down by overcoming the causes; one of them is a diet. Students paying less attention to diet so that a lot of students who complained of forgot and confused about what to do. Therefore, the purpose of this study was to analyze the coralation between the a diet and the incidence of Pseudodemensia happening to the sixth semester students of S1 Nursing Program of University Nahdlatul Ulama Surabaya. The methode of study was analityc. The population involved 119 students in which 91 respondents were taken as the sample by using stratified propotionate random sampling technique. The independeunt variabel was the a diet, whereas the dependent one was the incidence of Pseudodemensia. The study found that there is a meaningful coralation between the a diet and the incidence of Pseudodemensia happening ( $\rho = 0.00$ ,  $\alpha = 0.05$ ).

**Key words:** a diet, pseudodemensia

#### Introduction

Pseudodemensia is a condition that resembles dementia but actually the main cause is depression. In pseudodemensia, a person may appear confused, exhibit depressive symptoms such as disorders, complain of memory disorders and other cognitive problems such as dellirium. However, memory and language functions remain intact (Hill, Pseudodemensia can occur progressively after achieving the highest growth and development (age 15 years) but many people think pseudodemensia occurs only in the elderly (Brodaty, 2011). Reality in the environment especially among adolescent pseudodemensia many found. Teenagers often complain of forgetting and confused about what to do.

From the Encyclopedia Britannia data states that in 2005 there were 24.3 million people suffering from dementia around the world, while the current number increased 35.6 million people. This figure is expected to double by 2030, and triple in 2050 (Alzheimer's Disease International, 2009). Marc Wortmann, executive director of 78 Alzheimer's organizations says that every 4 seconds there are new sufferers, and when projected forward, there may be 1 new case every second by 2050 (Khatijah, 2013). Psychiatric experts FKUI RSCM. Martina WS Nasrum mentioned that in Indonesia is estimated in 2050 patients with Alzheimer's pseudodemensia can reach 3 million cases (Rosari, 2013).

Based on Eka Rahmawati's research on the correlation anxiety with pseudodimensia incidence in 2014 among 2nd semester students of Nursing Study Program at UNUSA, obtained 52,2% of students experience probable cognitive disorder or so-called pseudodimensia. The result of observation among students of sixth semester of Study Program of Nursing at UNUSA, obtained from 10 respondents, with the age range of 18-20 years found the fact that from 10 students have experienced often forget and sometimes confused with what they want to do for example, when Want to drink, taken instead plates or when want to turn on the motor, taken instead flash.

This research was conducted by Eka ernawati (2014) entitled "The Correlation Anxiety with Pseudodemenia Occurrence in 2nd Grader of Study Program of Nursing Faculty of Nursing and Midwifery of Nahdlatul Ulama University Surabaya" in the journal there is no mention of involvement between general and special data, Described what kind of anxiety that can cause pseudodemensia.

Pseudodimenisa occurs due to various factors including: anxiety, stress, environment, and lifestyle. A person's lifestyle can be seen from the diet. A healthy diet rich in vitamins from fruits and vegetables helps protect the brain from free radicals and retains memory. (American Journal of Epidemiology, 1999) (in Paretta, 2005).

The brain is very easily damaged by free radicals, because these harmful chemicals are easily absorbed by fat while most of the brain's structure is fat, so researchers agree that free radicals cause signs of aging. Brains exposed to free radicals can cause cognitive and behavioral disorders (Paretta, 2005).

Keeping the diet is necessary for tea from pseudodemensia. A healthy diet is important for many reasons, one of the reasons is to increase the work of the brain and protect the brain from free radical damage. A healthy diet includes the schedule, amount and type of food eaten. (Paretta, 2005).

### Method

method The research used is analytical, based on the time of sampling this research using cross sectional approach. Researchers study the relationship between independent variables and dependent variables are done once and in the same time. The population of all students of 6th semester of Study Program Nursing University of Nahdlatul Ulama Surabaya force of 2012 amounted to 119, and the sample of some students of sixth semester of Study Program of Nursing University of Nahdlatul Ulama Surabaya force of 2012 amounted to 51 respondents.

Sampling study in the using Probability sampling with propotional random sampling technique. The location of the research was conducted at the Faculty of Nursing and Midwifery of Nadlatul Ulama University Surabaya in April 2015. The independent variables in this study were diet and dependent variable in this study is the incidence of pseudodemensia. In this study questionnaires independent on variables (diet) and MMSE on the dependent variable (incidence pseudodemensia).

The way of data collection is the researcher asked for approval and signature of the respondent, if willing to be researched. Then the researchers began to retrieve data by respondents answer questions from the questionnaire sheet honestly in accordance with the attitude of respondents.

Data analysis with SPSS 18 using Rank Spearman test with validity test 0,05

## 1. Result and Discussion

#### 4.1. Data

General data contains the characteristics of respondents including age, gender, ethnicity, stress incidence of all students of 6th semester of Study Program

Nursing University of Nahdlatul Ulama Surabaya

a. Age

Age (years)	Frequency	(%)
19 - 20	35	38,5
21 - 22	53	58,2
23 - 24	3	3,3
Total	91	100

Source: Primary Data, 2015

It can be seen from 91 respondents mostly (58.2%) aged 21-22 years.

b. Gender

Gender	Frequency	(%)
Man	21	23,1
Female	70	76,9
Total	91	100

Source: Primary Data, 2015

Can be known from 91 respondents almost entirely (76.9%) female

c. Ethnicity

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Ethnicity	(%)	
Java	80	87,9
Madura	11	12,1
Total	91	100

Source: Primary Data, 2015

Can be known from 91 respondents almost entirely (87.9%) Javanese ethnic

d. Health status

Health status in the	Frequency	(%)
last 6 months		
Sick	66	72,5
Never sick	25	27,5
Total	91	100

Source: Primary Data, 2015

It can be seen from 91 respondents most (72.5%) experienced pain in the last 6 months.

e. Stress incidence

Stress	Frequency	(%)
No	53	58,2
Yes	38	41,8
Total	91	100

Source: Primary Data, 2015

Can be known from 91 respondents almost partially (41.8%) experienced

f. Anxiety

Anxiety	Frequency	(%)
No	45	49,5
Yes	46	50,5
Total	91	100

Source: Primary Data, 2015

It can be seen from 91 respondents most (50,5%) have anxious.

g. Residence

Frequency	(%)
47	51,6
44	48,4
91	100
	47

Source: Primary Data, 2015

It can be seen from 91 respondents almost partially (48.4%) live close to the highway

Specific data include diet and pseudodemensia happening.

a. Characteristics of respondents by diet

 	I	J
Diet	Frequency	(%)
Good	28	30,8
sufficient	44	48,4
Not good	19	20,9
Total	91	100

Source: Primary Data, 2015

Can be known from 91 respondents almost half (48.4%) have a pretty good diet b. Characteristics of respondents based on

the incidence of pseudodemensia

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Pseudodemensia	Frequency	(%)	
grade			
Normal	31	34,1	
Probable cognitive	42.	46,2	
impairment	72	70,2	
Definite cognitive	18	19,8	
impairmen	10	17,0	
Jumlah	91	100	

Source: Primary Data, 2015

# **Analyze Data**

Can be known from 91 respondents almost half (46.2%) experienced propable cognitive impairment.

Cross-tabulation of dietary association with

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Diet	Pseudodemensia (MMSE)			
	Normal	Probable cognitive impairment	Definite cognitive impairment	Total
	N(%)	N(%)	N(%)	N(%)
Good	26 (92,9%)	2 (7,1%)	0 (0%)	28 (100%)
suffici ent	5 (11,4%)	36 (81,8%)	3 (6,8%)	44 (100%)
Not good	0 (0%)	4 (21,1%)	15 (78,9%)	19 (100%)
Total	31 (34,1%)	42 (46,2%)	18 (19,8%)	91 10 0)

It can be seen that from 28 respondents who have a good diet almost entirely (92.2%) did not experience cognitive disorders (normal). From Rank Spearman test result got value  $\rho=0,000$  which mean  $\rho<\alpha$  then  $H_0$  is rejected, it means there is relationship of eating pattern with incidence of pseudodemensia at student sixth semester students of S1 Nursing Program University Nahdlatul Ulama Surabaya.

## **Discuss**

In this chapter will be described the results of research on the pattern of eating with the incidence of pseudodemensia in sixth semester students of Nursing University of Nahdlatul Ulama Surabaya. In accordance with the goals that have been set. So can be described the discussion as follows:

# 1. Dietary features

The results of research conducted by researchers showed that almost half (48.4%) of respondents have a fairly good diet. That is, eating habits are based on the level of favorite, frequency of eating, and eating schedule that makes students prefer any food for pleasure such as instant noodles and fast food, so the benefits of food consumed for health is not too they think. These food habits cause problems because the content or

nutrients in fast food are not balanced. Food producers often use saturated fats to process food to improve the aroma and taste.

According Pujiyanti (2005) mentions in general adolescents have poor eating habits. Some teenagers, especially girls, often eat unbalanced amounts of food compared to their needs for fear of being overweight. Pujiyanti also showed that teenagers love snack snacks, especially sweet pastries. Meanwhile, a group of vegetables and fruits that contain lots of vitamins and minerals are not popular among teenagers

# 2. Pseudodemensia Occurrence Rate

Based on the result of the research on the sixth semester students of the Nursing University of Nahdlatul Ulama surabaya as listed in table 5.10 it was found that almost half (46.2%) experienced propable cognitive impairment.

According to the American Journal of Epidemiology, 1999 in Paretta in 2005, argued pseudodimenisa occurs due to various factors including: anxiety, stress, environment, and lifestyle. One lifestyle can be seen from the diet. A healthy diet rich in vitamins from fruits and vegetables helps to protect the brain and maintain memory. The content of antioxidants, vitamin A, vitamin C, and vitamin E in fruits and vegetables work together to protect the brain and body by paralyzing free radicals. Vitamin A, vitamin C, and vitamin E are also important in improving and maintaining memory

# 3. The Correlation Between the a Diet and the Incidence of Pseudodemensia

Based on Rank Spearman test with significance value  $\alpha = 0.05$ . Obtained value  $\rho = 0.000$  which means  $\rho < \alpha$  then H0 is rejected, it means there is a correlation a diet with the incidence of pseudodemensia in the students sixth semester of Nursing University of Nahdlatul Ulama Surabaya. From the results above shows there is a correlation between diet with the

incidence of pseudodemensia. And it can be concluded that the diet is very influential on the incidence of pseudodemensia, where if a person's diet good then the incidence of pseudodemensia can be suppressed. But in principle everyone has a different diet, because each person has different characteristics in the application of diet. A good diet can reduce the occurrence of pseudodemensia in adolescents. A diet high in nutrients is the key to increasing memory function

#### Conclusion

Conclusions from the results of this study are:

- Students of Nursing Program University Nahdlatul Ulama Surabaya almost half have good diet.
- 2. Students of Nursing Program University Nahdlatul Ulama Surabaya almost half of them experience probable cognitive impairment or commonly referred to as pseudodemensia.
- 3. There is a the coralation between the a diet and the incidence of Pseudodemensia happening to the sixth semester students of S1 Nursing Program University Nahdlatul Ulama Surabaya.

# **Suggestions**

1. Theoretical

In nursing the soul of pseudodemensia can be prevented by addressing the cause first of which is one with a good diet

- 2. Practical
- a. For respondents

For respondents not to experience pseudodemensia should responders can arrange a good diet, by always breakfast, eat regularly, not always eat fast food, eat foods that vary and contain the nutrients the body needs. In addition, respondents can also add pengatahuan by seeking information premises utilizing technology such as

reading health books, health journals, and internet media as much as possible without having to wait for knowledge given lecturers so that pseudodemensia can be prevented by respondents.

## b. For the next researcher

As an input material in subsequent research to overcome and prove other factors that can affect the diet with the incidence of pseudodemensia

#### References

- 1. Adriani, Maryana., Wijadmadi Bambang. (2012). *Pengantar Gizi Masyarakat*. Jakarta, Kencana.
- 2. Adriani, Maryana., Wijadmadi Bambang. (2012). *Peranan Gizi Dalam Siklus Kehidupan Edisi 1*. Jakarta, Kencana.
- 3. Anonim. (2015). Berat badan ideal anda. <a href="http://gaya\_hidup\_sehat.org">http://gaya\_hidup\_sehat.org</a>. Diakses tanggal 23 Januari 2015, 10.38 WIB
- 4. Barnett, Helen. (2008). *Menjinakkan Usia*. Klaten, Image Press
- 5. Brodaty, Henry. (2011). Alzheimer's & You: prevention & treatment of dementia. www.news-medical.net.
  Diakses tanggal 20 Januari 2015, 11.58
  WIB
- 6. Budiman. (2011). *Penelitian Kesehatan*. Bandung, Refika Aditama
- 7. Devinsky, Orrin., D'esposito, Mark. (2005). *Neurology of Cognitive and Behavioral Disorders*. New York, Oxford University Press
- 8. Ernawati, Eka. 2014. Hubungan Kecemasan Dengan Kejadian Pseudodemensia Pada Mahasiswa Semester 2 Prodi S1 Keperawatan Fakultas Keperawatan dan Kebidanan Universitas Nahdlatul Ulama Surabaya

- 9. Farida, Ida,. Amalia, Nila, (2009). *Diet Sehat dan Efektif dengan Metode Food Combining*. Jogjakarta, Bukubiru
- 10. Hill, Carrie. (2008). <u>Pseudodementia.</u> <u>www.alzheimersabout.com</u>. Diakses tanggal 20 Januari 2015, 10.30 WIB
- 11. Imron. (2009). *Demensia dan Fungsi* Otak. www.medicastore.com. Diakses tanggal 20 Januari 2015, 10.25 WIB
- 12. Khomsan, Ali. (2010). *Pangan dan Gizi Untuk Kesehatan*. Jakarta, RajaGrafindo Persada
- 13. Lillrank, Sonja M., Collins., Levit, Pat. (2007). Psychological Disorders Alzheimer's Disease and Other Dementias. New York, Infobase Publishing
- 14. Loue, Sana., Sajatovic, Martha. (2008). Encyclopedia of Aging and Public Health. New York, LLC
- 15. Notoatmodjo, Soekidjo. (2010). Metodologi Penelitian Kesehatan. Jakarta, Rineka Cipta
- 16. Nursalam. (2011). Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan: Pedoman Skripsi, Tesis, dan Instrument Penelitian Keperawatan Edisi 2. Jakarta, Salemba Medika
- 17. Paretta, Lorraene (2005). Makana untuk otak Panduan Penting Meningkatkan Kemampuan Otak. Jakarta, Erlangga
- 18. Proverawati, Atikah & Erna Kusuma. (2010). *Ilmu Gizi untuk Keperawatan* & *Gizi Kesehatan*. Jogjakarta, Nuha Medika
- 19. Psychology Dictionary.\_. World's Most Comprehensive Online Psychology <u>Dictionary.</u> www.psychologydictionary.com.
  Diakses tanggal 23 Januari 2015, 10.05
- 20. Puri, Basant K. (2011). *Buku Ajar Psikiatri (Textbook of Psychiatry) Edisi* 2. Jakarta, EGC

WIB

- 21. Rosari, maria (2013). Satu *Juta Penduduk Indonesia Penderita Alzheimer's*. <u>www.antaranews.com</u>.
  Diakses tanggal 20 Januari 2015, 10.55
  WIB
- 22. Science Dictionary.\_. The world's Largest Online Science Dictionary. www.thesciencedictionary.com. Diakses tanggal 23 Januari 2015, 10.33 WIB
- 23. Setiadi. (2007). Konsep Dan Penulisan Riset Keperawatan. Jogjakarta, Graha Ilmu
- 24. Videbeck, Sheila L. (2008). *Buku Ajar Keperawatan Jiwa*. Jakarta, EGC