

HVgvans
HVดI 9NvH Saylis


$\square$

 (1ii)
*) yy



# THE PROCEEDING BOOK The $2^{\text {nd }}$ International Nursing Conference STIKES HANG TUAH SURABAYA 

"Developing Cross-Cultural Understanding and Behavior in Nursing Care Services"

# The Proceeding Book $2^{\text {nd }}$ International Nursing Conference Developing Cross-Cultural Understanding and Behavior in Nursing Care Services 

STIKES Hang Tuah Surabaya



Hak Cipta © 2016,
Sekolah Tinggi Ilmu Kesehatan Hang Tuah Surabaya
Jl. Gadung No. 1 Surabaya
Telp./Fax: (031) 8411721
Website : http://stikeshangtuah-sby.ac.id
Email : info@ stikeshangtuah-sby.ac.id

Hak cipta dilindungi undang-undang. Dilarang memperbanyak sebagian atau seluruh isi buku ini dalam bentuk apa pun, baik secara elektronik maupun mekanik, termasuk memfotokopi, merekam, atau dengan menggunakan sistem penyimpanan lainnya, tanpa izin tertulis dari Penerbit.

## UNDANG-UNDANG NOMOR 19 TAHUN 2002 TENTANG HAK CIPTA

1. Barang siapa dengan sengaja dan tanpa hak mengumumkan atau memperbanyak suatu ciptaan atau memberi izin untuk itu, dipidana dengan pidana penjara paling lama 7 (tujuh) tahun dan/atau denda paling banyak Rp 5.000.000.000,00 (lima miliar rupiah).
2. Barang siapa dengan sengaja menyiarkan, memamerkan, mengedarkan, atau menjual kepada umum suatu ciptaan atau barang hasil pelanggaran Hak Cipta atau Hak Terkait sebagaimana dimaksud pada ayat (1), dipidana dengan pidana penjara paling lama 5 (lima) tahun dan/atau denda paling banyak $\mathbf{R p} \mathbf{5 0 0 . 0 0 0 . 0 0 0 , 0 0}$ (lima ratus juta rupiah).

## Stikes Hang Tuah Surabaya

The Proceeding of $2^{\text {nd }}$ International Nursing Conference
Developing Cross-Cultural Understanding and Behavior in Nursing Care Services
$506 \mathrm{Hlm}, 17 \times 24 \mathrm{~cm}$

ISBN : 978-602-72856-1-3

## CONTENT

Greeting From Stering Commite ..... iv
Opening Speech Head Stikes Hang Tuah Surabaya ..... v
Steering Commite ..... vii
Scientific Paper Reviewer ..... ix
Conference Schedule ..... x
Plenary Speaker
Speaker 1: Prof. Dr. Chang Ching Thon ..... xi
Speaker 2: Dr. Lesley Dornan ..... xvii
Speaker 3: Dr. Katrina Breaden ..... xxv
Speaker 4: Dr. Janny Prihastuty, S.Kep., Ns., MARS
List of Oral Presentation ..... xliii
List of Poster Presentation ..... xlvi
List of Participant ..... xlvii
Plenary Discussion Room

## GREETINGS FROM STEERING COMMITTEE

Assalamu’alaikum wr. Wb Honorable guest<br>1. Coordinator Kopertis VII East Java<br>2. Head of RUMKITAL DR. Ramelan Surabaya<br>3. Head of STIKES Hang Tuah Surabaya<br>4. Head assistant $1,2,3$ of STIKES Hang Tuah Surabaya<br>5. Distinguished speakers<br>6. Colleges Nursing of STIKES Hang Tuah Surabaya<br>7. Distinguished participants

First, I would like to praises and thanks to God for the blessing so STIKES Hang Tuah Surabaya can organized The $2^{\text {nd }}$ International Nursing Conference by theme "Developing Cross Cultural Understanding and Behavior in Nursing Care Services". Welcome to Surabaya.

The conference brings together academicians, practitioners, researcher as much as 200 participants, from east to west of different provinces in Indonesia, and many different countries. So by gathering and interacting each of attendees here can tighten our bond as academician, practitioner, and professional in order to increase the spirit of research and study.

Ladies and gentleman, i would like to thank Flinders University Australia, Dr. Leasly from UK, UNIMAS Malaysia, International Hospital Indonesia, that support us with expert speakers. I would also like to express my gratitude to BTN, BNI, BNI Life, Wolters Kluwer, Lippincott William and Wilkins, Wardah Cosmetic, Erha Clinic, Sophie Martine, EGC, CV. Rukun Putra, Kalbe Nutritional for sponsorships. Many thanks also go to our colleges, especially team of Second International Nursing Conference.

Finally, i hope you will enjoy your stay, and the conference will be special moment to gets a new knowledge, new friends and new experiences too.

Thank you
Wassalamu 'alaikum wr wb

Steering Committee

# OPENING SPEECH THE HEAD OF STIKES HANG TUAH SURABAYA 

## Assalamu'alaikum wa-rahmatullahi wa-barakatuh

## Good Morning Ladies and Gentlemen,

It is my honor and privilage to welcome all participants of the 2nd International Nursing Conference organized by Stikes Hang Tuah Surabaya. In particular, I would like to express my gratitude to our plenary speakers who have made great contribution in this conference. Thanks and appreciation also goes to the organizing committee.

## Ladies and Gentlemen

The issues of global village era have brought great concerns to local businesses and services in Indonesia, especially Surabaya. Attempts of improvement are inevitable to business and service providers, including healthcare services. There have been increases in numbers of foreign patients, who need medical treatments in some hospitals in Surabaya. The presence of foreign patients in some hospitals in some cases, has triggered some issues among health care practitioners. Among other problems related to foreign patients, communication is presumed to be the most serious barrier among healthcare practitioners. It was reported that some nurses were in difficulties when they had to communicate with their foreign patients. In relevant to this issue, we proudly present the 2nd International Nursing Conference under the theme: "Developing Cross-Cultural Understanding and Behavior in Nursing Care Services". The topics for plenary sessions include:

1. Ethical Concerns in Nursing Practices, will be presented by Associate Prof. Dr. Chang Ching Thon from Unimas, Malaysia.
2. Eliminating Communication Barriers among Health Professionals, will be presented by Dr. Lesley Dornan from The United Kingdom.
3. Cross-Cultural Awareness in Palliative Care, will be presented by Dr. Katrina Breaden from Australia.
4. Standards and Qualities in Providing Care for Foreign In-Patients, will be presented by Mrs. Jany Prihastuty, S.Kep.,Ns, MARS from Indonesia.

We strongly believe that every topic selected in this conference will contribute a great deal of knowledge for every one of us and possibly inspire us to provide better health-care services for every patient treated in local hospitals, especially for those coming from other countries who certainly possess different cultural backgrounds. Of course this is a stepping stone for bigger changes in nursing sciences. We do expect that every audience will take the most benefit of this conference. Finally I would like to express my gratitude and highest appreciation to the speakers, organizing committees, and participants who have made this event possible.

Ladies and Gentlemen...
Without further ado I declare this conference open

Wassalamu'alaikum wa-rahmatullahi wa-barakatuh
Head of STIKES Hang Tuah Surabaya

Wiwiek Liestyanigrum, S.Kp., M.Kep.

## STEERING COMMITE

| Patron | Head of STIKES Hang Tuah Surabaya |
| :---: | :---: |
| Advisor | : Head Assistant I |
|  | Head Assistant II |
|  | Head Assistant III |
| Organizing Committe |  |
| Chairman | Puji Hastuti, M.Kep., Ns |
| Vice Chairman | : Meiana Harfika, M.Kes |
| Treasury | : Nenny Andriani, SE |
|  | Dya Sustrami,S.Kep., Ns., M.Kes |
| Secretary | : Taufan Agung, SE |
| Scientific Board | Nuh Huda, M.Kep., Ns., Sp. KMB |
|  | Christina Yuliastuti, M.Kep,. Ns. |
|  | Qori'ila Syaidah, M.Kep., Ns., Sp.An |
|  | Astrida Budiarti., M.Kep., Sp.Mat |
|  | Nisha Dharmayanti, S.Kep., Ns., M.Si |
|  | Antonius Catur S, M.Kep., Ns |
|  | Muh. Zul Azhri Rustam, S.KM., M.Kes |
|  | Ari Susanti, S.KM., M.Kes |
|  | Ayu Citra Mayasari, S.Pd., M.Kes |
|  | Nur Chabibah, S.Si., M.Si |
|  | Fandi Achmad |
|  | Aspari |
| Registration Board | : Merina Widyastuti, M.Kep., Ns |
|  | Wasis Agung Ahmadi |
| Secretary Board | : Ninik Ambarsari, M.Kep., Ns. |
|  | Nur Muji Astuti, S.Kep., Ns. |
|  | Theresia Atik |
| Event Division Board | : Dhian Satya Rachmawati, M.Kep., Ns |
|  | Dwi Ernawati, M.Kep., Ns |
|  | Rifka Pahlevi, S.Kep., Ns |


| Publication, \& Sponsorship | : Hidayatus Syadiah, M.Kep |
| :---: | :---: |
|  | Imroatul Farida, S.Kep. Ns., M.Kep |
|  | Diyan Mutyah, S.Kep., M.Kes |
|  | Sri Anik R., SH., S.Kep., Ns., M.Kes |
| Partnership Division | : Dwi Priyantini, S.Kep., Ns. M.Sc |
|  | Dini Mei Widayanti, M.Kep |
|  | Sapto Dwi Anggoro, M.Pd |
| Accomodation Board | : Lela Nurlela,S.Kp., M.Kes |
|  | Chalik Susilo, SE |
| Logistic Division | : Nadia Oktiary., Amd |
|  | Any Rusdiana |
|  | Ika Rochmah Rosalia, AMK |
|  | Fauziah Utamingitiyas |
| Equipment Division | : I Wayan Kama Utama |
|  | Dika Akmal., S.Sos |
|  | Hermawan |
|  | Suwarno |
|  | Muhajir |
| Documentation Division | : Karnoto |
| Tranportation Division | : Akif Ismail, S.Sos |
|  | Priyo |
|  | Ilyas Widodo |

# SCIENTIFIC PAPER REVIEWER 

Prof. Dr. Chang Ching Thon

Universitas Malaysia, Malaysia
Dr, Lesley Dornan
Resercher, Chiang Mai University
Dr. Katrina Breaden
Flinders University, Australia
Dr. Ah. Yusuf, S.Kp., M.Kes
Universitas Airlangga (UNAIR), Surabaya
Dr. Rachmat Hargono, dr., MS., M.PH
Unversitas Airlangga, Surbaya

Dr. Bambang Widjanarko Otok, M.si
Institute Teknologi Sepuluh November (ITS), Surabaya

# SCIENTIFIC PAPER REVIEWER 

Prof. Dr. Chang Ching Thon

Universitas Malaysia, Malaysia
Dr, Lesley Dornan
Resercher, Chiang Mai University
Dr. Katrina Breaden
Flinders University, Australia
Dr. Ah. Yusuf, S.Kp., M.Kes
Universitas Airlangga (UNAIR), Surabaya

Dr. Rachmat Hargono, dr., MS., M.PH
Unversitas Airlangga, Surbaya

Dr. Bambang Widjanarko Otok, M.si
Institute Teknologi Sepuluh November (ITS), Surabaya

# CORRELATION OF FREQUENCY OF DRINKING COFFEE WITH SLEEPING QUALITY STUDENTSIN NGAGEL REJO WONOKROMO SURABAYA 

Meiana Harfika, Wiwiek Liestyaningrum, Benediktus Tendo<br>STIKES Hangtuah Surabaya<br>meianaharfika@gmail.com


#### Abstract

Consumption of coffee appears to be a trend among Indonesian students to provide stimulation. The coffee contains caffeine which is a psychoactive substance and the main pharmacological effect is as adenosine receptor antagonist which may affect the function of central nervous system and can disrupt sleep quality. The purpose of this study was to determine the correlation of drinking coffee frequency with sleeping quality on students. The design that used in this study was using cross sectional study. The populations in this study were students at village of Ngagel Rejo Subdistrict of Wonokromo Surabaya. Samples of students are numbered 36 peoples by using simple random sampling. The collecting data was using questionaires.. and then analyzed descriptively. The results showed that there is correlation of drinking coffee frequency with sleeping quality of the student in village of Ngagel Rejo Wonokromo Surabaya based on test results of Spearman rho with the results of $\mathrm{p}=0.000<\mathrm{a}=0.05$. It is hoped that students reduce the consumption of coffee, especially at night because of the caffeine which contained in coffee can prevent people from falling asleep so the sleeping quality is disturbed and it has a serious impact on health.


Keywords: Drinking Coffee Frequency, Sleeping Quality, Caffeine, Student

## Introduction

The coffee is a kind of beverage derived from the processing and extraction of the coffee plant seeds are dried and then pulverized to a powder. Coffee is one drink that much-loved people, because coffee has been consumed for generations. Until now, the elderly and even young people choose coffee powder compared to other types of coffee because it's unique. Therefore, there are
many coffee shops in kerbside selling locally made coffee powder. Coffee makes everyone excited. Similarly, drinking tea in the morning or evening, drink regular coffee mornings for pep. Coffee drinkers usually drink 3-4 cups of coffee every day, and this can cause a person's dependence on coffee. Coffee contains caffeine which is a psychoactive substance. The main pharmacological effect is as an antagonist to adenosine receptors
affect the functioning of the central nervous system and can disrupt the quality of sleep. Based on a survey conducted on students who lived in the village Ngagel Rejo Wonokromo Surabaya, found that on average they consume 1-2 cups of coffee every day.

Usually they drank coffee during the morning before heading off to college, in the late afternoon or evening. The coffee that they drink normally use coffee sachet obtained from the stalls because in addition to it easily accessible also means making it easy and not time consuming. Habits that often they do is drink coffee at night because that is when they can get together after a day on campus and relieve fatigue.

Drinking coffee at night it is very disturbing their sleep activity. They often stayed up late at night because it is difficult to sleep earlier than usual. As a student, need quality sleep is needed, where normal sleep time is 7-8 hours for concentration on college awake and drowsiness (Perry, Potter, 2010).

Indonesia's domestic coffee consumption, in addition supported by the social patterns in the consumption of coffee, is also supported at an affordable price, practicality in the presentation as well as the diversity of taste / flavor according to the tastes of consumers.

The level of domestic coffee consumption in 1989 based on survey results LPEM UI of 0.5 kilograms / capita I year. Currently (2013) domestic coffee consumption is estimated to have reached 1.0 kg / capita / year. Association of Indonesian Coffee Exporters (AICE) noted that the Indonesian coffee consumption continues to
rise since four years ago. It is revealed from the survey results related to the needs of the coffee association, which rose by 36 percent from 2010 to 2014.

According to the AICE, in 2010 Indonesia's coffee consumption to 800 grams per capita and total coffee needs reach 190 thousand tons. Whereas in 2014, Indonesia's coffee consumption was 1.03 kg per capita to the needs of coffee reached 260 thousand tons. Coffee is known to contain caffeine which is a stimulant that can increase alertness and eliminating drowsiness. The caffeine content in coffee is the most widely claimed to be able to make a fresh body and eliminate fatigue. Coffee consumption also appears to be a trend among Indonesian students to provide stimulation, increase energy and eliminate sleepiness while attending college.

Based on the preliminary survey conducted on 10 students who lived in the village Ngagel Rejo Wonokromo Surabaya, it was found that as many as 8 people who have trouble sleeping after drinking a cup of coffee at night, four people experience heartburn, three people experience headaches and 2 people experiencing nausea. Increased consumption of coffee in the community, especially to students in the area Ngagel rejo that can affect the quality of their sleep at night. Average daily student can consume as much as 1-2 cups of coffee a day. Drinking a cup of coffee containing caffeine at night making it difficult to sleep.

Coffee contains various substances that are psychotropic when a response by the body's defense mechanisms. One of them, coffee contains caffeine which can
stimulate the production of two hormones stimulating namely cortisone and adrenaline. Consumption of caffeine in large quantities and cause excessive adenosine receptor will bind to caffeine so that the brain continues to send signals to increase blood flow to the muscles and the heart. Caffeine works in body to take over the adenosine receptors in the nerve cells that will stimulate the production of adrenal hormones and cause increased blood pressure, gastric acid secretion, and muscle activity, as well as stimulation of the liver to release sugar compounds in the bloodstream to produce extra energy (Weinberg, 2009). As a result, in a short time the coffee is able to affect the sleep, increases mental awareness, mind, focus, and response. Caffeine may prevent people from falling asleep, causing people to wake up at night, disrupting sleep REM (Perry, Potter, 2010). That's why regular coffee consumed in the morning, helping awake at night, and when conditions are tired after a day of activities. As a result of growing coffee making human waking hours longer than the hours of sleep and work longer than the rest. The side effects are much sought after, but sometimes avoided by coffee connoisseurs are insomnia or effect of staying up. Coffee is known to friends stay up because of its caffeine content helps the heart and makes people wary of making it difficult to sleep. Coffee has a negative impact if consumed in excess. Given Coffee affects the quality of sleep, coffee consumption, especially at night because caffeine is proven to lead to deterioration in the quality of sleep that is of aspect amount of sleep is reduced, satisfaction
and depth of sleep decreased and may cause interference to move in the morning.

A cup of coffee a day can improve blood circulation, but coffee consumption is excessive dependence that could have been avoided. Health problems, especially sleep disorders can not be separated from the responsibility of nurses as health professionals in this respect the role of the nurse as a role model and educator. The role of the nurse as a role model to make a nurse is bound by the code of professional conduct in carrying out its role both in the order of service as well as in social life of the community. Nurses provides health education about the adverse effects on sleep quality coffee to students.

To fulfill this role, the nurse must have the skills in effective interpersonal relationships, knowing the principle adopted by the client, have the ability of learning and teaching, as well as having sufficient ability of coffee both in terms of content, benefits, and side effects that arise on health especially in terms of quality of sleep that includes the time of start of sleep, sleep duration, sleep efficiency habits, sleep disturbance and the use of sleeping pills.

## Research Method

This study used a descriptive correlational study using cross sectional design. The population in this study were students who lived in Ngagel rejo Wonokromo Surabaya. The number of respondents 40 people with a sample of 36 people. The sampling technique used in this research with Probability Sampling Random Sampling.

## Result

## 1. Characteristics of respondents by sex

\left.| Table 1. Table frequency characteristics of |  |  |
| :--- | :---: | :---: |
| respondents by sex |  |  |$\right]$| Sex | frequency | Percentage <br> $(\%)$ |
| :--- | :---: | :---: |
| Male | 25 | 69.4 |
| Female | 11 | 30.6 |
| total | 36 | 100.0 |

Results Table 1 in mind that the majority of respondents are male as much as 25 respondents ( $69.4 \%$ ) and the rest were women as many as 11 respondents ( $30.6 \%$ )

## 2. Characteristics of respondents by age

Table 2. Table frequency characteristics of respondents by age

| Age | Frequency | (\%) |
| :--- | :---: | :---: |
| $18-19$ Years old | 6 | 16.7 |
| $20-21$ Years old | 20 | 55.6 |
| $22-23$ Years old | 5 | 13.9 |
| $24-26$ Years old | 5 | 13.9 |
| Total | 36 | 100.0 |

Results Table 2 Respondents note that the vast majority were aged $20-21$ years as many as 20 respondents ( $55.6 \%$ ). respondents aged 18-19 years as many as six respondents ( $16.7 \%$ ). Respondents aged 22-23 years as many as five respondents ( $13.9 \%$ ) and respondents aged 24-26 years as many as five respondents (13.9\%).

## 3. Characteristics of respondents by status of residence

Table 3. Table frequency characteristics of respondents by status of residence

| Stay | Frequency | Persentage <br> (\%) |
| :--- | :---: | :---: |
| Boarding Houses | 36 | 100.0 |
| Total | 36 | 100 |

Results Table 3, it is known that in general all respondents of the 36 respondents ( $100 \%$ ) live in boarding houses.

## 4. Characteristics of respondents by college

Table 4. Table frequency characteristics of respondents based college

| University | Frequency | Persentage <br> $(\%)$ |
| :--- | :---: | :---: |
| Sutomo | 1 | 2.8 |
| Ubara | 1 | 2.8 |
| Ubaya | 1 | 2.8 |
| Unipa | 32 | 88.9 |
| Unitomo | 1 | 2.8 |
| Total | 36 | 100.0 |

Results Table 4 is known that the number of respondents that most of the respondentswho lectures on campus Unipa Surabaya as much as 32 respondents ( $88.9 \%$ ) and the rest is the respondents who lectures on campus as much Sutomo

1 respondent ( $2.8 \%$ ), respondents who lectures on campus Ubara Surabaya as one respondent ( $2.8 \%$ ), respondents who studied at Ubaya campus as one respondent $(2.8 \%)$,
and respondents who lectures on campus as much Unitomo 1 respondent ( $2.8 \%$ ).

## 5. Characteristics of respondents by age began to drink coffee

Table 5. Table of distribution of respondents by age began to drink coffee

| Age Begin <br> Drinking | $\mathbf{n}$ | (\%) |
| :--- | :---: | :---: |
| $1-5$ Years old | 8 | 22.2 |
| $6-10$ Years old | 23 | 63.9 |
| $11-15$ Years old | 3 | 8.3 |
| $16-17$ Years old | 2 | 5.6 |
| Total | 36 | 100.0 |

Results Table 5 in mind that the majority of respondents ages ranging from drinking coffee is from the age of $6-10$ years old as many as 23 respondents ( $63.9 \%$ ), while the rest are respondents who began drinking coffee since the age of 1-5 years old as much as 8 respondents ( $22.2 \%$ ), respondents who began drinking coffee since the age of 11-15 years old as many as three respondents ( $8.3 \%$ ), respondents who began drinking coffee since the age of 16-17 years old as many as 2 respondents (5.6\%).

## 6. Distribution of respondents by type of coffee drunk

Table 6. Table of frequency distribution of respondents by type of coffee drunk

| Coffe Type | Frequency | Percentage <br> (\%) |
| :--- | :--- | :--- |
| Black Coffe | 26 | 72.2 |
| Instan Coffe | 10 | 27.8 |
| Total | 36 | 100.0 |

Results Table 6 in mind that most of the respondents consume black coffee as much as 26 respondents ( $72.2 \%$ ). Respondents who consumed coffee with creamer / milk as much as 10 respondents ( $27.8 \%$ ).

## 7. The distribution of respondents by the time drinking coffee

Table 7. Table of frequency distribution of respondents by the time drinking coffee

| Time | Frequency | Percentage <br> (\%) |
| :---: | :---: | :---: |
| 07.00 AM | 11 | 30.6 |
| 08.00 AM | 15 | 41.7 |
| 09.00 AM | 10 | 27.8 |
| Total | 36 | 100.0 |

Table 7 note that most respondents drink coffee at 08.00 AM as many as 15 respondents (41.7\%). Respondents who drink coffee at 07.00 AM by 11 respondents (30.6\%). Respondents who drink coffee at 09.00 AM by 10 respondents ( $27.8 \%$ ).

| Time | Frequency | Percentage <br> $(\%)$ |
| :--- | :---: | :---: |
| 18.00 PM | 2 | 5.6 |
| 19.00 PM | 20 | 55.6 |
| 20.00 PM | 5 | 13.9 |
| 21.00 PM | 7 | 19.4 |
| 22.00 PM | 1 | 2.8 |
| 23.00 PM | 1 | 2.8 |
| Total | 36 | 100.0 |

Results 8 above table it is known that most respondents drink coffee at 19.00 PM on the evening of 20 respondents ( $55.6 \%$ ). Respondents who drink coffee at 21.00 PM by

7 respondents (19.4\%), respondents who drank coffee at 20:00 PM by 5 respondents ( $13.9 \%$ ).
Respondents who drank at 18:00 PM by 2 respondents ( $5.6 \%$ )

## 9. Frequency of drinking coffee Relations with the sleep quality of students

Table 9. Coffee drinking frequency relationship with the sleep quality of students in the Village Ngagel Rejo Wonokromo Surabaya respondents

| Frequency of Drinking Coffee | Quality of Sleeping |  |  |  | Jumlah |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Good |  | Bad |  |  |  |
|  | N | \% | N | \% | N | \% |
| Never | 0 | 0 | 0 | 0 | 0 | 0 |
| Sometime | 3 | 11,5 | 23 | 88,5 | 26 | 100 |
| Sering | 0 | 0 | 10 | 100 | 10 | 100 |
| Total | 3 | 8,3 | 33 | 91,7 | 36 | 100 |
| $p=0,001$ rho spearman $=0,578$ |  |  |  |  |  |  |

Table 9 shows that there are differences in sleep quality students who are having the frequency of drinking coffee on kateagori Sometimes and Frequently. Students having a frequency of drinking coffee sometimes consisted of 26 people the majority ( $88.5 \%$ ) have the quality of sleep in recent category, while students who are having the frequency of drinking coffee is often made up of 10 people, all ( $100 \%$ ) had sleep quality in recent category. From these results it can be seen that the students who have the highest level of quality of sleep disturbance is a student who has a frequency of drinking coffee in a category often.

Results of statistical test by Spearman rho values obtained the resulting ) 0.05 (5\%). aindex ( p ) is 0,001 less than the significance value ( Because ), then H0athe index value (p) resulting smaller darisignifikansi ( rejected
and H1 accepted which means that there is a relationship between the frequency of drinking coffee with sleep quality. The value of the Spearman rho coefficients obtained for 0.578 shows a fairly strong relationship.

## Discussion

Respondents who have a frequency of drinking coffee in a category sometimes (1-2 cups per day) at most because of the type of coffee consumed different respondents. Results Table 5.9 (page 66) shows that most respondents preferred the kind of black coffee as much as 26 respondents ( $72.2 \%$ ) than on the type of coffee milk / creamer. In accordance with the results of crosstabulation between types of coffee and coffee drinking frequency, it is known that most of the respondents consume black
coffee as much as 17 respondents (65.4\%) in the category sometimes ( $1-2$ glasses per day) and respondents who consumed coffee milk / creamer as many as nine respondents ( $90.0 \%$ ) in the category sometimes. Ditjetbun research results (2001) that the type of coffee ready for brewing is generally favored by the predominantly urban and educated. Groups of teenagers who dominated the student / students tend to choose the type of instant coffee mix both types of coffee (coffee, sugar and creamer or milk) or black coffee or instant coffee. This is consistent with the characteristics of respondents who are all students, where their habitual coffee consumption an average of 1-2 glasses per day with the kind of black coffee because the coffee they consume easily obtainable in the stalls, and also supported by economic circumstances students themselves, In addition, student activities were quite solid in college so they must arrange a time to pick a relaxed time when consuming coffee as the morning before leaving for college and early evening after the lecture. For this reason that support more students choose the frequency of drinking coffee sometimes. Another factor that makes the respondent sometimes drink coffee due to the mindset of respondents who think that to believe things that are mystical or mindset that is not based on scientific understanding, it also affects the respondents in a set time when consuming coffee, for example: the respondents believe when coffee consumption may improve stamina so that in carrying out the activities in particular at night, respondents felt more energetic and can stay up late. Based on
the results of research on the tables most of the respondents who consumed coffee during the night at 19:00 as many as 20 respondents ( $55.6 \%$ ) and the time when the morning most of the respondents consumed coffee at 08.00 by 15 respondents ( $41.7 \%$ ). Respondents who possess the frequency of drinking coffee are included in the category often ( 3 cups per day) of 10 respondents ( $27.8 \%$ ). Results of cross tabulation between the ages began drinking with the frequency of drinking coffee is known that the majority of respondents aged 6-10 years have a frequency of drinking coffee in a category often as many as five respondents (21.7\%). Lestari (2009) in the journal study said that age is a significant effect on the level of coffee consumption. Somebody consumption patterns will influence consumption behavior, and one of the factors that influence consumption behavior is age. The resulting distribution of respondents by age students start drinking coffee in Ngagel Rejo village Wonokromo Surabaya in Table 5.7 (p.65) that the majority of respondents ages ranging from drinking coffee is from the age of 6-10 years as many as 23 respondents ( $63.9 \%$ ). It shows the length of time respondents in mengkonsmsi coffee, which is based on Table 5.2 most of the respondents aged $20-21$ years as many as 20 respondents ( $55.6 \%$ ) so that coffee consumption for respondents become habit because already consume coffee since kacil. Piaget (1984) in Wade (2007) says that the stage of development of children aged 7-12 years are at the concrete operational stage. At this stage, the child has undergone significant developments and is able to overcome some
of the limitations experienced in the previous stage. They can understand the viewpoints of others and the less made an error of logic. Kekurangsempurnaan Apart from that, in these years, the cognitive abilities of children growing rapidly. They can group objects and sort objects from the smallest to the largest, from the bright to dark colors. This is supported by the opinion Andriani et al. (2000) cited Lestari (2009) in the journal study said that the rate of consumption is influenced by characteristics of age, gender, education and employment. Behavior based food consumption also by habits that grow and thrive in the environment and can not be separated from external factors, among others, the cultural environment (Andarina \& Sumarmi, 2006). The increasing age of a person will change their consumption patterns, and can not be separated from the cultural environment. Respondents who consumed coffee with custom reason is because the coffee drinks are often consumed by the respondent in the morning before breakfast and sometimes in the afternoon as a complement to a relaxing time. Coffee drunk by consumers but not as nutritional as a refreshing body and to reduce sleepiness. The second reason is a logical basis for the respondent to continue to consume coffee. According Ikrawan (2005), the caffeine in coffee is a metabolic stimulant. Caffeine also has the effect of ergogenik (effects improve muscle work), because the highest concentration of caffeine that are in muscle cells that can lower lactate production by increasing calcium ion exchange. Thus because of the nature of such caffeine could help to reduce sleepiness and refresh the body.

This can be caused because the average the respondents in this study were students from Flores, because coffee consumption for the community Flores has become a habit. Age students who were respondents in this study were 18-27 years of age. According Mangkunagara (2002), cited Lestari (2009) says that consumer behavior is influenced by psychological factors, among others, is a learning experience. The respondent's age could present a learning experience, a habit which is a process of orientation and action in consuming coffee. So that will determine changes in consumption.

As for some of the factors that influence people's habits Flores coffee consumption is a factor of cultural, environmental and topographical location of the area of origin of the respondents which is a regional commodity producers of coffee are quite high in the area of East Nusa Tenggara.

Perry theory, Potter (2010) which says that the quality and quantity of sleep a person is influenced by many factors, such as the following: illness, medication, lifestyle, emotional stress, environment, exercise and fatigue, motivation and nutrition. One factor that is likely to be experienced by students is a life-style coffee consumption at night that it kept them awake and could not sleep so' sleep quality targanggu. Inadequate sleep and poor sleep quality can lead to balance disorders physiology and psychology. Impact physiology include a decrease in daily activities, tiredness, weakness, slow healing process, the immune system decline and instability of vital signs. While the psychological impact include depression, anxiety and concentration (Briones, 1966, quoted Safrudin 2009 in the Journal of Health

Sciences Nursing). The quality and quantity of sleep is affected by a number of factors. Quality of sleep refers to an individual's ability to stay asleep and got some sleep REM and NREM fitting.

## Frequency of Drinking Coffee relationships with students in Sub Sleep Quality Ngagel Rejo Wonokromo Surabaya

From the results it can be seen that the rate of students who have poor sleep quality disturbances are students who have a frequency of drinking coffee in a category often caused because of the amount of caffeine contained in coffee are consumed exceeds the maximum limit of the body. Opinion researchers that more and more doses of caffeine consumed by a person the worse also the quality of sleep that person. This is consistent with the theory Weinberg (2009) on the mechanism of action of caffeine say that caffeine enters the body is carried by the bloodstream and into the brain pass through the membrane barrier between blood and brain.

In the brain, adenosine receptors. Caffeine molecule is structurally similar to adenosine adenosine receptor will bind to and block the brain cells to bind adenosine and caffeine will return all the work adenosine. According Liveina (2014) in the journal study said that caffeine is consumed will go into the lumen of the intestine and is absorbed quickly and complete. The majority of survey respondents have felt the effects of caffeine within an hour after consumption, with regard to the time needed caffeine to achieve the maximal plasma concentration of
approximately 30 to 45 minutes. The release of norepinephrine due to the blockade of receptors Adenosine 1 (A1) and increased dopaminergic activity due to blockade of A2a receptors provide a stimulant effect that is characterized by difficulty sleeping after caffeine consumption. consequently the body no longer sleepy, but appeared fresh feeling that the quality of your sleep disturbed.

Results of cross tabulation between types of coffee with the quality of sleep is known that respondents who consumed types of black coffee as much as 24 respondents (92.3\%) were more likely to experience poor sleep quality than respondents who consume different types of coffee milk / creamer which was only 9 respondents who experienced quality sleep poorly.

Respondents who consumed coffee black tend to be more experience poor sleep quality due to the caffeine content contained on the kind of black coffee more than the caffeine content contained on the type of coffee milk / creamer. This is consistent with the results of research Rahajeng (2010) in the journal study said that the caffeine content contained on the kind of black coffee in one sachet ( 7.35 gram equivalent to 2 teaspoons) is 239.5 mg and coffee milk / cream in one sachet ( 32 g ) the amount of the caffeine content of as much as 73.9 mg . Caffeine is a compound functioning as an antagonist of adenosine, where the results of this blockade provide a stimulant effect on the central nervous system. The stimulant effects can improve alertness, awakening and eliminate sleepiness (Weinberg, 2009).

Suryadi et al. (2002) cited Lestari (2009) in the journal study that says that society has a characteristic dynamic city that
buy products not only for functionality, but also for a kepuasanyang wants. This type of coffee powder branded heavily promoted through various media and supported by the availability of goods in the shops will be more quickly responded by urban consumers. It can be caused by habits of respondents who had been long enough to consume black coffee without using such a mixture of milk or cream. The reason is based on the body's ability to adapt to accept the type of food or drinks that are new to the body, both from the taste of coffee and the effects of coffee on the body. Of the few respondents said that when consumed coffee with milk and cream mixture can cause nausea and disruption to pencernan, making it difficult for them to change habits that consumed coffee black.

Statistical test results can be seen above the level of the comparison frequency of drinking coffee in a category sometimes and categories are often very significant, affecting the quality of sleep of respondents this percentage can be seen from the comparison between categories sometimes as many as 26 respondents who experienced a $88.5 \%$ poor sleep quality and frequent categories were as many as 10 respondents $100 \%$ had poor sleep quality.

Weinberg (2009) says that the rate of metabolism of caffeine each person is very different from one another. At the same dose effects of caffeine on a person's body will be felt within 3 hours while in others only felt after 6 hours. Therefore, the effect of caffeine on the quality of sleep a person is dependent on the rate of metabolism of caffeine every person, because the metabolic rate for each person is different even though the dose of caffeine contained in coffee consumed by
each student as much. Just as in the table 5:14 (p.68) that the respondent has a frequency of drinking coffee in a category sometimes as many as 26 respondents did not all experience the quality of sleep in a shabby but there are three categories of respondents (11.5\%) who had good sleep quality, while 23 respondents ( $88.5 \%$ ) had poor sleep quality. This is because the rate of metabolism of caffeine each respondent was different. As with the respondents that have a frequency of drinking coffee in a category often out of 10 respondents ( $100 \%$ ) all experienced poor sleep quality. This is because the amount of caffeine consumed respondents strongly exceeded the maximum.

According to ISO (2006) cited Maramis (2013), limit caffeine consumption in food is as much 150 mg / day and $50 \mathrm{mg} /$ serving. Perry, Potter (2005) says that most young adults on average 6-8 hours of sleep per night. Quality of sleep refers to an individual's ability to stay asleep and got some sleep Rapid Eye Movement (REM) and Non Rapid Eye Movement (NREM) that fit. Endang (2001) says that the need for adequate sleep is determined by factors other than the number of hours of sleep (sleep quantity), also by a factor of depth of sleep (sleep quality). A person can sleep a short time, but with enough depth of sleep, and thus, on waking will feel fresh again and sleep patterns that will not harm our health.

## Conclusion

Based on the analysis of research and discussion it can be concluded:

1. Frequency of drinking coffee in Kelurahana Ngagel students Rejo Wonokromo Surabaya largely within
the category of occasional (1-2 cups per day) were 26 respondents ( $72.2 \%$ ).
2. The sleep quality of students in the village Ngagel rejo Wonokromo Surabaya most have poor sleep quality in the category of a total of 33 respondents ( $91.7 \%$ )
3. There is a relationship between the frequency of drinking coffee with students in Sub-quality sleep Ngagel Rejo Wonokromo.

## Advice

1. For Readers

Researchers suggest to the reader to mengaturjumlah caffeine into the body as much as 150 mg per day.
2. For respondents

To the respondent or the students to know the limits of your body a dose of caffeine, know the effects of coffee taken so that no disastrous effects of sleep quality.
3. For the Food and Drug Supervisory Agency (BPOM) need to impose limits on the amount of the caffeine content of coffee producers, so that consumers do not consume caffeine coffee exceed the maximum limit.
4. For libraries

The results of this study can be used as a reference for students as a source of information as well as increase their knowledge in conducting further studies on the effect of frequency of drinking coffee on the sleep quality of students.
5. For further research

Researchers can further develop this research by testing the validity and
reliability of the research instruments and using a larger sample and more about relationships frequency of drinking coffee with sleep quality by considering the lifestyle that is run by the students.

## Refference

Anonim. 2015. Buku Pedoman Skripsi. Edisi Kedua. Surabaya: SHT Press.
Buysse, DJ, dkk. 1988. The Pittsburgh Sleep Quality Index: A New Instrument For Psychiatric Practice and Reasearch.
Gemilang, J. 2013. Rahasia Meracik Kopi Ternikmat dari Berbagai Penjuru Dunia. Yogyakarta: Araska.
Hidayat, A. Alimul. 2012. Pengantar Kebutuhan Dasar Manusia, Aplikasi Konsep dan Proses Keperawatan. Jakarta: Salemba Medika.
Juwana, Satya. 2005. Gangguan Mental dan Perilaku Akibat Penggunaan Zat Psikoaktif: Penyalahgunaan Napza / Narkoba. Edisi. 2. Jakarta: EGC.
Lanywati, Endang. 2001. Insomnia Gangguan Sulit Tidur. Yogyakarta: Kanisius.
Liveina 2014. Jurnal Penelitian Pola Konsumsi dan EfekSamping Minuman Mengandung Kafein Pada Mahasiswa Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Udayana Bali, http://ojs.unud. ac.id/index.php/eu m/article/view/11951
Majid, A. Yudi. 2014. Skripsi: Pengaruh Akupresur Terhadap Kualitas Tidur Lansia d Balai Perlindungan Sosial Tresna Werdha Ciparay, Universitas Padjadjaran Bandung. http://web.unair.ac.id/ admin/file/f_66394_Pengaruh Akupresur-Terhadap-Kualitas-Tidur- Lansia.pdf,
Moh. Nazir. 2014. Metode Penelitian. Bogor: Penerbit Ghalia Indonesia.
Nashori, Fuad. 2015. Perbedaan Kualitas Tidur dan Kualitas Mimpi antara Mahasiswa lakilaki dan mahasiswa perempuan universitas
islam Indonesia. Indonesian Psychological Journal Vol. 2 No. 2,http://nurwahidahside. blogspot.co.id/20 15/11/resume-jurnal-perbedaan-kualitas- tidur.html\#sthash. Vn7PzxNW.dpuf
Nursalam. 2011. Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan Pedoman Skripsi, Tesis dan Instrumen Penelitian Keperawatan. Jakatrta: Salemba Medika.
Perry, Potter. 2010. Fundamental Of Nursing. Fundamental Keperawatan. Edisi 7. Jakarta: Salemba Medika.
Prasadja, Andreas. 2009. Ayo Bangun! Dengan
Bugar Karena Tidur Yang Benar. Jakarta Selatan: PT. Mizan Publika.
Panggabean, Edy. 2011. Buku Pintar Kopi. Jakarta: Agromedia Pustaka.

Pulu, Haryani. 2015. Primarasa: Olahan Lezat Kopi dan Teh. Jakarta: PT. Gaya Favorit Press.
Safrudin. 2009. Hubungan Kualitas Tidur Dengan Lama Hari Dirawat Pasien Gastritis di RSU Kebumen. Jurnal Ilmiah Kesehatan Keperawatan, Volume 5, No. 2.http:// ejournal.stikesmuhgombon g.ac.id/index. php/JIKK/article/vi ew/56
Samsura, Doddy. 2014. Ngopi Ala Barista. Jakarta: Penebar Plus+.
Saputra, Lyndon. 2013. Catatan Ringkas Kebutuhan Dasar Manusia. Jakarta: Bina Rupa Aksara.
Tarwato dan Wartonah. 2011. Kebutuhan Dasar Manusia dan Proses Keperawatan. Jakarta: Salemba Medika.


# Meiana Harfika, SKM., M.Kes 

for his/her contribution as

## Poster Presenter

THE $2^{\text {nd }}$ INTERNATIONAL NURSING CONFERENCE (INC) 2016 "Developing Cross-Cultural Understanding and Behavior in Nursing Care Services"

In Surabaya, Indonesia November $5^{\text {th }}, 2016$
Accredited based on decree of Indonesia National Nurses Association
No: 1036/ DPP.PPNI / SK / K.S / XI / 2016
Speaker 3 SKP, Participant 3 SKP, Moderator 2 SKP, Committee 2 SKP.


Wiwiek Liestyaningrum, S.Kp.,M.Kep. The Head of STIKES Hang Tuah Surabaya


Puji Hastuti, S.Kep., Ns., M.Kep. Chairperson of Organizing Committee

