



**THE PROCEEDING OF  
THE 9TH INTERNATIONAL NURSING CONFERENCE 2018  
“NURSES AT THE FOREFRONT IN TRANSFORMING CARE, SCIENCE, AND  
RESEARCH”**



**FACULTY OF NURSING  
UNIVERSITAS AIRLANGGA  
2018**

The Proceeding of 9<sup>th</sup> International Nursing Conference:  
Nurses at The Forefront in Transforming Care, Science, and research

Fakultas Keperawatan Universitas Airlangga

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**9<sup>TH</sup> INTERNATIONAL NURSING CONFERENCE**  
**“Nurses at the Forefront Transforming Care, Science, and research”**  
**Surabaya, 7 – 8 April 2018**

**DAY 1, SATURDAY 7<sup>th</sup> April 2018**

TIME	ACTIVITY	VENUE
07.00 – 08.30	Open Registration	Ballroom Isyaana Hotel Bumi
08.30 – 08.45	<b>Opening Remarks</b> <ul style="list-style-type: none"> <li>• Indonesia Raya: National Anthem</li> <li>• Hymne Airlangga</li> </ul>	
08.45 – 09.15	- Welcoming Show (Traditional Dance): Sparkling Surabaya - Speech from Dean of The Faculty of Nursing, Universitas Airlangga - Speech from Rector Universitas Airlangga - Opening ceremony: Hit the Gong - Pray	
09.15 – 09.45	<b>Keynote Speaker</b> Vice Rector I Universitas Airlangga (Development of Nursing Faculty to Word Class University)	
09.45 – 09.50	- Certificate Conferment & Giving Souvenir	
09.50 – 10.00	<b>Coffee Break and Opening Poster Presentation</b>	
10.00 - 10.20	<b>Speaker 1</b> Dr. Muhammad Hadi, SKM., M.Kep (Universitas Muhammadiyah Jakarta, Indonesia) <i>“The Role of AINEC to Improve Quality of Nursing Through Education, Clinical Practice and Research”</i>	Ballroom Isyaana Hotel Bumi
10.20–10.40	<b>Speaker 2</b> Professor Lisa McKenna (La Trobe University, Australia) <i>“Challenges in research publication in nursing”</i>	
10.40 – 10.55	<b>Speaker 3</b> Elsi Dwi Hapsari, B.N., M.S., D.S (Universitas Gajah Mada, Indonesia) <i>“Improving Image of Nurses in Indonesia: Role of INNA”</i>	
10.55 – 11.15	<b>Speaker 4</b> Dr. Aileen Burton (University College Cork, Ireland) <i>“Diabetes and psychological wellbeing: a neglected aspect of care”</i>	
11.15 – 11.45	Plenary Discussion	
	Conferment of certificates	
11.45 – 12.45	Poster Presentation 1	
	<b>Pray Time &amp; Lunch Break</b>	
12.45 – 13.05	<b>Speaker 5</b> Professor Eileen Savage (University College Cork, Ireland) <i>“Online versus paper based screening for anxiety and depression in adults with cysticfibrosis in Ireland”</i>	Ballroom Isyaana Hotel Bumi
13.05 – 13.25	<b>Speaker 6</b> Dr. Bill McGuiness (La Trobe University, Australia) <i>“Evidenced based update on wound management”</i>	
13.25 – 13.40	<b>Speaker 7</b>	

TIME	ACTIVITY	VENUE
	Yuni Sufyanti A, S.Kp., M.Kes (Universitas Airlangga, Indonesia) <i>“Family Centered Empowerment Model as a Effort to Increase Family’s Ability to Caring Children with Leukemia”</i>	
13.40 – 13.55	<b>Speaker 8</b> Addi Mardi Harnanto, M.Nurs (Poltekes Kemenkes Surakarta, Indonesia) <i>“The Effort to Improve the Competency and Softskill of Disaster Preparedness Management for Graduates of Nursing colleges in Indonesia”</i>	
13.55 – 14.25	Plenary Discussion Conferment of certificates	
14.25 – 14.45	<b>Speaker 9</b> Assist. Prof. Dr. Supaporn naewbood (Naresuan University, Thailand) <i>“The Role of Nurses in Palliative Care Program and Development”</i>	Ballroom Isyaana Hotel Bumi
14.45 – 15.05	<b>Speaker 11</b> Dr. Vimala A/P Ramoo (University Malaya, Malaysia) <i>“Palliative Care in Intensive Care: Malaysian Perspective”</i>	
15.05 – 15.20	<b>Speaker 12</b> Dr. Retno Indarwati, S.Kep., Ns., M.Kep (Universitas Airlangga, Indonesia) <i>“Peer Group Support Toward Stress Relocation Among Elderly in Nursing Home”</i>	
15.20 – 15.35	<b>Speaker 13</b> Dya Sustrami, S.Kep., Ns., M.Kes. (STIKES Hang Tuah Surabaya, Indonesia) <i>“The Comparison of Elderly life Quality index of Urban and Coastal Societies in Surabaya ”</i>	
15.35 – 16.00	Plenary Discussion Certificate Conferment	
16.00 – 16.30	<b>Coffee Break and Opening Poster Presentation</b>	
16.30 – 16.50	<b>Speaker 14</b> Dr. Sonia Reisenhofer (La Trobe University, Australia) <i>“Using the World Health Organisation (WHO) guidelines to support women exposed to violence”</i>	
16.50 – 17.05	<b>Speaker 15</b> Dr. Abu Bakar, S.Kep., Ns., M.Kep., Sp. KMB (Universitas Airlangga, Indonesia) <i>“Decreased Cortisol Coronary Heart Patient Who Received Islamic Nursing Care: A pilot Study”</i>	
17.05 - 17.20	<b>Speaker 16</b> Dr. Mundakir, S.Kep., Ns., M.Kep (Universitas Muhamaddiyah Surabaya, Indonesia) <i>“Strategy Model Faster Learning Organization (FLO) as Improvement Effort a Holistic Nursing Services Based on Modelling-Role Modelling Therapy (MRM)”</i>	
17.20—17.50	Plenary Discussion Certificate Conferment & Closing Day 1	



# Differences In The Level Of Knowledge After Health Education On The Handling Of Dysmenorrhoea In Teenager Women In SMP Muhammadiyah 4 Surabaya

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**Keywords:** Dysmenorrhoea, Knowledge, Health Education, Teenage Women.

**Abstract:** Dysmenorrhoea is a reproductive health problem experienced by teenage women. The incidence of dysmenorrhea is around 50% among reproductive age. This study aims to determine the level of knowledge of juvenile girls SMP Muhammadiyah 4 Surabaya after health education. The research design was conducted using an experimental pre-designed one-group pre-post test design. Sample in this study amounted to 36 respondents taken through simple random sampling technique. Data collection instruments are questionnaire of demographic data and knowledge level of dysmenorrhoea handling. Data analysis using Wilcoxon Statistic Test  $p < 0.05$ . Result of research Level of knowledge of respondents after health education on handling of dysmenorrhoea 32 respondents (89%) good knowledge level, 4 respondents (11%) enough knowledge level, 0 respondents (0%) less knowledge level. Based on statistical test using Wilcoxon Sign Test with significant level obtained  $p$  value = 0,000. This shows that  $p \leq 0,05$  which means there is a significant difference between the level of knowledge before and after the health education. The results of this study is expected to give insight in building health promotion, especially education for reproductive health in teenager women.

## 1 INTRODUCTION

Dysmenorrhoea is painful during menstruation, with a feeling of cramping and centralized in the lower abdomen (Sarwono, 2011). Dysmenorrhoea usually occurs in adolescence after some time experiencing menarce. Adolescence is a period of transition where the level of curiosity is very high to find identity (Kusmira, 2011), Therefore in adolescence is needed a guidance in the level of knowledge in maintaining the reproductive system Knowledge is a known related to the learning process, knowledge is the result from know and this happens after people melakuka sensing of a particular object, most of human knowledge is influenced by the eyes and ears (Notoatmodjo, 2012).

Adolescence is a period of guidance in the level of knowledge by through health education. Health education is any effort planned to influence others, so they do what the educator or health promoter hopes to do. Women who are menstruating every month have dysmenorrhoea as much as 50% and

10% have severe symptoms that require bed rest, international reports of dysmenorrhoea prevalence is very high and 50% of young women experience dimenorea throughout the reproductive years. The incidence of dysmenorrhea in Indonesia is 107.673 (64.25%), consisting of 59,671 people (54.89%) suffering from primary dysmenorrhoea and 9,496 people (9.36%) having secondary dysmenorrhoea (healthy info, 2010). The incidence of dysmenorrhea in Indonesia is 107.673 (64.25%), consisting of 59,671 people (54.89%) suffering from primary dysmenorrhoea and 9,496 people (9.36%) having secondary dysmenorrhoea (healthy info, 2010). Lack of knowledge in the treatment of dysmenorrhea can have an impact on the activities or activities of women, especially adolescents. Dysmenorrhea prevents women from performing normally and requires prescription. This situation causes a decrease in the quality of life of women, for example dysmenorrhea can not concentrate in learning and learning motivation decreases because of perceived pain (Suraya, 2014). Therefore, it is important that the health education of students on the handling of dysmenorrhoea, given the health education, the

adolescent knowledge will increase, the adolescent will be better prepared when knowing the menstruation cycle will arrive so that the quality of life will be better not to be obstructed to enter school and daily activities .

## 2 METHODS

The research design used in this study used pre-experimental design with one-group pre-post test design, which in this study made measurement or observation twice that before (pretest) conducted health education to handling dysmenorrhoea and after (post-test) done health education on the handling of dysmenorrhoea in grade VIII students of SMP 4 Muhammadiyah Surabaya. The population of all students of class VIII SMP 4 Muhammadiyah Surabaya who had menstruation amounted to 40 people.

Sampling technique use Probability sampling with simple random sampling approach. Sample Most students of grade VIII SMP 4 Muhammadiyah Surabaya amounted to 36 people. Data analysis with use of Wilcoxon Statistic Test ( $p < 0.05$ ). Data was collected on 13 December 2017. After initial observation, the researcher gave health education at SMP Muhammadiyah 4 Surabaya by lecture method. This study was conducted in the hall room with the number of respondents as many as 40 female students were collected into one with the provision of health education as much as 1 time.

Researchers describe the material about the treatment of dysmenorrhoea for 45 minutes consisting of understanding dysmenorrhoea, causes of dysmenorrhoea, signs and symptoms of dysmenorrhoea, prevention of dysmenorrhoea, and handling dysmenorrhea. After completion of post intervention data collection.

## 3 RESULTS

The results of this study include demographic data and special data research.

Table 1: Characteristics based on age of girls in grade VIII SMP Muhammadiyah 4 Surabaya, December 13, 2017 (n = 36)

Age (year)	Percentage (%)
12-13	55,6
13-14	36,1

14-15	8,3
	100

Table 1 shows that of 36 respondents of junior high school students of SMP Muhammadiyah 4 Surabaya, 20 respondents (55.6%) were 12-13 years old, 13 respondents (36.1%) were 13-14 years old, 3 respondents (3.8%) were 14-15 years old.

Table 2: Characteristics based on activities by girls of class VIII SMP Muhammadiyah 4 Surabaya, December 13, 2017 (n = 36).

Activities	Percentage (%)
Flag Raisers	5,6
scout	30,6
Basketball	58,3
Volleyball	5,6
	100

Table 2 shows that from 36 respondents of junior high school students of Muhammadiyah 4 Surabaya, 21 respondents (58.3%) followed basketball, 11 respondents (30.6%) followed scout activities, 2 respondents (5.6%) followed flag raisers activities, 2 respondents (5.6%) following volleyball

Table 3: Characteristics of respondents based Level of Knowledge Before Health Education in juvenile girls of SMP Muhammadiyah 4 Surabaya on December 13, 2017 (n = 36)

Level of Knowledge	Percentage (%)
Good	10
Enaugt	71
less	19
	100

Table 4: Characteristics of respondents based on the level of knowledge after health education on handling dysmenorrhoea in young women SMP Muhammadiyah 4 Surabaya on December 13, 2017 (n = 36).

Level of Knowledge	Percentage (%)
Good	89
Enaugt	11
less	0
	100

Table 4 shows that the level of knowledge of 36 respondents of junior high school students of SMP Muhammadiyah 4 Surabaya after health education on handling of dysmenorrhoea, 32 respondents

(89%) good knowledge level, 4 respondents (11%) knowledge level enough. So the average level of knowledge of junior high school students of Muhammadiyah Surabaya after doing health education is good

Table 5: Characteristics of respondents based on different levels of knowledge after health education on handling dysmenorrhoea in adolescent girls SMP Muhammadiyah 4 Surabaya on December 13 (n = 36).

Level of knowledge	Pretest (%)	Posttest (%)
Good	10	89
Enaught	71	11
less	19	0
Wilcoxon Signed Test test p = 0,000 <0,05		

Table can be seen that the level of knowledge before the health education, 4 respondents (10%) good knowledge level, 25 respondents (71%) enough knowledge level, 7 respondents (19%) less knowledge level. The level of knowledge of adolescents after health education 32 respondents (89%), 4 respondents (11%) sufficient level of knowledge, and the level of knowledge less becomes non-existent. Test statistic using Wilcoxon Sign Test with significant level obtained p value = 0,000. This indicates that  $p \leq 0,05$  meaning that there is significant difference of mean score of knowledge level before and after health education.

## 4 DISCUSSION

### Knowledge Level of Junior High School Students of Muhammadiyah 4 Surabaya Before Health Education

The table shows that the level of knowledge of young women prior to health education is divided into three categories namely good, enough, less. The result of analysis shows the knowledge level of 36 respondents, 24 respondents (67%) enough knowledge level.

Factors affecting the level of knowledge are the level of education, occupation, age, information, environmental factors, and socio-cultural. This sufficient knowledge is influenced by previous dysmenorrhoeal experience, where respondents who suffer from dysmenorrhoea are as many as 28 respondents (77.8%). This data is supported by crosstab results between special data (pre test) with adolescents with dysmenorrhoea who stated that 18

respondents (64.3%) of 28 respondents (100%) who suffer from dysmenorrhoea enough knowledge category.

(Notoatmodjo, 2010) reveals that one way humans acquire knowledge through personal experience, personal experience can be used as an effort to gain knowledge. Based on the results of crosstab above category enough as much as 18 respondents (64.3%) who experienced dysmenorrhoea. The researchers concluded that the average level of adolescent knowledge is sufficiently influenced by the personal experience they experienced in the past suffering from dysmenorrhoea. the more experience a person gains, the better the knowledge level. Experience can affect the level of knowledge of respondents, because personal experience associated with what has been and is experienced to shape and affect our appreciation of the stimulus.

### Knowledge of Responden in SMP Muhammadiyah 4 Surabaya After Health Education

The results showed that the level of knowledge of young women after health education. The result of analysis shows that the number of respondents before the previous level of health education knowledge of some of the knowledge base of respondent category enough. After doing health education level of adolescent knowledge of most good category.

The level of knowledge of 36 respondents, 32 respondents (89%) with the level of knowledge of good category. The results of this study indicate that most of the adolescent girls of class VIII SMP Muhammadiyah 4 Surabaya after health education in good category, this proves that health education intervention can improve students' knowledge about handling dysmenorrhoea. This study is in line with the study (Alfarisy, 2013) on "The effectiveness of health education on increasing the knowledge of adolescents about the impact of smoking in SMAN 1 Kampar Utara can be concluded that health education has a significant effect on changes in adolescent knowledge about the impact of cigarette hazard. Results of crosstab of special data (post test) with the data of respondents experiencing dysmenorrhoea as follows. Of 28 respondents (100%) who experienced dysmenorrhoea, 24 respondents (85.7%) good category knowledge level.

This research is in line with the theory (Notoatmodjo, 2007) suggests that health education is essentially an activity or an attempt to convey

health messages to people, groups or individuals. Increased knowledge is an indicator of health education conducted. In the end the knowledge is expected to affect its behavior. In other words, the existence of health education can bring changes both in terms of cognitive, attitudinal, and target behavior. Based on the above data the researcher concludes that there is a change of knowledge level of this good category influenced by the existence of health education given by lecture method and more focus on handling of dysmenorrhoeal so that there is a significant change of level of knowledge

### **Differences in the level of knowledge of juvenile girls SMP Muhammadiyah 4 Surabaya before and after medical education on handling dysmenorrhoea**

Cross tabulation results between before and after health education. Significant results obtained ( $p = 0,000$ ) which means  $p$  value  $<0,05$  hence can be concluded  $H_0$  rejected and  $H_a$  accepted that there is difference of knowledge level before and after giving health education to handling dysmenorrhoea.

The results of this study are in line with the study (Alfarisy, 2013) on the effectiveness of health education on increasing the knowledge of adolescents about the impact of smoking in SMAN 1 Kampar Utara It can be concluded that health education has a significant effect, this is shown from the results of stasis test by using independent sample test with  $p$  value 0.000 or  $p <0,05$  to change level of adolescent knowledge about impact of cigarette hazard. Notoatmodjo (2007) suggests health education is an activity or learning process to develop or improve certain skills so that the goals of health education that can stand alone. The level of education can affect a person's mindset and digestibility towards the information received. The higher the education level of a person, the higher the information can be absorbed and the height of information absorbed affects the level of knowledge, and vice versa.

(Notoatmodjo, 2007) suggests an important step in health education is to create messages tailored to the target including in media selection, intensity and duration of message delivery. Submission of information is influenced by the methods and media used in which the methods and media delivery of information can have a significant effect on knowledge improvement, information delivery methods is one factor that influences an optimal information delivery results. The health education provided incorporates the latest complementary therapies that have been studied. Such as the use of

soy milk and herbal therapy. In the study Budiarti, A., (2016) states there is an effect of giving herbal therapy with a decrease in the scale of dysmenorrhoea pain. Similarly, research conducted by Budiarti, A., & Wulandari, R.N., (2015) which states there is influence of soy milk to decrease the scale of dysmenorrhoea pain.

## **5 CONCLUSIONS**

1. The level of knowledge of teenage girls of class VIII SMP Muhammadiyah 4 Surabaya before the health education is mostly enough categories.
2. The level of knowledge of girls of class VIII SMP Muhammadiyah 4 Surabaya after health education almost entirely good category
3. There is a difference between the level of knowledge before and after the health education on the handling of dysmenorrhoea.

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