



STIKep PPNI Jawa Barat, Bandung - INDONESIA
National Cheng Kung University Hospital - TAIWAN
Bandung, 16th – 17th July, 2018

Conference Book
International Conference on Health Care
and Management

“Evidence to inform action on supporting and implementation of
SDGs”

Secretary Office :

STIKep PPNI Jawa Barat (Intitute of Nursing Science PPNI West Java)

Jalan Ahmad IV No. 32 Cicendo, Bandung 40173

West Java – Indonesia

Phone: +62 22 6121914

E-mail: info@icon-stikeppni.org

Website: www.icon-stikeppni.org

National Cheng Kung University Hospital

No.138, Sheng Li Road,Tainan, Taiwan 704, R.O.C.

Tel : 886-6-2353535

E-mail : hospital@mail.hosp.ncku.edu.tw



Conference Book International Conference on Health Care and Management:

**“Evidence to inform action on supporting and implementation of SDGs”
Bandung, 16th – 17th July, 2018**

This book published by:

STIKep PPNI Jawa Barat (Intitute of Nursing Science PPNI West Java)

Jalan Ahmad IV No. 32 Cicendo, Bandung 40173

West Java – Indonesia

Phone.: +62 22 6121914

E-mail: info@icon-stikeppni.org

Website: www.icon-stikeppni.org

National Cheng Kung University Hospital (NCKUH)

No.138,Sheng Li Road,Tainan, Taiwan 704, R.O.C.

Tel : 886-6-2353535

E-mail : hospital@mail.hosp.ncku.edu.tw

Chief Editor:

Linlin Lindayani, Ph.D

Member:

Irma Darmawati, M.Kep.,Ns.Sp.Kep.Kom

Henri Purnama, MNS



Conference Book – Table of Contents

International Conference on Health Care and Management-2018

Welcome Message.....	4
Conference Committee	8
Conference Program	10
Presentation Schedule	14
Speaker Biographic.....	30
Information	43

Welcome Message



Assalamualaikum Warahmatullahi Wabarakatuh

Dear honorable guests,
Sustainable Development Goals (SDGs) as an agreement of sustainable development objectives agreed by all countries at the 2015 UN sessions. Each country including Indonesia has an obligation to implement this joint development plan by applying universal, integration and inclusive principles by ensuring that no one missed or “No-one Left Behind” Indonesia has Nawa Cita or 9 priority agenda which should synergize with SDGs and can be used as health program application in Indonesia to also achieve SDGs.

On behalf of the organizing committee and the Nursing Society of Indonesia, I am glad to invite you to join ICHM 2018 (International Conference on Health Care and Management) in Bandung, Indonesia on July 16-17, 2018.

The conference is expected to reveal some solutions for evidence-based health care and scientific facts to be discussed by various viewpoints from diverse speakers from around the world with the title “Evidence to inform action on supporting and implementation of SDGs. Through the International Conference is expected to improve health services, especially in the field of nursing in Indonesia to improve the human development index.

We hope all participant could benefit from the exciting program and will surpass your expectation and that will be an inspiring event.

Warm regards,



Dhika Dharmansyah
Conference chair



Assalamu'alaykum Wr.Wrb
Good morning and best wishes for all of us.

Ladies and gentlemen, in such a great and happy day, let's praise and thank to Allah Swt who has given us grace and mercy to all of us to gather in this International Conference on Health Care Management event today.

First of all, we would like to gratitude and appreciate highly to national Cheng Kung University Hospital has given the opportunity and confidence to our institution STIKep PPNI Jabar for the second time in collaboration to organize International Conference on Health Care Management with theme: "Evidence to inform action on supporting and implementation of SDGs". This event is one of follow up The memorandum of Understanding between NCKUH with STIKep PPNI Jabar.

STIKep PPNI Jabar is as a nursing education institution carry out the mandate to create professional nurse, we must implement all TRIDHARMA University activities in academic atmosphere that aims to broaden and improve nursing and existence of nurse profession capacity in nation developing continually.

As we know the university academic quality is determined by its researches and graduates result quality. The research work results may be either a right against managing intellectual wealth equity as well as scientific work which is able to be publicized through scientific journals and scientific gathering forums of the same scientist background both in national and international level.

Nevertheless, the publishing of journal researches is published by its university. Nowadays, it is irregular because there are both financial and scientific manuscript availability drawbacks. Scientific regular manuscripts are very limited because manuscript contributor is only from its university as well.

The high education Research and technology ministry data in 2017, it stated that there were an increase of research work publishing done by practitioners, academicians and researchers of Indonesian. The amount of Indonesian research publishing on international journal certifiable indexed Scopus tended to increase. The high education Research and technology ministry data on December 1st 2017 noted that Indonesia scientific research publishing reached 14.100 journals. Meanwhile, on October 1st 2017 there were as many as 12.098 journals.

However, internally nurse profession scientific research journals are still less of publishing. It is alleged to the low of quantity and quality publishing about nursing. One of the drawbacks is rarely the interaction between nursing scientists and experts in scientific conferences. Some efforts are carried out by STIKep PPNI to encourage and to accelerate sharing knowledge amongst the nursing experts. Accordance to the goals, National Cheng Kung University Hospital Taiwan and STIKep PPNI have made MoU and held as this International conferences organizer. Hopefully, it is able to bridge all stakeholders, practitioners, and academicians in supporting the quality of the human resources especially, nurses and health workers as well.

The honourable ladies and gentlemen,
Nowadays, in the global era, the transformation runs rapidly and consequently it makes the knowledge based society. Information and communication technology development are very important in on its role in manifesting society development based on the knowledge. The higher education of society will be higher of health service quality demands specially nurse.

Accordance to the effort, this International conference aims to,

1. Facilitate the knowledge sharing between health experts and nurses to encourage the goal of health human resource quality.
2. Produce health scientific and nursing articles deserve to be published on international scopus indexed journal.
3. Make communication networking amongst Universities, research institution, nurse practitioners, and other stakeholders.

I truly believe that all participants through the 2 days in international conference, our goals above are able to be manifested well.

Finally, I would like to thank to all of participants diligently and with spirit of attending this international conference on health care management.

Wish the conference is able to be knowledge sharing event and delightful and successful as well, the conference will be enlightened and interchange will do great help for us after attending this conference, especially STIKep PPNI Jabar and generally for all profession nurses to provide health services to communities, aamiin ya robbal alamin.

Wassalamu'alaykum Wr.wb.

Kindest regards,



The Dean of STIKep PPNI Jabar



Excellencies, Distinguished Delegates, Ladies and Gentlemen,
Selamat Siang,

I'm ChyunYu Yang, the superintendent of National Cheng Kung University Hospital in Tainan, Taiwan.

On behalf of our hospital, it is my pleasure and privilege to welcome all of you to participate in the international conference on health care and management 2018.

To our eminent speakers and delegates who have come from UK, Netherland, Korea, Japan, Thailand, Singapore, Taiwan, and Indonesia, I bid you a very warm welcome to Bandung. We are indeed honoured to have you here with us. We have about 1.000 participants from different place in Indonesia and countries gathered here today, making our conference a truly meaningful one.

This is our second time collaborate with STIKEP PPNI Jawa Barat to hold an international conference. Last year, we have very successful conference with the theme focus on infection control and disaster management. And this year, our conference theme is "evidence to inform action on supporting and implementation of SDGs".

The Sustainable Development Goals (SDGs) known as the global goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. Goal 3 addresses all major health priorities and calls for improving reproductive, maternal and child health; ending communicable diseases; reducing non-communicable diseases and other health hazards; and ensuring universal access to safe, effective, quality and affordable medicines and vaccines as well as health coverage.

However, the world seems still far from ending maternal mortality, with more than 303,000 deaths in pregnancy or childbirth occurring annually. NCDs are also a growing problem, causing 40 million deaths in 2015.

But, All in all, we can take comfort in the fact that SGD indicators are moving in the right direction. Yet we still have plenty of work to do.

I wish in the next two day and a half, we have the opportunity - and indeed the responsibility - to prepare and add knowledge related the current situation and progress reflection of SDGs.

In closing, I encourage delegates to participate actively in the interesting discussions over the next two days. I wish everyone a successful and fruitful conference.

Thank you.

Conference Committee

Steering Committee	: H. Oman Fathurohman H. Wawan Arif Sawana., S.Kp Dr. Hj. Tri Hapsari. R. A., S.Kp., M.Kes Drs. Sutjahyo., M.M H. Husen BSC., MM
Advisor	: Ns. Diwa Agus Sudrajat., M.Kep
Chair	: Dhika Dharmansyah, Ners., M.Kep
General Secretary	: Irma Darmawati., M.Kep., Sp.Kep. Kom Dian Anggraini., Ners., M.Kep
Finance	: Hj. Imas Tjutju, AMK., S.Pd Fitria Agustina., Amd Tati Apriliawati., S.Pt
Programs	: Dewi Srinatania., S.Kp., M.Kep Heni Purnama., MNS Gina Nurdina., S.Kep., Ners Lia Juniarni., M.Kep., Sp. Kep.J Nyayu Nina Putri C ., Ners., M. Kep
Scientific	: Dewi Marfuah., Ns., M.Kep Susy Puspasari., Ners., M.Kep Wini Hadiyani., S.Kp., M.Kep Vita Lucya, Ners., M.Kep Nunung Nurhayati., Ns., M.Kep Tri Antika., Ners., M.Kep Bhakti Permana., M.Si., M.Kep Rizal., Ilbert., SS., MM
IT Administrator	: Rena Ratna Nur Syamsiah, AMD Yuda Gumelar, S.Ip., MPd Deni Firmansyah., S.Sos
Public Relation and Sponsorship	: Suci Noor Hayati., Ners., M.Kep Eva Supriatin., S.Kp., M.Kep Masdum Ibrahim., S.Kep., Ners Ade Supriadi, S.Pd., M.Si Linlin Lindayani., MSN



Accommodation, Logistik, and Documentation	:	Agus Hendra., S.Kp., M.Kep Ns. Herdiman., M.Kep Wagino Budi Gunawan, SE Ribut Sarimin, M.Kes Hj. Yuyu Yulipah, AMK.,S.Pd
General Committee	:	Asep Haedar Djudju Adjum Dahlan Edi
Security	:	Asep Supriyadi Diki Uu Siswo

EFFECTIVENESS OF OXYGEN ACTIVITY THERAPY LOW FLOW SYSTEM BINASAL KANUL WITH SOW FOWLER POSITION TO REDUCE PAIN IN PATIENTS OF ACUTE CORONER SIDE IN ULIN RSUD

¹**Mariani**, ²**Hamzah**, ³**Solikin**

^{1,3}University of Muhammadiyah Banjarmasin, South Kalimantan, Indonesia

²Department of Anesthesiology, Soetomo, Dr. General Hospital

Corresponding Email: ani.skep89@gmail.com

ABSTRACT

Background: Coronary Heart Disease is a heart disease caused by the narrowing of coronary arteries due to atherosclerosis or spasm or both. Acute Coronary Syndrome (SKA) is a serious disease which threatens someone's life, it can cause sudden death. **Objectives:** The purpose of this study is to analyze the effectiveness of Oxygen Therapy Action Method of low flow system binasal kanul with semi fowler position to reduce chest pain in patients with Acute Coronary Syndrome at Ulin Hospital. **Methods:** The research method used Queasy Experimental Designs using nonequivalent control group design. The experimental group and control group treatments were measured before and after treatment. **Results:** Pain rate in patients with Acute Coronary Syndrome with oxygen action method of low flow system binasal kanul p value 0,000 and level of pain in patients with acute coronary syndrome with semi fowler position p value 0.000. **Conclusions:** This research needs to be refined and developed to improve the reference in developing the concept of how to reduce the scale of pain in patients with Acute Coronary Syndrome using non-pharmacological therapy. The results of this study measures oxygen therapy method low flow binasal kanul system with semi fowler position effective against reducing chest pain in patients with Acute Coronary Syndrome.

Keywords: ACS, Binasal cannula, Semi-Fowler.

INTRODUCTION

Coronary Heart Disease is a heart disease caused by the narrowing of coronary arteries due to the process of atherosclerosis or spasm or both. Coronary heart disease causes problems in the heart's organs and especially in the blood vessels. Acute Coronary Syndrome is a serious life-threatening coronary disease because it can cause sudden death¹⁸

American Heart Association (AHA) data noted that every two minutes one person dies of heart disease. Five of the 1000 hospitalized patients in some developing countries are estimated to have cardiac arrest, and less than 20% of patients are unable to survive out of hospital¹¹.

World Health Organization (WHO) data, the death of heart disease will continue to increase worldwide. In total, by 2030 it is predicted there will be 52 million deaths per year or up 14 million from 38 million by 2015. More than two thirds (70%) of the global population will die of heart¹⁶.

The main symptoms of the most complained or felt by patients with coronary heart disease are chest pain (angina) or discomfort in the chest. The pain is very severe, worsens, and lasts more than 20 minutes. Pain can be accompanied by body weakness, nausea, shortness of breath, fatigue, cold sweats or fainting. Pain or discomfort is very severe, worsens and lasts more than 20¹³.

METHOD

This research is quantitative research with a design using Quasi-Experimental Designs research method, this design has a control group, but it can not function to control the external variables that influence the experiment implementation. This research uses nonequivalent control group design. After the treatment, the results of the measurements of the two treatments can be compared which is more effective.

The population in this study were all patients with Acute Coronary Syndrome (SKA) treated in the Inpatient Heart Hospital (Alamanda) Hospital Ulin in November 2017.

Sample size from population got 36 people, as for Inclusion criteria:

1. Patients with Acute Coronary Syndrome (SKA)
2. The pain felt by the patient include scale 4 -9 (Medium/heavy)
3. Not with STEMI
4. Angiography has not been done

The samples were divided into two experimental groups namely Oxygen Therapy of cannula and Semi-Fowler Position

The research instrument for the dependent variable is NRS (Numeric Rating Scale) scale, pain measurement using NRS scale to assess the scale of pain in SKA patients. Results from NRS Scale Assessment: score 0 included category no pain, score 1-3 included on the mild pain scale, score 4-6 including medium pain scale, score 7-9 including heavy pain category and ten very heavy or unbearable pain. Assessment of pain is done pre and post actions to be performed, whether pain decreases, pain unchanged or pain increases.

The data collected by the researcher in this research is related to the independent variable in this research in the form of SOP process perform the action developed by the researcher.

The ethics of this study used patients with diagnoses of Acute Coronary Syndrome with moderate pain scale treated in the Heart Room (Alamanda) of Ulin Banjarmasin Hospital, so it should consider the ethical and humanist aspects. Previously, research should get ethical approval (ethical clearance) from the Ethics Committee of Muhammadiyah University of Banjarmasin and Ethics Committee at Ulin Banjarmasin Hospital. In addition to the principles of research ethics, researchers also made informed consent given to the patient/family before the study was conducted.

RESULTS

Data collection was conducted from November third week until December fourth week 2017 At Ulin Hospital. This study uses 36 respondents; the sample is then divided into two intervention groups that are 18 by using Oxygen Therapy Action Method of Low Flow System Binasal Kanul and 18 using Semi Fowler Position.

Univariate Analysis

Tabel.1 Distribution of Respondents by Sex and Age at Ulin Hospital (n = 36)

Characteristics	Semi Fowler's position		Low flow	
	f	%	f	%
Gender				
a. Man	12	66,7	10	55,6
b. Woman	6	33,3	8	44,4
Total	18	100	18	100
Age				
46- ≥64	18	100	18	100

Most of the respondents were gender and age, most respondents were 12 (66,7%) male for Semi-Fowler and 10 (55,6%) for Oxygen, so total male respondents were 22 from 36 respondents,

while the respondent distribution based on age that respondents aged elderly s / d the end of the average 46-≥65 for the position of semi-fowler and Oxygen total of 18 of 36 respondents.

Table 2. Pain Scale on Patients Given Oxygen Therapy Measures With Low Flow System Binasal Kanul Method n = 18

Scale of Scale	Before		After	
	f	%	f	%
Mild Pain	7	38,9	17	94,4
Medium Pain	11	61,1	1	5,6
Amount	18	100	18	100

Most of the pain scale in patients with Acute Coronary Syndrome at Ulin Hospital before being administered was moderate pain category, i.e. 11 people (61.1%), and light category seven people (38,9%). Whereas after being given Oxygen Therapeutic Measure With Low Flow System Binasal Kanul Method, most of the patients had pain scale with the light category, that is 17 people (94,4%) and moderate category as many as one person (5,6%).

Table 3. The pain scale in the patients given the semi-fowler position, n =18

Scale of Scale	Before		After	
	f	%	f	%
Mild Pain	0	0	7	39,0
Medium Pain	18	100	11	61,0
Amount	18	100	18	100

Most of the pain scale in patients with Acute Coronary Syndrome at Ulin Hospital before being given Semi Fowler's Position action was with moderate pain category, i.e., as many as 18 people (100%). After the Semi-Fowler Position, most patients had moderate-to-moderate pain scores of 11 (61.0%) and light category of 7 (39.0%).

Normality test before and after is done (Semi-Fowler Position and Action of Oxygen Therapy With Low Flow System Binasal Kanul Method) based on a test of normality Shapiro-Wilk. Can be p-value value 0.000.

Bivariate Analysis

Tabel.4 Effectiveness of Semi-Fowler Position in Acute Coronary Syndrome at Ulin Hospital (n = 18)

Semi Fowler position	Median	Mean Rank	Standar Devition	p-value
Pre	6,00	0,00	1,056	0,000
Post	1,451	9,00	1,451	

Before and after the provision of semi-fowler position in SKA patients in Ulin General Hospital, median pre 6.00 average, mean rank pre 0.00 and standard deviation of 1.056. Average median post 4,00, Mean Rank 0,00 and standard deviation 1,451, The result of statistical test got p-value 0.000 which means p-value <0,05, so it can be concluded Semi Fowler's position effective in reducing pain scale in a patient of Acute Coronary Syndrome.

Tabel.5 Effectiveness of Oxygen Therapy Action Methods Low Flow System Binasal Kanul in Acute Coronary Syndrome at Ulin Hospital (n = 18)

Low flow	Median	Mean Rank	Standard	p-value
----------	--------	-----------	----------	---------

	Division			
Pre	6.00	0.00	1.056	0.000
Post	1.451	9.00	1.451	

Before and after the administration of Oxygen Actions in patients with Acute Coronary Syndrome at Ulin Hospital, median average pre 6.00, Mean Rank pre 0.00 and standard deviation of 1.056. Average median post 4.00, Mean Rank 9.00 and standard deviation 1.451, The result of statistic test got p-value 0.000 which mean p-value <0.05 , so it can be concluded oxygen therapy action with a low flow method bi-nasal system cannula is effective in reducing the scale of pain in patients with Acute Coronary Syndrome.

Tabel.6 Effectiveness of Oxygen Therapy Methods Low Flow system Binasal Kanul with Semi-Fowler position on reducing chest pain in patients with Acute Coronary Syndrome at Ulin Hospital (n = 18)

Action	Median	Mean Rank	Standar Devition	p-value
<i>Semi fowler</i>	4.00	3.89	1.056	0.043
<i>Low flow</i>	4.00	3.89	1.451	

Provision of Oxygen Therapy Low Flow system Binasal Kanul method and semi-fowler position to reduce chest pain in patients with Acute Coronary Syndrome, a median average of 4.00 and mean 3.89. The result of statistical test obtained p-value 0,043 which mean p value $<0,05$, so it can be concluded oxygen therapy method low flow system binasal kanul with semi fowler position effectively decrease chest pain in a patient of the acute coronary syndrome at RSUD.

DISCUSSION

Characteristics of Respondents

Age is a painting variable that affects pain, especially in children and the elderly. Developmental differences, found among these age groups can affect how children and elderly act against pain. Pain is not a part of the aging process that can not be avoided. In elderly people who experience pain, need to do an assessment, diagnosis, and management aggressively¹⁷.

In general, men and women did not differ significantly in response to pain, pain tolerance for a long time has been the subject of research involving men and women. However, tolerance to pain is influenced by biochemical factors and is unique to each, regardless of sex¹⁷.

The effectiveness of Oxygen Therapy Action Method Low Flow system Binasal Kanul in pain reduction in patients with Acute Coronary Syndrome at Ulin Hospital

Oxygen therapy is done to increase oxygen supply and reduce breathing work. Oxygen therapy is used to create a balance between oxygen supply and oxygen demand. This imbalance will cause organ dysfunction. Oxygen therapy can improve the outcome and save lives when used appropriately and harmfully if used improperly¹⁷.

This study proved that the provision of oxygenation action With Low Flow System Binasal Kanul method could reduce the scale of pain in patients with Acute Coronary Syndrome because this alternative is beneficial for the patient's condition, this way is easy to do in the nursing environment. Provided interventions provide comfort, improve mobility, change psychological responses, reduce fear and give clients the power to control pain³.

Oxygen supplementation is the standard treatment for all patients present with acute coronary syndromes, regardless of oxygen saturation level. Oxygen Therapy Low Flow system Binasal Kanul method in the reduction of pain in patients with Acute Coronary Syndrome in this study of oxygen therapy bi-nasal cannula low flow method by giving 1-3 liters with a concentration of

24-32% to 18 respondents. The advantage of using nasal cannula oxygen is a simple, inexpensive and more often used tool for delivering oxygen.

Effectiveness Measures Semi-fowler position in pain reduction in patients with Acute Coronary Syndrome at Ulin Hospital.

The simplest and most effective method to reduce the risk of decreasing chest wall development is by setting the position at rest. The most effective position for patients with the cardiopulmonary disease is to give a semi-fowler position with a degree of 30-45°¹⁴.

The semi-fowler position can increase oxygen and maximize ventilation efforts by decreasing abdominal compression at the lung base. The semi-fowler position in the patient may also support lung performance. The process of blood circulation is influenced by the position of the body and changes in body gravity. Upright positions are also used to increase lung volume and reduce respiratory work in patients¹⁹.

Giving a semi-fowler position with a slope of 45° helps the development of the chest in patients with cardiopulmonary disorders can be effective in reducing pain in patients with Acute Coronary Syndrome

The effectiveness of Fowler Position with Action of Oxygen Therapy With Low Flow System Bi-nasal cannula Method for reducing pain in patients with Acute Coronary Syndrome at Ulin Hospital

A decrease in cardiac output is associated with a reduction in cardiac contraction as a priority because of the impact of the cardiac reduction in the rate of glomerular filtration rate resulting in sodium retention causing ischemia in the myocardium, and this may adversely affect the patient and also cause changes in tissue perfusion. Cardiac output is a disturbance in the breathing pattern that can be bad for the patient²¹.

Semi Fowler's position causes decreased tension in the abdominal muscles, and the abdominal mass drops down, reducing the pressure to the diaphragm and relieving chest compression. At the time of inspiration, the pressure in the lungs is much lower than usual than the atmospheric pressure, which results in more air intake into the lungs. Increased air entering the lungs, an increase oxygenation, especially in semi-fowler position 30°¹⁴. semi-fowler position and action of oxygen therapy low flow system binasal kanul method effective on decreasing the scale of pain in patients with acute coronary syndrome.

CONCLUSION

Based on study, it can be concluded that Provision of Oxygen Therapy Low Flow system Binasal Kanul method and semi-fowler position to reduce chest pain in patients with Acute Coronary Syndrome, a median average of 4.00 and mean 3.89. The result of statistical test is p-value 0,043 which means p- value <0,05, so it can be concluded that oxygen therapy method of low flow system bi-nasal cannula with semi-fowler position effectively decrease chest pain in patients with acute coronary syndrome in rsud ulin

Suggestion

For Institution Hospital

Semi-fowler Position and Methods of low flow system bi-nasal cannula are applied in reducing the scale of pain especially in patients with Acute Coronary Syndrome in care of nursing care.

For Educational Institutions

As a reference in developing the concept of how to reduce the scale of pain in patients with Acute Coronary Syndrome using non-pharmacological therapy and also efficient to develop nursing interventions.

For Nurses

New knowledge that Semi Fowler's position and low flow bin canal method is effective in reducing the scale of pain in patients with Acute Coronary Syndrome, may provide a solution in treating pain in patients with Acute Coronary Syndrome.

For Further Research

This research can also be continued with larger sample, because this research is applicative so it is worth to be developed again to enrich the repertoire of nursing science.

REFERENCE

- Aaronson, P.I & Jeremy, P. Ward. (2010). *At Glance: Cardiovascular System (Translation)*. Jakarta: Erlangga Publisher
- Aarrosan & Ward, 2010. *At Glance Cardiovascular System*, Jakarta: Erland.
- Afni, Nor. (2017). Effectiveness of Benson Relaxation Compared with Slow Deep Breathing In Pain Scale Reduction in Coronary Heart Patients. Banjarmasin
- American Heart Association. 2015. Coronary Artery Disease - The ABC of CAD ([http://www.heart.org/HEARTORG/Conditions/More/MyHeartandStrokeNews/Coronary-ArteryDisease---The-ABC of CAD_UCM_436416_Article.jsp](http://www.heart.org/HEARTORG/Conditions/More/MyHeartandStrokeNews/Coronary-ArteryDisease---The-ABC-of-CAD_UCM_436416_Article.jsp)). Retrieved 05 June 2017
- Andarmoyo, S. (2013). *Concept and Process of Pain Nursing*. Ar-Ruzz. Yogyakarta
- Andramoyo, Sulisty. (2012). *Basic Human Needs (Oxygenation)*. Yogyakarta: Graha Science.
- Bavry Anthony A, Bhatt DeepakL. (2009). *Acute Coronary Syndromes in Clitical Practice*. 1st Edition. P. 1-2
- Cardiovascular Disease Statistics. (2015). British Heart Foundation Center on Population Approaches for Non Communicable Disease Prevention. Nuffield Department of Population Health, University of Oxford. British Heart Foundation
- Dadang, (2010). *Cardiothoracic Ratio (CTR)*
- Dahlan, M.Sopiyudin. 2013. *Descriptive, Bivariate, and Multivariate, Completed Applications Using SPSS*. Jakarta: Salemba Medika.
- Goldbelger. (2012) *Cardio Pulmonary Resuscitation Method to Increase Survival Rate Post Cardiac Arrest Patients* In access on 15 June 2017
- Harun, Idrus (2007). *Acute Myocardial Infarction without Elevation ST*. Internal medicine textbook. Volume III, Issue IV. Publishing Center for Internal Medicine Faculty of Medicine Universitas Indonesia. Jakarta.
- Lalenoh, Isabella. (2014). *Coronary heart disease*. RS Mitra Keluarga Kenjeran Surabaya
- Majampoh, et al (2013). *Influence of Semi Fowler Positioning to Bone Patient Stability In Pulmonary TB Patients In Irina C5 PROF RSUP Dr.R.D.Kandou MANADO*
- Manitoba Center for Health Policy (MCHP). (2013). *Concept: Coronary Heart Disease (CHD) / Ischemic Heart Disease (IHD) -Measuring Prevalence*. [http://www.mchp-appserv.cpe.umanitoba.ca/view_Concept.php?conceptID = 1083](http://www.mchp-appserv.cpe.umanitoba.ca/view_Concept.php?conceptID=1083). University of Manitoba, Canada. Retrieved 11 May 2017
- Maukar, (2014) *Data World Health Organization (WHO)* Accessed on 13 June 2017.
- Potter & Perry. (2010). *Fundamental Nursing Teaching Book Volume 2*. Jakarta: EGC
- Remita Uilly.H, ddk. (2014). *Quality of Life Patients Post Retain Coronary Strengthening* In access to nursing ejournal (e-Kp) Volume 2. Number 1. August 2014. On June 15, 2017
- Supadi, ddk (2008) *Standard Operating Procedure Semi Fowler Giving Position in Heart patients*
- Tamsuri, 2007, *Concept And Management of EGC Pain*, Jakarta
- Widianti, (2013) *Coidiyanti made (Section / SMF Psychiatry Faculty of Medicine Udayana University / Sanglah Hospital Denpasar) 3013*. Scientific Research Relationship Between Defression, Cemasa and Acute Coronary Syndrome