



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”

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This book published by:

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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 SGDs 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

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ANALYSIS FACTORS THAT AFFECTING DEPRESSION LEVEL AT CORONARY HEART DISEASE PATIENT IN ULIN GENERAL HOSPITAL

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ABSTRACT

Background: Psychosocial problems experienced by patients with coronary heart disease becomes a very important thing to note. Patients often experience psychosocial problems such as anxiety and depression. Psychosocial problems can affect the heart directly because it can increase heart oxygen need and workload. Patients with major depression after myocardial infarction are most possible to die within 6 months 5 times higher than patients without depression. An important step in the depression management is to identify the etiology that can be done by identifying risk factors and focusing interventions to minimizing the underlying causes of the depression. **Objectives:** Analyze factors affecting depression level at patients with coronary heart disease. **Methods:** This study is a correlative analytic with cross-sectional approach at 47 respondents. The statistical tests used chi square, spearman rho and logistic regression. **Results:** Factors related with depression level were family history (p value 0.026), comorbidity (p value 0.002), stress (p value 0.044), family support (p value 0.027) and long suffering (p value 0.001). **Conclusions:** Comorbidity is the most factor associated with depression rate with OR 5.758. It mean respondents who have comorbidities have 5.758 times higher of depression after controlled by family history, stress, and long suffering.

Keywords: Coronary heart disease, Depression

INTRODUCTION

The heart is the center of human life, without the human heart indeed will not live. But ironically the heart is the organ that most often get interference in most humans. It proved that heart attacks became the number one killer disease in the world. Many statistics show how dangerous this heart attack, especially the point of attack is in the coronary arteries, which most likely the sufferer will die suddenly although previously in good health (Maulana, 2014).

Coronary heart disease affects various aspects of the life of the sufferer. Physically the patient will feel shortness of breath, easy fatigue, sexual disorders, and chest pain. Also, psychosocial problems such as anxiety and depression are also commonly experienced by patients with coronary heart disease. Disturbance of spiritual distress can also occur because coronary heart disease is an acute illness that threatens life so that requires care and lifestyle adjustment continuously throughout the life of the sufferer (Dalen, 2014).

Prevention of reoccurrence of heart attacks, patients with coronary heart disease needs to make lifestyle changes. Such changes in dietary patterns, smoking habits, activity restrictions, and stress and anxiety control. This condition can precisely trigger the emergence of new distress, plus changes in physical terms and role changes that occur due to prolonged illness. Stress, depression, low

social and spiritual support can worsen disease conditions in patients with coronary heart disease (Davidson et al., 2013).

According to world statistics, there are 9.4 million deaths each year caused by cardiovascular disease and 45% of deaths due to coronary heart disease (Wong, 2014). The mortality of the world population due to cardiovascular disease will increase from 17 million in 2004 to 23.4 million by 2030 (WHO, 2013). Prevalence of coronary heart disease in Indonesia based on doctor's diagnosis 0,5%, while based on the symptom (without doctor's diagnosis) equal to 1,5%. Coronary heart disease is in the seventh highest position of non-communicable diseases. Estimated number of coronary heart disease patients in south Kalimantan based on doctor diagnosis in 2013 is 0,5% or estimated about 13,612 people, while based on a symptom or without doctor's diagnosis is 2,2% or rated about 59,892 people. Estimated number of coronary heart disease patients according to data of South Kalimantan provincial health office in 2015 as many as 1781 people, increased by 92% from the previous year 2014 (Risksedas, 2013).

Symptoms of depression have a negative role in cardiovascular disease, increasing the risk of cardiac events and worsening the quality of life of patients. Post-myocardial infarction (MI) depression was associated with a 1.5 to 2.7-fold increased risk for post-MI death and new cardiac events. Despite the negative effects of depression in cardiac patients, his assessment of depression remains lacking, especially in Italian cardiology hospitals. There is widespread evidence that cardiovascular disease and depression are interconnected. Depression produces an 80% increased risk of onset of cardiovascular disease and is strongly associated with poor outcomes, negatively contributing to disease progression and prognosis. Also, cardiovascular disease alone may increase the risk of developing Major Depressive Disorder depression (MDD), which shows a prevalence of 20% to 30% in coronary heart disease patients (Tesio et al., 2017).

Patients with cardiovascular disease with depression are more likely to have higher mortality and rehospitalization rates than non-depressed patients. The more severe the depression, the higher the risk of death and other cardiovascular events. The prevalence of depression reported in patients with heart disease varies considerably. Mild depression was found in two-thirds of hospitalized patients after acute myocardial infarction (AMI). Major depression is common in 15% of patients with cardiovascular disease. This prevalence is more than two to three times found in the population, although it may not be much greater than the estimated prevalence of lifetime for the general population. Major depression is characterized by a lack of interest in all or part of the activity, no appetite, fatigue, feelings of worthlessness or excessive guilt (David et al. (2014).

Research conducted on 7,589 patients with coronary heart disease from 24 European countries found most patients have symptoms of anxiety and depression after the incidence of coronary heart disease. Anxiety symptoms were seen in 26.3% of patients, and as many as 22.4% experienced symptoms of depression. Anxiety and depression are associated with gender, low level of education and lifestyle (Pogosiva et al., 2017). Depression in CHD patients in China was found in 5236 hospitalized patients with 51% of depression, and from 1,353 patients in the community the prevalence of depression ranged from 34.6 to 45.8% depression. Severe depression was found between 3.1% to 11.2% (Med, 2014).

Nuraeni Research (2016), in 100 patients with coronary heart disease at Dr. Hospital. Hasan Sadikin Bandung in April 2016 states that 100 patients found 40% of them experiencing depression. Depression is a serious health problem, so it is necessary to investigate further the factors that affect depression with variable age, gender, family history with depression, comorbidities, stress, family support and long-suffering from coronary heart disease.

METHODS

This research is correlative analytic research with cross-sectional approach with the aim to know the factors that influence the depression level in patients with coronary heart disease at Ulin Hospital. The population in the study were all patients with coronary heart disease who came to treatment or treated at Ulin Hospital that amounted to 315 patients. The sample was taken by purposive sampling technique; the sample size was 47 respondents with inclusion criteria: CHD patients with depression, patients able to read and write, exclusion criteria: patient age > 65 years.

This research was conducted in Heart Poly Room and Inpatient Room of Ulin Hospital Ulin disease from 30 October to 27 November 2017. Data were obtained by giving the instrument of depression questionnaire using BDI-II questionnaire sheet containing 21 items of depressive symptoms statement, and age questionnaire sheet, history family, sex, long-suffering. The stress questionnaire was quoted from DASS 42 (Depression Anxiety and Stress Scales) by Lovibond who has been converted by Damanik and modified to 14 points and support family using standardized questionnaires. The bivariate analysis used is chi-square and Spearman rho statistic analysis to analyze the relation of each factor to depression level. Then reanalyzed using multiple logistic regression to find out the most influential factor with depression level.

RESULTS

Table 1 Univariate Analysis

Variable	Category	n	%
Depression	Mild depression	33	70,2
	Moderate depression	14	29,8
Age	Late adult (26-45 Years)	5	10,6
	Initial Elderly (46-55 years)	20	42,6
	Elderly (56-65 years)	22	46,8
Gender	Male	36	76,6
	Female	11	23,4
Family History	None	45	95,7
	Present	2	4,3
Stress	No stress	8	17,0
	Stress	39	82,0
Comordibities	None	19	40,4
	Present	28	59,6
Family support	High	18	38,3
	Moderate	29	61,7
long-suffering	>12 Month	16	34,0
	≤12 Month	31	66,0

Based on the bivariate test the following results are obtained:

1. There was no significant correlation between age with depression level in patients with coronary heart disease with P Value 0.649.
2. Gender had no significant relationship to depression level in patients with coronary heart disease with a p-value of 0.086.
3. There was a significant correlation between family history to depression level in patients with coronary heart disease with p-value 0.026.
4. Stress has a significant relationship to depression level in patients with coronary heart disease with a p-value of 0.044.
5. There is a relationship between comorbidities with depression levels in patients with coronary heart disease with p-value 0.002.
6. There is a relationship between family support to the level of depression in patients with coronary heart disease with p-value 0.027.
7. There is a long relationship of suffering from depression levels in patients with coronary heart disease with p-value 0.001. After the bivariate test, the factors are analyzed in multivariate modeling.

Table 2 Selected Candidate Selection Results

Variable	P-value
1. Family History	0,025
2. Stress	0,001
3. comorbidities	0,000
4. Family support	0,012
5. long-suffering	0,021

From the result of candidate selection in Table 5.9, there are five variables that p-value <0.25 is family history, stress, comorbidities, family support and long-suffering.

Table 3 Results of multivariate modeling.

Variable	p-value	OR
Family History	0,999	1,287E9
Stress	0,999	2,388E8
comorbidities	0,156	5,758
Family support	0,870	1,195
long suffering	0,998	4,086E8
Constant	0,998	0,000

After the last model was obtained the comparison result and the OR calculation on the fifth model, there is a change of OR <10% on all variables, thus the modeling is complete. From the multivariate analysis, the variables significantly associated with depression rate were the associate disease variable with the largest OR of 5.758 after controlled by family history, stress, and long-suffering.

DISCUSSION

The age-to-depression relationship in patients with coronary heart disease. In the results of the study, age factor did not affect the incidence of depression this is due to depression in. According to Hawari, (2010) psychosocial stressors are events that cause changes in one's life (child, adolescent, adult) so that one is forced to adapt to experience the stressors that arise. In real life, stressors are an unavoidable part of life. Stress is prolonged and not addressed properly can trigger a person experiencing depression. In children and adolescents, 10% -15% of them have anxiety disorders and also have depression disorders, while in adults 20% -50% experience depression and anxiety disorders. Social anxiety disorder is associated with a doubling of the increased risk of developing depression. Approximately 85% of patients with depression have significant anxiety. Anxiety and depression can occur up to 25% in patients treated at health facilities (March et al., 2016).

Adolescents with obsessive-compulsive disorder are at risk for comorbid psychiatric conditions, such as depression and anxiety. The study of Chinese adolescents with obsessive-compulsive disorder. Levels of helplessness, depression, and anxiety are directly related to the possibility of obsessive-compulsive disorder. Obsessive Compulsive Disorder (OCD) or obsessive-compulsive disorder is a psychological disorder that affects the mind and behavior of the sufferer. Once a person has OCD, unwanted thoughts and fears will appear continuously, causing the patient to be obsessed with something and perform certain actions repeatedly in response to his fears. For example, repeatedly check whether they have locked the door or not. OCD sufferers may be able to ignore the thought, but it will only make them feel anxious and depressed. It can cause stress and affect the daily life of the sufferer (Sun, 2015).

The relationship of gender to the level of depression in patients with coronary heart disease. Calvagna (2015) suggests that depression in men may include symptoms that are not usually considered as symptoms of classic depression. As a result, depression can be difficult to recognize in

men. Men may also not admit that they feel depressed. This condition can be seen as a sign of bad masculinity in men who want to preserve the image of toughness and endurance. Untreated depression is associated with suicide. Men die of suicide more often than women, although women do more suicide attempts. This could be related to the fact that women seek more help than men or men choose a more deadly way. The suicidal mind, also known as the idea of suicide, is an emergency.

Pudrovska (2014) that women who work or work with labor authorities show more depressive symptoms than women without a job authority. A comparison of gender reveals that although women have depression higher than men. Women are twice as likely to be depressed as men, but this may be because more women seek treatment for their symptoms than men so data for women who are depressed. Some believe depression can be caused by hormonal changes throughout life. Women are especially vulnerable to depression during pregnancy and after childbirth, called postpartum depression, and also at menopause.

Van et al. (2017), in his study, stated that there was no difference between sex-related risk factors for major depressive depression as related to the same health maintenance mechanisms. Depression can occur in both men and women depending on the originator and the factors that affect it, although women are more likely to experience depression. This is because women more often check the condition than men. Family history relationship with depression level in patients with coronary heart disease.

The results of the study only found two respondents who have a family history of depression with the level of depression is being associated with the theory and facts related field conditions in the family and environment that can affect the mindset process of other family members, so there is a tendency exposed to the conditions and symptoms depression experienced by other family members. Such a quiet-looking parent will affect the child to behave in the same way.

Bjornlund (2010) in Irwan (2013) which states in some cases, pure depression originates from genetic factors, people with depressed families tend to suffer from depression such as family history with bipolar disorder, alcohol users, schizophrenia or other mental disorders. In line with that Arief (2014), that the significant factor of mood developmental is genetic. In severe depressive disorder in twins, the incidence of depression in monozygotic twins is 50%, whereas dizygotic is 10-25%. People with depression occur because of mutations in the methylenetetrahydrofolate reductase gene which is a cofactor in monoamine biosynthesis.

A person who in his family is known to be suffering from severe depression has a greater risk of suffering from depression in general. Bipolar disorder is often better known as depression is a condition that causes a person always to feel depressed. Bipolar disorder is thought to be caused by the instability of chemical levels in brain organs and may also be influenced by genetics. The risk of inheriting bipolar disorder by 10 to 15% (Irene, 2017).

This is in line with data in the US in 2001-2005 surveyed 7940 depressed samples in life, 54.7% of whom have a family history of depression. Those with a family history were twice as likely to have treatment, especially the history of pregnant women with depression (Prokofyeva et al., 2013). Family history is related to the level of depression due to genes that can inherit traits to family members and emotional linkages within the family to influence the process of interaction and relationships within the family.

Relationship stress with depression level in patients with coronary heart disease. There is a significant relationship between stress and depression level in patients with coronary heart disease; correlation coefficient = 0.295 means there is a positive relationship between stress and depression. Respondents experiencing stress may have the potential to experience depression as well.

Kaplan (2010) that life events that cause stress more often precedes the first episode of mood disorder to experience severe stress that can cause depression in a person. Stress can cause depression. Depression can cause platelet hyper-aggregation and hypercortisolemia, thus exacerbating the blockage of coronary arteries. Ischemia of the heart indicates a state of oxygen deprivation caused by inadequate perfusion, resulting in an imbalance between the need and supply of oxygen. Increased platelet aggregation and hypercortisolemia (glucocorticoid hormone) will increase the formation of atherosclerosis. With the reduced diameter of the arterial opening, atherosclerosis leads to a decrease in blood flow to the heart muscle in the event of increased flow due to an increased need (during

physical activity). Stress that may initiate or present together depression increases sympathetic nervous hyperactivity. Sympathetic hyperactivity contracts blood vessels (small vessels) resulting in hypertension which also accelerates damage to blood vessel cell cells resulting in atheroma (thickening) in the inner lining of the blood vessels.

Liu (2017), explains there is a difference between the sexes in modifying a stressful and depressed life event in adults in China where women who experience family-related events have a greater risk of depression or more stressful events, the more likely someone is depressed. Jimenez et al. (2015), describes the prevalence of anxiety symptoms of depression, anxiety, and suicide related to mental disorders among medics during the school year associated with fatigue and stress syndrome. At 108 medicines the symptoms of depression were low (3.7%), low anxiety symptoms (38%) and 1.9% suicide risk at the beginning of the school year and increased in the second measurement to 22.2% for depression, 56.5% for anxiety and 7.4% for the risk of suicide. The prevalence of depressive disorder was 4.6%, and no anxiety disorder was diagnosed. Almost all medical personnel with depressive disorders have a history of personal depression. No one reported a job or academic environment as a trigger for the disorder. There is no special relationship such as gender or civil status.

Exposure to acute stressors leads to activation of the hypothalamic system of the adrenal and sympathoadrenal pituitary and chronic stressors associated with continued functional changes of the system. Experiencing acute and chronic stress is aligned with an increased incidence of mental illness with the most consistent evidence of a major depressive episode trigger. Various mental disorders, including depression, anxiety, and schizophrenia, are associated with an increased risk of CHD (Lederbogen, 2012).

Relation of comorbidities with depression levels in patients with coronary heart disease. Irwan (2013) that the disorder of depression often occurs in the patient with some medical illness or neurological disease to aggravate the condition and increase the mortality for the sufferer. In another study, Jonas (2010) about a common chronic disease which is associated with an increased risk of depression is type 2 diabetes mellitus. This study looks for the development of depression in people with type 2 diabetes compared to those without diabetes. A total of 48,808 diabetic patients but no depression compared with 123,713 people without diabetes or depression. The researcher followed the patient for 2-10 years and noted the progress of depression. The study found that diabetic patients had a 24% greater risk of developing depression than those without diabetes.

A person diagnosed with a disease often does not feel helpless or alone. When faced with a diagnosis of potentially life-changing chronic conditions, it can potentially be depressed. The chronic diseases associated with depression such as type 2 diabetes. Depression can affect behavior, such as eating habits or exercising. It can also affect the body in the way the immune system works or how the blood clots. Depressed people with diabetes may not take their medication diligently so that uncontrolled blood sugar eventually makes them more susceptible to serious complications. People with heart disease who are also depressed may be less concerned about their diet so that it can cause a higher risk of heart attack again. People with heart disease who suffer from depression are three to four times more likely to die within six months of their attack than people without depression (Sonnenberg, 2015).

Ciprandi (2015) showed that anxiety and depression were common and relevant comorbidities in asthma outpatients and were associated with uncontrolled asthma and lower ACM control scores (ACT). Thus, assessment of comorbid mental disorders should also be done.

Sonnenberg, (2015) in a psychological study of asthma shows that those who recorded more signs of mental depression, such as feelings of helplessness or inadequacy, also suffered more from their asthma. This is in line with Akula et al. (2018) which states that asthma is an increasingly common disease associated with substantial physical and financial burdens. Asthma can be associated with clinically significant levels of clinical depression symptoms and lifelong psychiatric disorders. The diagnosis of asthma is significantly related to the history of the diagnosis of psychological, emotional, or mental disorders and to the severity of moderate or moderate depressive symptoms at this time.

Tiller (2013), states that comorbid depression and anxiety disorders occur in 25% of patients with a disease. Approximately 85% of patients with depression have significant anxiety, and 90% of patients with anxiety disorders experience depression. The initial symptoms may appear vague and non-specific. Careful history and examination with relevant examinations should be used to make the diagnosis. Once the diagnosis is made, the scale of the assessment can identify the severity of depression and help monitor the progress of treatment.

The relationship of family support to the level of depression in patients with coronary heart disease. Hayulita (2014), states that family support refers to the assistance received by individuals from other people or groups that make a person feel comfortable, loved, and appreciated and can have a positive effect on him. Increased family support can be an important strategy in reducing or preventing mental stress.

Olagunju (2015), states there is a connection between depression and social support felt by elderly in West African society. Participants were mostly women (52.9%), and the mean age was 68.8 ± 7.3 years. A total of (26.4%) experienced episodes of depression, and mild severity was greater. Low levels of social support and family support are associated with depression.

Older relationships suffer from depression levels in patients with coronary heart disease. According to Helgeson & Fritz, (1999), in Edward (2006) states that during the first weeks or months of having heart disease, most patients have higher levels of anxiety and depression than normal, but their distress tends to decline for a year or two. Most can adjust quickly, especially if they have a high level of social support. But if the level of anxiety and depression is very high that passes through several months, the emotion can be a poor adaptation and tend to be associated with a decrease in the fulfillment of the lifestyle of people with heart disease and deterioration of his physical condition. Patients with severe depression and anxiety within weeks after a heart attack suffer more heart problems afterward, such as arrhythmias or dying the following year than those with fewer distress. In the same way, patients who, after successful angioplasty, feel optimistic about the future and have a personal control awareness are less likely than others who suffered a heart attack or surgery or other angioplasty within the next few months.

Researchers have long understood heart disease, and depression have a two-way relationship, with depression increasing the likelihood of heart disease and vice versa. While previous studies have investigated the depression that occurs within months after the diagnosis of coronary heart disease, this new study is the first to explain the effects of depression in the long term (Nicole, 2017).

Long-suffering from coronary heart disease As in this study more patients with coronary heart disease is less than one year experience more depression in comparison with the longer. This is because the longer the patient suffers from heart disease mostly improved conditions with better treatment such as the installation of cardiac catheterization so that clinical symptoms of coronary heart disease such as chest pain is reduced so that patients can be more optimistic in life as usual. There are also patients who can accept his condition with lifestyle improvement with a healthy lifestyle.

Older relationships suffer from depression levels in patients with coronary heart disease. According to Helgeson & Fritz, (1999), in Edward (2006) states that during the first weeks or months of having heart disease, most patients have higher levels of anxiety and depression than normal, but their distress tends to decline for a year or two. Most can adjust quickly, especially if they have a high level of social support. But if the level of anxiety and depression is very high that passes through several months, the emotion can be a poor adaptation and tend to be associated with a decrease in the fulfillment of the lifestyle of people with heart disease and deterioration of his physical condition. Patients with severe depression and anxiety within weeks after a heart attack suffer more heart problems afterward, such as arrhythmias or dying the following year than those with fewer distress. In the same way, patients who, after successful angioplasty, feel optimistic about the future and have a personal control awareness are less likely than others who suffered a heart attack or surgery or other angioplasty within the next few months.

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Long-suffering from coronary heart disease As in this study more patients with coronary heart disease less than one year experience more depression in comparison with the longer. This is because the longer the patient suffers from heart disease mostly improved conditions with better treatment such as the installation of cardiac catheterization so that clinical symptoms of coronary heart disease such as chest pain is reduced so that patients can be more optimistic in life as usual. There are also patients who can accept and blading chest with his condition with lifestyle improvement with a healthy lifestyle.

The Most Dominant Factors Affecting Depression Rate Multiple logistic regression analysis of several variables that may affect depression level in patients with coronary heart disease by looking at p-value and Odd Ratio (OR) change in each modeling on multiple logistic regression test. Based on the statistical results it is found that the variables that most affect the level of depression in patients with coronary heart disease are a variable of comorbidities.

Factors that determine susceptibility to depression can be grouped into the following categories: genetics, family environment, personal characteristics and severe stress. The main risk factors include: being a woman, a family history of depression, subclinical symptoms, negative cognitive styles, negative life events. Common symptoms of depression can be different in children and adolescents than they are in adults. It often happens with atypical features. The diagnosis may be problematic because it is often a relay on observing children's dysfunction. Therefore severe depression treatment in children and adolescents is considered difficult. It is important to estimate all the features that underlie their symptoms, persistence, and then apply appropriate therapy (Kalinowska, 2013).

CONCLUSION

There is no relationship between age and sex with depression levels in patients with coronary heart disease. In family history, stress, comorbidities, family support and long-suffering have an influence on depression level in patients with coronary heart disease at Ulin Hospital. The most dominant factor affecting the depression rate in patients with coronary heart disease in Ulin Hospital is the accompanying disease factor.

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