

DESCRIPTION OF RISK FACTORS IN OCCURRENCE OF PIDIC INFLAMMARY DISEASE IN WOMEN OF REPRODUCTIVE AGE

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ABSTRACT

Pelvic inflammatory disease is a reproductive system disorder in women that can be caused by viruses or bacteria. Pelvic inflammatory disease is an inflammatory process of the female genital organs in the pelvic cavity, namely the genital tract consisting of the uterus, fallopian tubes and surrounding areas including the peritoneum. It is caused by Neisseria gonorrhoeae or Chlamidia trachomatis and may be the organism involved in bacterial vaginosis. Objective: This study aims to describe the risk factors for pelvic inflammatory disease experienced by women of childbearing age. Research methods; This study uses an analytical survey. The population in this study were all cases of GSR who were treated in hospitals. Andi Makkasau, Parepare City with a total of 247 people. The sampling technique was purposive sampling. The method of data collection in this study is secondary data, namely if the desired data collection is obtained from other people or other places and is not carried out by the researcher himself where in this study the researcher records the register number of patients with pelvic inflammation (PRP) obtained from the register book at the GSR treatment room or medical record. Then take the patient's status on the medical record at Andi Makkasau Hospital. After that, take the data and select the complete data based on the specified criteria. The data were analyzed using chi-square. namely if the desired data collection is obtained from other people or other places and is not carried out by the himself where in this study the researcher records the register number of patients with pelvic inflammation (PRP) obtained from the register book at GSR treatment room or medical records. Then take the patient's status on the medical record at Andi Makkasau Hospital. After that, take the data and select the complete data based on the specified criteria. The data were analyzed using chi-square. namely if the desired data collection is obtained from other people or other places and is not carried out by the himself where in this study the researcher records the register number of patients with pelvic inflammation (PRP) obtained from the register book at GSR treatment room or medical records. Then take the patient's status on the medical record at Andi Makkasau Hospital. After that, take the data and select the complete data based on the specified criteria. The data were analyzed using chi-square.

Keywords: *Pelvic inflammatory disease, Women of childbearing age.*

INTRODUCTION

At the UN General Assembly on 25 September 2015 in New York, the Sustainable Development Goals (SDGs) were officially adopted as a global development agreement. Starting in 2016, the Sustainable Development Goals (SDGs) 2015 to 2030 officially replaced the Millennium Development Goals (MDGs) 2000 to 2015. One of the goals of the SDGs in the health sector is the third goal and the fifth goal "National Health System and Access to Reproductive Health and Family Planning". (Ermalena, 2021)

According to the World Health Organization (WHO) approximately 150 women die per year, so there is reason to pay more attention to this medical disorder. However, there is also another concern that this infection is known to greatly increase a woman's risk of becoming infertile. When invading bacteria penetrate the fallopian tube, they can scar along the soft inner lining, making it difficult (or impossible) for an egg to enter the uterus. (Manuaba 2012) After one episode of this infection, a woman's risk of becoming infertile is 10%. One of the contributions to reducing maternal mortality is pelvic inflammatory disease because it ranks 8th in disease problems experienced by mothers. (WHO, 2019).

In 2019, universal access to reproductive health; Women need access to good quality reproductive health care and effective interventions. In 2012, 64% of women aged 15-49 who were married or in a consensual union used some form of contraception, while 12% wanted to stop or delay childbirth but did not use contraception. However, increased coverage is urgently needed in certain areas, such as the WHO Africa Region where the figure is still only 51%. (WHO, 2019)

There is no specific data regarding the incidence of PRP globally. However, in 2005 WHO estimated that there were 448 million new STI cases each year that occurred in women aged 15-49 years. In the United States, approximately 750,000 cases of PRP are diagnosed each year. This figure tends to be constant after declining since 1985 until 2001. In general, the incidence of PID in high-income countries is 10-20 per 1,000 women. Meanwhile, in low-income countries such as in Sub-Saharan Africa and Southeast Asia, PRP cases have an increased incidence of complications. (M. Gradison, 2012, C. Mitchell et al, 2020).

This prevalence increases in developing countries with low socioeconomic communities. More than a quarter of PRP patients require hospitalization. The risk increases in areas with a high prevalence of sexually transmitted diseases as a result of free sexual activity and changing partners. Developing countries like Indonesia have all the risks that cause PRP to occur in women. For this reason, proper prevention and management is needed to reduce the prevalence of PRP. Therefore, knowledge about PRP is needed so that it can be prevented, diagnosed early, and managed quickly and promptly. (Manuaba, 2012)

DESCRIPTION OF RISK FACTORS IN OCCURRENCE OF PIDIC INFLAMMATORY DISEASE
IN WOMEN OF REPRODUCTIVE AGE

During the 2016 National Health Working Meeting (Rakerkesnas) in Jakarta, the Indonesian Minister of Health, Prof. dr. Nila Farid Moeloek, Sp.M(K) said that the implementation of the Millennium Development Goals (MDGs) had ended in 2015 and continued with the Sustainable Development Goals (SDGs) until 2030 which emphasized more on 5P namely: People, Planet, Peace, Prosperity, and Partnerships. All health issues in the SDGs are integrated in one goal, namely goal number 3, which is to ensure a healthy life and promote well-being for all people at all ages. (Ministry of Health, 2019)

Since the declaration of the MDGs in 2000, Indonesia has implemented policies, programs and activities to achieve the target of increasing the welfare of the Indonesian people. Some of the MDGs targets have not been achieved and will continue to be achieved in the 2015 to 2030 SDGs. Indonesia's achievements in 2015; Of the 67 MDGs indicators, 18 indicators have not been achieved, including the challenges of controlling HIV and AIDS, including the low level of prevention behavior for sexually transmitted diseases such as the use of condoms in risky sexual intercourse, due to the low knowledge of the population about HIV and AIDS and other sexually transmitted diseases. (Surbandi, 2020)

In Indonesia, the incidence of PRP is estimated at more than 850,000 new cases each year and is most often found in women aged 16 to 25 years. Currently in Indonesia, the incidence of PRP has increased compared to the previous 2 to 3 decades. This is partly due to a freer and more liberal social culture and increased use of intrauterine devices (IUDs). (B. Hadijanto et al, 2021)

Based on data collection on health profiles, the number of WUS in 2016 was 2,353.30, IUD contraceptive users were 4.51%, and cases of reproductive system disorders for sexually transmitted diseases in 2014 were around 31.70%, and in 2015 they were around 24%. , whereas in 2016 the number of cases was around 44.34%. (Profile of the South Sulawesi Provincial Health Office, 2020). While the data obtained from hospital medical records. Andi Makkasau, Parepare City, the number of PRP sufferers has changed from year to year, in 2014 the number of PRP sufferers ranged from 38 people (24 outpatients and 14 inpatients), in 2015 the number of PRP sufferers ranged from 45 people (13 outpatients and inpatients 32 people), and in 2016 the number of PRP sufferers was around 35 people (21 people outpatient and 14 people inpatient). (RS.AM Medical Records, 2021)

RESEARCH METHODS

This research uses a research design with an analytic survey method which aims to find relationships between variables. With the case control approach, this is a study conducted by comparing the case group and the control group based on their exposure status. (Notoatmodjo, 2010).

The sample in this study is where the cases are WUS who experience Pelvic Inflammatory Disease according to the criteria and where the controls are some WUS who experience GSR. The researcher chose again according to matching with the case group, namely the criteria that had the highest incidence of Pelvic Inflammatory Disease at Andi Makkasau Hospital Parepare and had complete data according to the variables studied with the criteria determined by the researcher.

The method of data collection in this study was secondary data, namely if the desired data collection was obtained from other people or other places and was not carried out by the researchers themselves where in this study the researchers recorded the register number of patients with pelvic inflammation (PRP) obtained from the register book at GSR treatment room or medical record. Then take the patient's status in the medical record at Andi Makkasau Hospital in 2017. After that, collect data and select complete data based on the specified criteria then univariately analyzed using the Chi-square statistical test.

Presentation of data will be carried out in the form of a frequency distribution table, then narrated or interpreted systematically and chronologically based on the problem so that research conclusions are obtained.

RESULTS AND DISCUSSION

1. Characteristics of Respondents

Table 4.1
Frequency Distribution of Respondent Characteristics by Age at Andi Makkasau Hospital, Parepare City

Age	Frequency (n)	Percentage %
< 20 Years	3	4,7
20 - 35 Years	29	45,3
> 35	32	50,0
Amount	64	100

Source: Secondary Data 2021

Table 4.1 shows that out of 64 respondents who were under 20 years old, there were 3 respondents (4.7%), who were 20-35 years old, who were 29 respondents (45.3%), and who were aged over 35 years who were 32 respondents (50 %).

Table 4.2
Frequency Distribution of Respondent Characteristics Based on Education at Andi Makkasau Hospital, Parepare City

Education	Frequency (n)	Percentage %
SD	1	21,9
JUNIOR HIGH SCHOOL	1	23,4
SENIOR HIGH SCHOOL	2	32,8
College	1	21,9
Amount	6	100

Source: Secondary Data 2021

Table 4.2 shows that of the 64 respondents with elementary school education, 14 people (21.9%) had junior high school education, 15 people (23.4%) had high school education, 21 people (32.8%), and those at the tertiary level were 14 people (21.9%).

2. Univariate analysis

The object analysis in this study is the risk factors that influence the incidence of pelvic inflammatory disease in women of childbearing age, which can be seen in the following table:

Table 4.3
Frequency Distribution of Pelvic Inflammatory Disease at Andi Makkasau Parepare Hospital

Pelvic Inflammatory Disease	Frequency (n)	Percentage %
Case	32	50
Control	32	50
Amount	64	100

Source: Secondary Data 2021

Based on table 4.3 it shows that the case and control tables have the same number or matching. That the number of cases of pelvic inflammatory disease was 32 respondents (50%) and controls in pelvic inflammatory disease were 32 respondents (50%).

Table 4.4
Frequency Distribution of Sexually Transmitted Diseases at Andi Makkasau Parepare Hospital

Sexually transmitted disease	Frequency(n)	Percentage %
Yes	28	43,8
No	36	56,3
Amount	64	100

Source: Secondary Data 2021

Based on table 4.4, it shows that of the 64 respondents who had sexually transmitted diseases, there were 28 respondents (43.8%) and those who did not experience sexually transmitted diseases, there were 36 respondents (56.3%).

Table 4.5
Frequency Distribution of History of Pelvic Inflammatory Disease at Andi Makkasau Parepare Hospital

PRP history	Frequency(n)	Percentage %
Yes	37	57,8
No	27	42,2
Amount	64	100

Source: Secondary Data 2021

Based on table 4.5, it shows that of the 64 respondents who had a history of pelvic inflammatory disease, there were 37 respondents (57.8%) and those who did not experience a history of pelvic inflammatory disease, there were 27 respondents (42.2%).

Table 4.6
Frequency Distribution of IUD Use at Andi Makkasau Parepare Hospital

Use of IUDs	Frequency(n)	Percentage %
Yes	20	31,2
No	44	68.8
Amount	64	100

Source: Secondary Data 2021

Based on table 4.6 it shows that of the 64 respondents who used IUDs, 20 respondents (31.3%) and those who did not use IUDs were 44 respondents (68.7%).

3. Bivariate Analysis

In this study there were 3 independent variables or independent variables namely sexually transmitted diseases, history of pelvic inflammatory disease and IUD users while the dependent variable or dependent variable was the incidence of pelvic inflammatory disease. To find out whether there is an influence between the independent variables on the dependent variable, bivariate analysis is used with the Chi-Squard test. The results can be seen in the following table.

Table 4.7
Distribution of the Frequency of Sexually Transmitted Diseases with the Incidence of Pelvic Inflammatory Disease at Andi Makkasau General Hospital Paripar City

PMS	Pelvic Inflammatory Disease (PRP)				Total		ρ value ($\alpha = 0.05$)
	Case		Control		n	%	
		%	n	%			
Yes		31,2	8	12,5	28	43,8	0.006
No		18,8	24	37,5	36	56,2	
Amount		50	32	50	64	100	

Source: Secondary Data 2021

Based on table 4.7 above, it shows that of the 64 respondents there were 20 people (31.2%) who had sexually transmitted diseases (STDs) and experienced pelvic inflammatory disease (PRP), 12 people (18.8%) who did not have the disease sexually transmitted diseases (STDs) and had pelvic inflammatory disease (PMS), and there were 8 people (12.5%) who did not get sexually transmitted diseases (STDs) and had pelvic inflammatory disease (PRP), and there were 24 people (37.5%) who are not exposed to sexually transmitted diseases (STDs) and do not experience pelvic inflammatory disease (PID).

Based on the results of the Chi-Square statistical test, ρ -value = 0.006, which means ρ (0.006) $<$ α (0.05), then H_0 is rejected and H_a is accepted. So it can be concluded that there is a significant influence between Sexually Transmitted Diseases (STD) and the Incidence of Pelvic Inflammatory Disease (PRP) at Andi Makkasau Parepare Hospital in 2017.

Table 4.8
Frequency Distribution of History of Pelvic Inflammatory Disease with Pelvic Inflammatory Disease Incidence at Andi Makkasau Hospital Paripar City

RP history	Pelvic Inflammatory Disease (PRP)				Total		ρ value ($\alpha = 0.05$)
	Case		Control		n	%	
		%	n	%			
Yes		40,6	11	17,2	37	57,8	0.000
No		9,4	21	32,8	27	42,2	
Amount		50	32	50	64	100	

Source: Secondary Data 2021

Based on table 4.8 above, it shows that out of 64 respondents there were 26 people (40.6%) who had a history of pelvic inflammatory disease (PRP) and experienced pelvic inflammatory disease (PRP), 6 people (9.4%) who did not have history of pelvic inflammatory disease (PRP) and

DESCRIPTION OF RISK FACTORS IN OCCURRENCE OF PID/INFLAMMATORY DISEASE
IN WOMEN OF REPRODUCTIVE AGE

experiencing pelvic inflammatory disease (PRP), and there were 11 people (17.2%) who did not have a history of pelvic inflammatory disease (PRP) and had pelvic inflammatory disease (PRP), and there were 21 people (32.8%) who had no history of pelvic inflammatory disease (PRP) and did not experience pelvic inflammatory disease (PRP).

Based on the results of the Chi-Square statistical test, the value of p -value = .000 is obtained, which means p (0.000) $<$ α (0.05) then H_0 is rejected and H_a is accepted. So it can be concluded that there is a significant influence between the History of Pelvic Inflammatory Disease (PRP) and the Incidence of Pelvic Inflammatory Disease (PRP) at Andi Makkasau Parepare Hospital.

Table 4.9
Distribution of Frequency History of IUD Users with Pelvic Inflammatory Disease
Incidence at Andi Makkasau Hospital
Paripar City

User History IUDs	Pelvic Inflammatory Disease (PRP)				Total		p value ($\alpha =$ 0.05)
	Case		Control		n	%	
		%	n	%			
Yes		14,1	11	17,2	20	31,2	0.787
No		35,9	21	32,8	44	68,8	
Amount		50	32	50	64	100	

Source: Secondary Data 2021

Based on table 4.9 above, it shows that of the 64 respondents there were 9 people (14.1%) who had a history of IUD use and experienced pelvic inflammatory disease (PRP), 23 people (35.9%) who had no history of IUD use and experienced pelvic inflammatory disease (PRP), and there were 11 people (17.2%) who had no history of IUD use and had pelvic inflammatory disease (PRP), and there were 21 people (32.8%) who had no history of IUD use and not have pelvic inflammatory disease.

Based on the results of the Chi-Square statistical test, the value of p -value = 0.787 is obtained, which means p (0.787) $>$ α (0.05) then H_0 is accepted and H_a is rejected. So it can be concluded that there is no significant effect between the history of IUD use and the incidence of Pelvic Inflammatory Disease (PRP) at Andi Makkasau Parepare Hospital in 2021.

CONCLUSIONS AND SUGGESTIONS

After conducting a study entitled Factors Influencing the Incidence of Pelvic Inflammatory Disease in Women of Reproductive Age at Andi Makkasau Hospital Parepare which was conducted on 64 respondents obtained through secondary data from the Hospital in 2021, There is an influence of Sexually Transmitted Diseases (STD) with the incidence of Pelvic Inflammatory Disease in Women of Reproductive Age at Andi Makkasau Hospital Parepare. This is evidenced by the results of data processing using the Chi Square Statistical test with the help of SPSS with the result that the value of ρ -value = 0.006 $< \alpha = 0.05$. There is an effect of a history of Pelvic Inflammatory Disease with the Incidence of Pelvic Inflammatory Disease in Women of Reproductive Age at Andi Makkasau Parepare Hospital. This is evidenced by the results of data processing using the Chi Square Statistical test with the help of SPSS with the result that the value of ρ -value = 0.000 $< \alpha = 0.05$. There is no effect of the history of IUD use on the incidence of Pelvic Inflammatory Disease in Women of Reproductive Age at Andi Makkasau Parepare Hospital.

Expected for future researchers who are interested in conducting further research, it should be done in a more complex and detailed form regarding Pelvic Inflammatory Disease (PRP) and with a larger number of samples. So that it can be used as further reference material for those who wish to conduct similar research as well and can be input for those who are interested in reading the results of this study.

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