

The Effect of Covid-19 Pandemic anxiety on Breastfeeding Expenditure on Post Partum Mothers in Air Putih Bengkalis Village Health Center Working areas

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ABSTRACT

The Covid-19 pandemic has caused many restrictions on almost all routines services, both in terms of access and quality, including restrictions on maternal and neonatal health services, such as a reduction in the frequency of antenatal care and postponement of classes for pregnant women. This condition can cause psychological problems for postpartum mothers, which can cause anxiety, the impacts of anxiety can cause breast milk production to not run smoothly and afraid of contracting Covid-19. The purpose of the study was to determine the effect of the Covid-19 pandemic anxiety on breastfeeding mothers post partum in the Air Putih village, the working area of the Bengkalis health center. The time of the research was carried out in June-July 2021. The place of research was carried out in the Air Putih village. The sample in this study were 32 respondents with a total sampling technique. The research instrument used the HARS questionnaire. Data analysis was carried out univariate and bivariate. Univariate results showed that the majority of anxiety levels experienced moderate anxiety with a percentage of 43.8%. The frequency of expulsion of breast milk in the majority of post partum mothers are not smooth with a percentage of 71.9%. The results of the bivariate analysis using the likelihood ratio test showed that the p value was 0.016 < 0.05. the conclusion is that there is an influence of the anxiety of the Covid-19 pandemic on the expenditure of breast milk for post partum mothers in the Air Putih village, the working area of the Bengkalis health center. It is hoped that post partum mothers will not be too anxious about the transmission of covid-19 so that breastfeeding can continue smoothly and maintain health protocols during the covid-19 pandemic.

I. Introduction

World Health Organization (WHO) and United Nations International The Children's Emergency Fund (UNICEF) recommends only children breastfed for at least 6 months and continued breastfeeding until 2 year old child. According to WHO data (2020), exclusive breastfeeding coverage in whole world only around 36% During period 2007-2014. Scope pattern breast-feed based on group age 0 month 39.8 % , breast-feed exclusive 5.1% and breast-feed Partial 55.1%. On baby which aged 5 month breast-feed exclusive only 15.3 % , domination 1.5% and breast-feed Partial 83% (Infodatin, 2020). Achievement Exclusive breastfeeding in Indonesia of 54.0 % has reached the target (Ministry of Health RI, 2020).

The achievement of exclusive breastfeeding nationally in 2019 was 67.74%, number the of course already go beyond strategic plan year 2019 ie 50%. in province of Riau the achievement of exclusive breastfeeding is 73.44%, the achievement of exclusive breastfeeding in the regional UPT work Bengkalis Health Center as much 62.44%, although already beyond the strategic plan, but the Ministry of Health is targeting the achievement of exclusive breastfeeding of 80% (Ministry of Health, 2020).

The low achievement of exclusive breastfeeding can be caused by postpartum mothers who experience no discharge ASI. Expenditure ASI moment mother postpartum could influenced by



psychological factors (Hardiani in Mardjun, 2019). Disturbance psychology on the mother will hinder the *let down reflect*, due to the occurrence Increased cortisol inhibits the transport of the hormone oxytocin in the body secretion so that milk production hampered (Guyton, 2014). There is currently an outbreak of Corona Virus Disease (COVID-19). Based on dataas of February 14 2020, the worldwide mortality rate was 2.1 %, specifically in the city of Wuhan by 4.9% and Hubei province by 3.1%. In Indonesia as of the 14th March 2020 there are as many as 96 confirmed cases COVID-19 with amount Dead 6 person and Becomes country to 65 which positiveconfirmation COVID-19. Infection COVID-19 could raises symptom light, currently or heavy. Symptom clinical main which appear that is fever (temperature $>38^{\circ}\text{C}$), cough and difficulty breathing. In addition, it can be accompanied by severe shortness of breath, fatigue, myalgia, gastrointestinal symptoms such as diarrhea and other respiratory symptoms. Half from patient arise congested in one week. On case heavy badby fast and progressive, like ARDS, shock septic, acidosis metabolic which difficultcorrected and bleeding or dysfunction system coagulation in a number of day. OnIn some patients, symptoms appear mild, not even accompanied by fever. Most patients have a good prognosis, with a minority in good conditioncritical or even dead. The impact of the COVID-19 pandemic has made mothers who will post partum experience worry from light until currently like Fright on crowd and shut himself at home (ISR PP POGI, 2020).

Based on data on cases of the spread of COVID-19 in Indonesia to date, per June 13, 2021 recorded 2,004,445 positive confirmed cases, 147,728 cases active, 1,801,761 patients recovered and 54,956 patients died (Covid-19 Task Force19, 2021). While the COVID-19 cases in Riau Province as of June 19 2021 recorded 67,448 positive cases, 62,332 cases recovered and 1,823 cases died world. Case case COVID-19 in Regency Bengkalis recorded 4,266 case positive, 3,901 case healed and 166 case die world (Corona Riau, 2021). While the COVID-19 case at UPT Bengkalis as of June 16 2021 was recorded 681 case positive, 591 case healed and 27 case die world (Profile Public health center UPT Bengkalis, 2021). Coverage of postpartum women at UPT Puskesmas Bengkalis in 2020 January Until December there were 1121 postpartum mothers, achieving exclusive breastfeeding was only 20%. in in 2021 from January to March there will be 52 people (46.24%) (Data Profile UPT Public health center Bengkalis). Based on survey beginning which conducted by researcherby means of an interview on April 3, 2021 at the Air Putih Region Village UPT Bengkalis Health Center with 10 people postpartum mothers 7 out of 10 postpartum mothers complained that the milk production was not smooth, the baby was fussy and the breasts felt empty as well as mother state worried will virus COVID-19 because afraid infectedCOVID-19.

II. Methods

This type of research is quantitative with *cross sectional design*. The population in this study were postpartum mothers whose milk production was not smooth with a sample of 32 respondents. The instrument used is the HARS questionnaire (*Hamilton anxiety Rating Scales*). The independent variable is anxiety about the Covid-19 pandemic, while the dependent variable is breastfeeding . Data analysis used bivariate analysis with *chi-square*.

III. Results and Discussion

The results of the Covid-19 pandemic anxiety research on breastfeeding expenditure were divided into two univariate analyzes and bivariate analyses.

A. Univariate Analysis

Univariate analysis can be seen in table 1 below:

Table 1 Frequency Distribution of Post Partum Anxiety Levels During the Covid-19 Pandemic in Air Putih Village, Bengkalis Health Center Working Area

Worry	f	%
Worried Light	11	34,4
Worried Currently	14	43.8
Worried Heavy	7	21.9
Amount	32	100

In table 1, The level of anxiety of post partum mothers in the future during the covid pandemic, the majority experienced moderate anxiety as many as 14 respondents with percentage 43.8%, whereas

minority experience worried heavy as much 7 respondents with a percentage of 21.9%.

Table 2 Frequency Distribution of Post Partum Breastfeeding During the Covid -19 Pandemic in Air Putih Village, Bengkalis Health Center Work Area

Expenditure ASI	f	%
Fluent	9	28.1
Not Fluent	23	71.9
Amount	32	100

In table 2 Expenditure breast milk on mother post partum in Centurythe COVID-19 pandemic, the majority of breastfeeding was not smooth as many as 23 respondents with percentage of 71.9%, while the current minority was 9 respondents with percentage 28.1%.

B. Bivariate Analysis

Table 3. The Effect of Covid-19 Pandemic Anxiety on Breastfeeding Expenditures for Post Partum Mothers in Air Putih Village, Bengkalis Health Center Working Area

Level Worry	Expenditure ASI				Total		P
	Fluent		Not smooth		f	%	
	f	%	f	%			
Worried light	6	66,7	5	21,7	1	34,	0.016
					1	4	
Worried currently	3	33,3	11	47,8	1	43.	
					4	8	
Worried heavy	0	0.0	7	30,4	7	21,	
						9	
Total	9	100	23	100	3	100	
					2		

Level worry light and expenditure breast milk fluent as much 66.7 % _ more a little compared breast milk no current as much as 21.7%. Moderate anxiety level and milk production smoothly as much as 33.3 % more than the expenditure of breast milk is not fluent as much 47.8%. The level of severe anxiety and current breast milk expenditure was 0.0 % more than current breast milk expenditure as much as 0.4%.

Discussion

Univariate analysis

Based on the results of the study, the anxiety level of post partum mothers in the past during the covid pandemic, the majority experienced moderate anxiety as many as 14 respondents with percentage 43.8%, whereas minority experience worried heavy as much 7 respondents with a percentage of 21.9%. This research is in line with research conducted by Yuliani, DR. and Anini, FN. (2020), with the research title "Anxiety of Pregnant Women and Mothers Postpartum During the Covid-19 Pandemic in Baturaden Sub-District". Research result show that, 75 % mother pregnant in Subdistrict Baturaden experience worry from scale mild-moderate until scale heavy, with majority level worry pregnant women are in the mild-moderate category.

Psychological disorders in the mother cause reduced spending ASI because will hinder let down reflex. Change psychology on mother postpartum generally occurs at 3 days post partum. Two days post partum mother tend to be negative towards the care of their babies and very dependent others because energy is focused on itself. In the process of breastfeeding A mother is influenced by 2 hormones namely prolactin and oxytocin. Process formation prolactin by adenohypophysis, stimulation which originated from baby suck and will next to pituitary posterior which then will Secrete hormone oxytocin. Through Genre blood hormone this will brought touterus which will raises contrast on uerus sot could occur involution of the organ. The contractions that occur will stimulate squeezed milk that has been processed and will be released through the alveoli then enters the ductal system and drains through the lactiferous ducts and then into the baby's mouth. In the let down reflex there are factors which can inhibit them include mothers who experience anxiety (Astutik, 2014).

One of the factors that influence the failure in the breastfeeding process could caused because no exit breast milk. Smoothness breast milk very influencedby psychological factors (Hardiani in Mardjun, 2019). Psychiatric conditions and emotion mother which calm very influence smoothness breast milk. If mother experience stress, thought stressed, no calm, worried, sad, and tense will affect

fluency breast milk. Mother which worried will a little Secrete breast milk compared motherwho are not anxious (Arfiah, 2017). Due to the COVID-19 pandemic make the community, especially pregnant women experience anxiety, which can impact on milk production

Bivariate analysis

Level worry light andexpenditure ASI fluent as much 66.7 % _ more a little compared ASI no smoothly as much as 21.7%. Moderate anxiety level and milk ejection smoothly as much as 33.3 % more than breastfeeding without fluent as much 47.8%. The level of severe anxiety and smooth breastfeeding expenditure is 0.0 % more than smooth breastfeeding expenditure of 30.4%.

The results of the bivariate analysis using *the chi-square test (Likelihood ratio)* obtained *p value* = 0.016 or *p value* < 0.05, it means there is influence worry pandemic Covid-19 to expenditure breast milk on mother postpartum in the village White Water UPT Bengkalis Health Center Area. Thing this in line with study which conducted by tambaru, R. (2020), with title study "Influence Worry Pandemic Covid-19 ToExpenditure breast milk Mother Post Partum in Midwife Practice Independent Hj. Rusmawati inestuary Rhinoceros". Results study obtained There is influence worry pandemic Covid-19 on post partum mother's milk production (*p value* : 0.000 < : 0.05). Study conducted by Kusumawati, et al (2020), with title study "Analysis Level Worry with Acceleration Expenditure breast milk on Mother Nifaas". Results study there is connection level worry with production acceleration breast milk with *p nilai value* 0.003< 0.05 .

Hawari (2016) state that worry is disturbance naturalfeeling which be marked with feeling Fright or worries which deep. Symptom which complained dominated by factor psychic but could also by physical factors. Someone will experience anxiety disorders when concerned is unable to cope with psychosocial stressors. According to Dewi (2015)level worry which occur on mother During and after process Delivery is a risk factor for delays in the first day of breastfeeding and second. Anxiety is a common thing in post partum mothers. Thing this related with adaptation mother post partum which shared to in 3groups (taking in, taking hold, and letting go) but will become pathological if happened too much.

According to Riksani (2012), the mother's mental state and emotions are calm very affect smoothness breast milk. If mother experience worry, stress,depressed mind, not calm, sad, and tense will affect fluency Breast milk, in this case, mothers who are worried will produce less milk compared to breastfeedingworry-free mother. This is because there are two processes for the release of breast milk process, namely the process of forming milk (*the milk production reflex*) and the process ofexpenditure water milk (*let down reflex*) which second process the influenced byhormone regulated by the hypothalamus (Badariah, 2011). *Hypothalamic* hormoneitself works according to the brain's commands and works according to the mother's emotions, so that mothers who are anxious will produce less milk than mothers who areno anxious (Aprilia, 2011).

In addition, the psychological processes in pregnant women have started since childhood pregnancy. Mother pregnant will experience change psychological which real so thatadaptation is required. Poor adaptation process can cause stressor anxiety so as to increase cortisol production. From cortisol which High levels will inhibit milk production (Dewi, 2015).

According to Guyton (2014) the level of anxiety in post partum mothers will accompanied by increased secretion of *adrenocorticotrophic hormone* (ACTH) by the glands pituitary anterior which followed with enhancement secretion hormone adrenocortical form of cortisol within minutes. Cortisol has a decoy effect direct negative feedback to the hypothalamus to decrease formation CRF and anterior pituitary gland to decrease ACTH formation. Both of these feedbacks help regulate plasma cortisol concentrations. So that when cortisol increase, bait come back this by automatic will reduce the amount of ACTH so that it returns to its normal value. Secretion cortisol which tall could hinder transportation hormone deep oxytocin secretion, so that could hinder expenditure product ASI (colostrum, ASI transition, ASI thanks).

IV. Conclusions

Worry pandemic Covid- 19 Affects expenditure ASI on motherpost partum so expected to mother postpartum so that you don't worry too much about the transmission of Covid-19 so that breastfeeding continues smoothlyas well as keep up health protocol during the covid-19 pandemic.

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