THE RELATIONSHIP OF THE RECEPTION WITH THE USE OF RATIONAL MEDICINE ON POST PARTUM MOTHER IN PUBLIC HEALTH CENTRE LAU BALENG KECAMATAN LAU BALENG IN 2019

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ABSTRACT

Medicine is an important factor in health care. The use of drugs that are inappropriate, ineffective, unsafe, and also not economical is now a problem in health care. Based on data from the North Sumatra Provincial Health Office in 2017, it is known the use of Vitamin A and Fe tablets in the case of Postpartum Mother (56.0%), Postpartum Infection (63.0%), the average use of drugs (3.5 drugs per prescription). This type of research used in this study is an analytic survey with a cross-sectional restropective design that is the design of epidemiological studies. The sampling technique in this study was to use a purposive sampling unit sampling technique of 65 recipes. This study yielded: the most dominant variable related to rational drug use at the Lau Baleng Health Center, Lau Baleng Subdistrict, was the prescribing variable corresponding to the list of essential drugs, with a significant 0,000, OR = 60,944 (95% CI = 10,375-385,129). It is recommended that prescribing doctors at the Lau Baleng Health Center in Lau Baleng District write prescriptions in accordance with applicable guidelines in accordance with the Republic of Indonesia's Ministry of Health standards for 2015-2019.

Keywords: Prescribing, Rational Medicine

Introduction

Medicine is an important factor in health care. The use of drugs and vitamins that are not appropriate, ineffective, unsafe, and also not economical is now a problem in health care, both in developed and developing countries. This problem is often found in health service units such as in hospitals, health centers, private practice, and in the wider community.

Based on data from the World Health Organization (WHO) in 2019 it is estimated that more than half of the world's population uses drugs that are prescribed, given and sold in an inappropriate way and use drugs incorrectly. One drug that needs to get the right prescription.

Improper use of drugs can have a negative impact on health. In Postpartum Mothers Provision of Vitamin A and Fe Tablet is needed for the prevention of infection and acceleration of healing in postpartum mothers

The cause of anemia is due to lack of nutrients for blood formation, such as iron and vitamin A. But what often happens is anemia due to iron deficiency (Rukiyah, 2010). About 75% of anemia in the puerperium is caused by iron deficiency which shows a picture of hypochromic microcytic erythrocytes on peripheral blood smears. The second most common cause is megaloblastic anemia and vitamin A deficiency. Other rare causes of anemia include hemoglobinopathy, inflammatory processes, chemical toxicity, and malignancy (Prawirohardjo, 2015).

According to the Indonesian Health Profile in 2016 anemia occurred in 37.1% of postpartum mothers in Indonesia, 36.4% of postpartum mothers in urban areas and 37.8% postpartum mothers in rural areas. To prevent anemia each puerperal woman is expected to get at least 90 tablets plus blood during the puerperium. The 2016 PSG (nutritional status monitoring) results found that only 40.2% of postpartum mothers

received at least 90 tablets with blood tablet lower than the 2016 national target of 85%. (North Sumatra health profile, 2016)

Method

This type of research used in this study is an analytical survey with a cross-sectional restropective design that is the design of epidemiological studies. The sampling technique in this study was to use a purposive sampling technique, a technique for obtaining samples that were directly carried out in the sampling unit as many as 65 recipes. Data were analyzed by univariate analysis, bivariate analysis, multivariate analysis using logistic regression tests. by testing the value of p = 0.05 (39).

Result

Tabel 1. Prescribing Relationships Based on Medication Items

Medication Items	Rational Drug Use						p value
	Irrational		Rasional		Total		
	f	%	f	%	f	%	
Irrational	16	24,62	23	35,38	39	100,0	0,027
Rasional	14	21,54	12	18,46	26	100,0	
Total	30	46,15	35	53,85	65	100,0	

Based on table, it is known that of the 65 prescriptions studied, the majority of prescriptions based on the number of items per prescription medication were irrational, as many as 39 (60.00%) prescriptions. Of the 39 prescriptions based on the number of irrational prescription drugs items, there were 16 (24.62%) irrational prescriptions in the prescription based on the number of prescription drugs items and irrational prescriptions based on drug use, and as many as 23 (35.38%) prescription that is not rational in prescribing based on the number of items per prescription medication but rational based on the use of drugs. Based on the results of the statistical test calculations the significance of p value is 0.027 <0.05, so it can be concluded that there is a relationship between the number of drug items per prescription sheet in a single diagnosis with rational drug use

Table 2. Relationship of Number of Prescribing Based on the Use of Vitamin A Nonspecific

Medication Items	Rational Drug Use						p value
	Irrational		Rasional		Total		
	f	%	f	%	f	%	
Irrational	16	24,62	23	35,38	39	100,0	0,27
Rasional	14	21,54	12	18,46	26	100,0	
Total	**30**	**46,15**	**35**	**53,85**	**65**	**100,0**	

Based on table 2 it is known that of the 65 prescriptions studied, the majority of prescriptions based on the number of items per prescription medication were irrational namely 39 (60.00%) prescribing. Of the 39 prescriptions based on the number of irrational prescription drugs items, there were 16 (24.62%) irrational prescriptions in the prescription based on the number of prescription drugs items and irrational prescriptions based on drug use, and as many as 23 (35.38%) prescription that is not rational in prescribing based on the number of items per prescription medication but rational based on the use of drugs. Based on the results of the statistical test calculations the significance of p value is 0.027 <0.05, so it can be concluded that there is a relationship between the number of drug items per prescription sheet in a single diagnosis with rational drug use.

Table 3. Relationship of Frequency of Prescribing Based on the use of Fe Tablets in Mother Postpartum

The use of Fe tablets in postpartum mothers	Rational Drug Use						p value
	Irrational		Rasional		Total		
	f	%	f	%	f	%	
Irrational	20	30,77	24	36,92	44	100,0	**0,020**
Rasional	10	15,38	11	16,93	21	100,0	
Total	**30**	**46,15**	**35**	**53,85**	**65**	**100,0**	

Based on table 3 it is known that of the 65 prescriptions studied, the majority of prescriptions based on the use of Vitamin A in the case of Mother Postpartum were irrational as many as 44 (67.69%) prescribing. Of 44 uses of Fe Tablet in the case of Postpartum mothers, there were 20 (30.77%) prescriptions that were irrational in the use of Vitamin A and Fe Tablet in the case of Postpartum mothers and were not

rational in drug use, and as many as 24 (36.92%) irrational prescription in the use of Vitamin A and Tablet Fe in the case of puerperal women and rational use of drugs.

Based on the results of the statistical test calculations the significance of p value is 0.020 <0.05, so it can be concluded that there is a relationship between the use of Vitamin A and Fe tablets in the case of postpartum mothers with rational drug use.

Tabel 4. Rational Relationship of Drug Use

Use Rational medicine	Rational Drug Use						p *value*
	Irrational		Rasional		Total		
	f	%	f	%	f	%	
Irrational	22	33,85	23	35,38	45	100,0	**0,007**
Rasional	8	12,31	12	18,46	20	100,0	
Total	**30**	**46,16**	**35**	**53,84**	**65**	**100,0**	

Based on table 4 it is known that of the 65 prescriptions studied, the majority of prescriptions based on the use of Fe tablets in the case of Mother Postpartum were irrational as many as 45 (69.23%) prescribing. Of the 45 Fe Tablets used in the case of the Rational Mother, as many as 22 (33.85%) prescribing irrational prescriptions were based on the use of Fe Tablets in the Postpartum mother case and irrational drug use, and as many as 23 (35.38%) irrational prescription based on the use of Fe tablets in postpartum mothers. Based on the results of the statistical test calculations the significance of p value is 0.007 <0.05, so it can be concluded that there is a relationship between the use of Fe tablets in postpartum mothers with rational drug use at.

Table 5. Variable Selection as a Model Candidate in Logistic Regression Test Based on Bivariate Analysis

No	Variabel	p *value*	Information
1	Medicine item	0,027	Kandidat
2	Use of Vitamin A in Post Partum Mothers	0,027	Kandidat
3	The use of Fe tablets in postpartum mothers	0,020	Kandidat
4	Rational Use of Drugs	0,007	Kandidat

Based on table it can be seen that all variables are model candidates in the logistic regression test where p value <0.25. The results of the logistic regression analysis can be seen in the following table:

Table 6. Logistic Regression Analysis Results

No	Variabel	B	p *value*	Exp(B)OR	95%CI for Exp(B)
1	Medicine item	0,434	0,310	0,648	0,145-2,885
2	Use of Vitamin A in Post Partum Mothers	4,110	0,001	60,832	10,375-385,129
3	The use of Fe tablets in postpartum mothers	4,560	0,002	60,944	10,375-385,129
4	Rational Use of Drugs	18,611	0,276	0,745	0,355-4,351

Analysis Results

Based on table 6 above, it can be seen that the logistic regression analysis produces one of the most dominant variables related to rational drug use in the Lau Baleng Health Center, Lau Baleng Subdistrict, which is prescribing variables that correspond to the list of essential medicines, with a significant 0,000 (p value <0.05), OR = 60,944 (95% CI = 10,375-385,129) means that thetype of prescribing that is in accordance with the list of essential medicines has a 60,944 chance of rational drug use compared to irrational drug use. Coefficient B value of 4.110 is positive, so the more prescribing that is in accordance with the rational list of essential drugs, the higher the rational use of drugs.

Discussion

Relationship of the Number of Drug Items per Prescription Sheet in a Single Diagnosis with the Use of Rational Drugs

Based on the results of the statistical test calculations the significance of p value is 0.027 <0.05, so it can be concluded that there is a relationship between the number of drug items per prescription sheet in a single diagnosis with rational drug use.

The high number of irregular prescription drug items used in the Lau Baleng Health Center in Lau Baleng District is likely due to the pattern of therapy for doctors and midwives given focus on symptoms rather than diagnosis. encourage doctors to prescribe many drugs such as Vitamin A and Fe Tablets without providing proper education and usefulness of the drugs. The economic, socio-cultural impact that makes the community Kususnya Ibu Nifas rarely make repeat visits if conditions are not too hated. So doctors and midwives prescribe a lot of drugs. henceforth the patient no longer pays for the medicine akan ditebusnya di loket obat puskesmas. Semakin tinggi tingkat polifarmasi means that more and more drugs must be provided at the puskesmas. This results in increased costs used to procure drugs.

Polypharmacy events at the Lau Baleng Health Center in Lau Baleng Sub-district can also occur due to the difficult enforcement of diagnoses with limited tools to ensure the diagnosis so that drugs are prescribed according to the patient's symptoms or complaints. In this Puskesmas, there is no set limit for prescribing monitoring, the number of drugs in one prescription (polypharmacy). Polypharmacy is the use of five or more types of drugs simultaneously in one sheet of prescription. Some of the characteristics of Irrational Drug Use include, overprescribing, underprescribing, multiple prescribing and incorrect prescribing.

The results of this study are in accordance with research conducted by Ami, et al with the title of the study "Analysis of Prescribing Medicine for Children 2-5 Years Old in the city of Bandung in 2012". This study aims to determine the pattern of drug absorption in children aged 2 to 5 years in 14 Bandung City Pharmacy period 2012 through prescribing indicators. The data used were 2,195 recipe sheets from 14 Bandung City Pharmacy taken retrospectively and processed based on WHO prescribing indicators. The results showed that the average number of drugs in each recipe sheet was 3.54

items, the percentage of patients who received 0% injection drugs; the percentage of patients receiving 75% antibiotics; the percentage of drugs prescribed with a generic name of 8.13% and the percentage of drugs prescribed according to the National Essential Medicines (DOEN) list is 32.9%(18).

Use of Rational Drugs, namely the number of drugs per prescription can be achieved if it meets the principles of the right diagnosis, the right patient, the right drug, the right dose, the right way of administration, the right interval and duration of administration, and the right information

According to researchers, polypharmacy can have a detrimental effect on patients such as, there is a risk of drug interactions because some drugs cannot be taken simultaneously. Drug interactions can endanger the patient's condition or even make other drugs have no effect. Besides polypharmacy can also cause an increase in the risk of side effects and costs, to make patients worry the smaller the average value of the number of prescription items, or in other words polypharmacy, the unwanted drug reactions from drug interactions can be avoided. Irrational use of the amount of drugs per prescription also affects the patient's adherence to treatment, the incidence of bacterial resistance to the prescription of irrational antibiotics, and the costs to be paid by the patient.

The Relationship between the Use of Vitamin A in the Postpartum Mother Case and the Use of Rational Drugs

The results showed that of the 65 prescriptions studied, most of the prescriptions based on antibiotic use in the case of Mother Postpartum were irrational as many as 44 (67.69%). Of the 44 uses of Vitamin A in the case of the Postpartum mother, there were 20 (30.77%) irrational prescribing and irrational drug use, and 24 (36.92%) irrational prescription and rational drug use. Based on the results of the statistical test calculations the significance of p value is 0.020 <0.05, so it can be concluded that there is a correlation between the use of Vitamin A in the case of Postpartum Mother with the use of rational medicine at.

Based on the Indonesian Ministry of Health Policy in the management guidelines, it can only be done if a person has been diagnosed appropriately.

The most worrying consequence of not consuming Vitamin A in the case of Postpartum mothers is the delay in the process of wound healing after childbirth and the production of breast milk which is not smooth so that it is necessary to administer Vitamin A to the postpartum mother who is appropriate and according to the dosage needed by the postpartum mother. in Lau Baleng Health Center, Lau Baleng Sub-District, this can be detrimental both in economic terms (increasing therapeutic costs) and clinical (increasing severity of the disease).

This study is also in line with Sauriasari's research (2017) entitled "Evaluation of the suitability of prescription writing in the case of Mother Postpartum in the Polytechnic of MTBS Puskesmas, Cengkareng District, Jakarta". The results showed the percentage of antibiotic use in the sample was 59.6% where the most widely used antibiotic was amoxicillin. Based on the results of this study, it can be concluded that the use of antibiotics in toddlers coughing non-pneumonia in Cengkareng Health Center is quite high and the suitability of prescription writing with MTBS Chart Book guidelines is inadequate.

According to the researchers' assumptions, the accuracy of the indications is a process of evaluating the selection of drugs that are in accordance with what the patient needs. The accuracy of the indications in choosing Vitamin A drugs is based on the diagnosis made by a doctor or midwife for medical reasons. Evaluation of the accuracy of the indications is seen from the need for patients to obtain the drug according to their needs.

Relationship of Use of Vit. A and Fe Tablets in Postpartum Mother Infection Cases with Rational Drug Use

The results showed that of the 65 prescriptions studied, most of the prescriptions based on the use of Fe tablets in postpartum mothers were irrational as many as 45 (69.23%). Of the 45 Fe tablets used in the non-specific case of puerperium, there were 22 (33.85%) irrational prescribing and irrational drug use, and 23 (35.38%) irrational prescription and rational drug use. Based on the results of the statistical test calculations the significance of p value is 0.007 <0.05, so it can be concluded that there is a correlation between the use of Fe tablets in the case of Mother Postpartum with rational drug use in the Lau Baleng Health Center, Lau Baleng District symptoms of the disease quickly disappear. From various approaches taken to increase the rationality of drug use, it can be seen that there are many factors that influence the prescription of Fe tablets such as lack of knowledge and habits in prescribing drugs. that is, the patient only gets the medicine needed, but treatment has not yet been carried out that refers to the Basic Medicine Guidelines at the Puskesmas.

The most worrying consequence of the use of Vitamins A and Fe in childbirth infection cases is the excessive use of rational drugs at the Lau Baleng Health Center, Lau Baleng Subdistrict, the slow healing process for Postpartum mothers and a small amount of milk production and resulting in adverse economic impacts

(increasing costs) therapeutic) and clinical (increasing severity of disease) Therefore the percentage of prescription of Fe tablets is expected according to the patient's condition to avoid undesirable effects. Restrictions on the use of these drugs aim to overcome disease resistance to the condition of the puerperal mother.

Conclusion

From the results at the Lau Baleng Health Center, Lau Baleng Subdistrict, the prescribing variable is in accordance with the list of essential medicines, with a significant 0,000, OR = 60,944 (95% CI = 10,375-385,129).

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