

Analysis of Midwife Needs Based On Workload In The Obgyn And Child Poly Work Unit At RSKIA HARYANDA Using the Workload Indicator of Staffing Need (WISN) Method

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Abstract.

Hospitals are required to provide quality health services through the availability of adequate human resources, including midwives. The mismatch between the number of personnel and the workload can affect the effectiveness of services and the quality of midwifery care. This study aims to analyze the needs of midwives based on workload using the Workload Indicators of Staffing Need (WISN) method. The research uses a quantitative descriptive approach. Data was obtained from secondary data in the form of the number of midwife service activities for one year and primary data through observation of the use of working time in each main activity. The analysis was carried out by calculating available working hours, workload standards, allowance standards, and manpower requirements based on WISN guidelines, then comparing them with the number of available midwives. The results of the analysis are expected to be able to describe the level of adequacy of midwives, identify shortages or over-staff, and become the basis for planning human resource needs in hospitals. The application of the WISN method provides a more objective calculation of manpower needs and is based on actual workload so that it can support management decision-making in the arrangement of health workers, improve the efficiency of human resource utilization, and optimize the quality of midwifery services in hospitals.

Keywords: workload, midwives, manpower needs, hospitals and WISN.

I. INTRODUCTION

Hospitals as one of the health facilities that provide health services to the community have a very strategic role in accelerating the improvement of public health degrees. Therefore, hospitals are required to provide quality services in accordance with the set standards and can reach all levels of society. (Ministry of Health of the Republic of Indonesia 2008). For this purpose, hospitals must be supported by sufficient and qualified human resources. According to Hanggraeni, "HR planning is a systematic process used to predict the demand and provision of human resources in the future (Hanggraeni, 2012). Through a systematic HR planning program, it can be estimated the number and type of workforce needed in each given period so that it can help the HR department in planning recruitment, selection, as well as education and training". (Flynn et al., 2010)

Based on Law Number 17 of 2023 concerning Health, health workers are everyone who is devoted to the health sector and has a professional attitude, knowledge, and skills through higher education which for certain types requires the authority to carry out health efforts. Health workers have an important role in improving the quality of maximum health services to the community in order to be able to increase awareness, willingness, and the ability to live a healthy life so that the highest degree of health will be realized (Minister of Health of the Republic of Indonesia, 2014). The needs of health workers in Indonesia are still unmet. In terms of number, quality, and distribution, health workers continue to increase but are still not able to meet the needs of health services throughout Indonesia.

Health Workers are anyone who devotes themselves to the health sector and has knowledge or skills through education in the health sector that for a certain type requires the authority of health efforts. Midwives are recognized as responsible and accountable professionals, who work as female partners to provide support, care and advice during pregnancy, childbirth and postpartum periods, lead childbirth on their own responsibility and provide care to newborns and infants. This care includes preventive efforts, promotion of normal childbirth, detection of complications in mother and child, and access to medical assistance or other appropriate assistance, as well as carrying out emergency measures. Midwives have an

important role in health counseling and education, not only to women, but also to families and communities. These activities must include antenatal education and preparation for parenthood and can extend to women's health, sexual health or reproductive health and child care. Midwives are one of the health workers who have an important and strategic position, especially in reducing the Maternal Mortality Rate (AKI) and the Infant Mortality Rate (AKB).

Midwives provide continuous and complete midwifery services. Midwifery services are in the form of prevention, promotion based on partnership and community empowerment together with other health workers to be ready to serve those in need. Midwives have professional standards as a reference to carry out all actions and care provided in all aspects of their professional service to individuals, families and communities, both from the aspects of input, process and output.

Hospital human resource planning requires hospitals to serve customers professionally to improve the quality of service by providing a number of professional personnel in their fields. Hospitals need to be efficient in everything, including the provision of manpower, while there are often complaints in one of the health service units about the high workload of human resources in the unit.

According to Astiena AK (2015), the workload of health workers is the number of jobs that must be completed by health professionals in one year in a health service facility. The workload in one unit is basically a balance between the quantity and quality of work demanded from employees and the amount of labor in that unit. The workload also considers the standard number of personnel according to the profession, the qualification standards and the standard of job evaluation standards. The height and height of the workload does not only depend on the number of available personnel, but also depends on the qualifications of the health workers. The workload can be high if the competence of health workers is far from the expected qualifications, by measuring workload, managers can make decisions based on scientific evidence, in accordance with the conditions in the field Workload measurement will produce real data on labor needs in the form of workload, number and qualifications of current personnel, which is directly beneficial in decision-making.

The WISN workload calculation method will produce data in the form of workload, as well as data on the number of health human resource needs based on the main activities in the health HR category. It is necessary to research the real needs of the number of health workers based on the workload of health human resources in the unit, so that the decision to increase or decrease the number of personnel is made based on scientific evidence. WISN is used to calculate the workload that produces the number of health workers based on the main activities of the health workers. WISN requires annual quantity data that has been recorded in full in the previous year, and needs to observe the use of working time for each main activity.

II. METHODS

This study uses a quantitative descriptive method with a workload analysis approach using the Workload Indicators of Staffing Need (WISN) method to determine the real needs of midwives based on workload in hospitals. The data used includes secondary data in the form of the number of services and main activities of midwives over the past year, as well as primary data obtained through observation of the use of working time in each main activity. The analysis is carried out by determining Available Working Time, compiling workload standards and allowance standards, then calculating labor needs based on the annual volume of activities according to WISN guidelines. The results of the calculation are compared with the number of midwives available to determine the level of manpower adequacy, identify shortages or overpowers, and provide recommendations for more effective and evidence-based human resource planning.

III. RESULT AND DISCUSSION

WISN Workload Analysis

Analysis of Midwife Needs Based on Workload in the Obgyn and Child Poly Work Unit at RSKIA HARYANDA Using the Workload Indicator of Staffing Need (WISN) Method

The design of this study is a descriptive research, namely a research that objectively describes the workload of midwives in the Obgyn and Child poly unit at RSKIA Haryanda using the Work Load Indicator

Staff Need (WISN) method. The subject of this study is the number of midwives in the Obgyn and Child poly unit at RSKIA Haryanda in 2023, which is 6 people. The data collected included available working hours, determining work units and categories of human resources to be researched, workload standards, leniency standards, and calculation of the number of midwives needed. The data collection method in this study is observation and interviews to find out the parts and activities contained in the Obgyn and Child poly unit at RSKIA Haryanda. The instruments used include a stopwatch, interview guidelines, and observation guidelines.

Data analysis (manpower requirement calculation procedure) using the WISN method is as follows:

Calculating Available Working Hours at Obgyn and Child Poly at RSKIA Haryanda

Calculating the available working hours is to obtain available working time for each category of Human Resources (HR) who work in service units for a period of one year. Establish the available working time with the following formula:

$$Waktu\ kerja\ tersedia = \{A - (B + C + D + E)\} \times F$$

Description:

A = Weekday

B = Annual leave

C = Training

D = National Holiday

E = Permission, Illness, etc.

F = Working Time

Results and analysis

Working hours are available containing some information that must be known such as 252 working days/year, annual leave 7 days/year, education and training 4 days/year, national holidays 2 days/year, 4 days/year absence from work, and 9 hours/day. In this study, it is known that the working time available in the calculation of 1 year in the Obgyn and Child poly unit at RSKIA Haryanda using the WISN method, the results of the initial data processing obtained from the results of observations to midwives at RSKIA Haryanda can be seen as follows:

Table 1 Determination of Working Hours Available for Midwives in the POLI Unit at Haryanda

Hospital			
Code	Factors	Quantity	Remarks
A	Workday	240	Day/Year
B	Annual Leave	7	Day/Year
C	Education and Training	4	Day/Year
D	Public Holidays	2	Day/Year
E	Work Absence	4	Day/Year
F	Working Hours	9	Hours/Day
Working hours available		223	Day/Year
Working hours available		2007	Hours/Year
Working Hours Available		120.420	Minutes/Year

Based on the results of the calculation of available working days to find out the working days of officers in the Obgyn and Child poly unit at RSKIA Haryanda, the working days of officers in 1 week are 5 working days. While in one year there are 48 weeks, in total there are 240 working days in one year. Based on the Ministry of Health No. 81/Menkes/SK/2004 concerning guidelines for the preparation of Human

Resources (HR) planning, it is stated that working days, in accordance with the provisions applicable at the hospital or local regulations, are generally within 1 week and 5 working days.

Based on the results of the calculation of annual leave and national holidays, it can be known that the number of annual leave for officers of the Obgyn and Child poly unit at RSKIA Haryanda is 7 days/year and national holidays are 2 days/year. Based on the results of the calculation of education, training and absence from work for officers of the Obgyn and Child poly unit at RSKIA Haryanda as many as 4 days/year. This is in accordance with the hospital's policy which states that education, training and work absence are the same amount, which is 4 (four) days/year.

The working hours of officers in the Obgyn and Child poly unit at RSKIA Haryanda are 9 working hours. This is not in accordance with Law of the Republic of Indonesia No. 13 of 2003 article 77 paragraph (2) which reads: 7 working hours in 1 day or 40 working hours in 1 week for 6 working days in 1 week; or 8 hours of work in 1 day or 40 hours of work in 1 week for 5 working days in 1 week. In both working hours systems, a limit of working hours is also given, which is 40 (forty) hours in 1 (one) week. If it exceeds the provisions of the working time, then the ordinary working time is considered to be overtime work time so that the worker is entitled to overtime wages. The inconsistency in the working hours of midwives in the Obgyn and Child poly unit at RSKIA Haryanda should be calculated overtime and paid overtime wages, otherwise the workload of midwives in the Obgyn and Child poly unit at RSKIA Haryanda is excessive.

Of the several factors that have been described above that affect the availability of working hours and working days. It is processed using the WISN method and gets the total available working time of 120,420 minutes/year, 2007 hours/year and 223 days/year.

Determination of work units and energy categories

The work unit that will be examined for workload is in the outpatient facility at the hospital, the Obgyn and Child poly work unit. The workload calculated is the category of "midwife" health workers.

Preparation of Workload Standards

The standard calculation of workload The researcher conducted an interview with the midwife, based on the working time the officer stated that the workload of midwife officers was very high, not only due to the lack of human resources but also because of the increasing number of patient visits. The standard workload in the Obgyn and Child poly Unit at RKIA Haryanda consists of 5 main activities that must be done, namely conducting a patient TTV examination, opening a post SC patient verb, immunizing children, filling out the status of the medical record results of the patient's examination, filling out the SIMRS. In this study, it is known that the standard workload of the main activities of midwives at RSKIA Haryanda, the results of the calculation of the standard workload can be seen below:

Table 2 Main Activities of Midwives of Obgyn and Child Poly Work Unit at RSKIA HARYANDA

Main activities	Description of Main Activities	Time	Total
The examination conducted a patient's TTV examination	Measuring the patient's weight	1 minute	11 minutes
	Measuring patient TB		
	Perform a patient Tension check	2 minutes	
	Measuring the length of the baby's body	5 minutes	
		3 minutes	
opening the bandage of the patient post SC	Checking post SC scars	5 minutes	8 minutes
	Applying an antiseptic (betadine)	3 minutes	

immunizing children	Injecting BCG, DPT and polio vaccines Administer polio immunization orally	10 minutes 2 minutes	12 minutes
Fill in the status of the medical record as a result of the patient's examination	Recording of patient anamnesis Examination and therapy provided	15 minutes	15 minutes
Fill in the SIMRS	Create a SIMRS report	20 minutes	20 minutes

Workload standards are the many types of work that a health worker can do in a working year in accordance with professional standards in calculating vacation time, illness, leave, and leave. Workloads include; main activities,

The average time it takes to complete each main activity, the standard workload per year. The standard calculation formula for workloads is as follows:

workload standards Available Uptime workloads

Average time of the main activity

Table 3 Standard Workload of Midwives of Obgyn and Child Poly Work Unit at RSKIA Haryanda

Yes	Main activities	CD	SBK	KT
1	Examination performs an examination Patient TTV	12720	10.947	1,16
2	open a post SC patient verb	2400	15.052	0,16
3	immunizing children	1680	10.035	0,17
4	Filling Status record Medical Results Patient examination	14400	8.028	1,79
5	Filling in the simkrs	14400	6.021	2,39
	Sub Total Need for Midwives			5,67

Description :

KK : Quantity of activities for 1 year SBK: Standard Workload

KT : Energy Needs

Preparation of Relaxation Standards

The type of activity and time requirement to complete an activity that is not directly related to the service of patients in this study are known to be the relaxation standard in the Poly-obgyn unit at RSKIA Haryanda using the WISN method, the results of the calculation to determine the relaxation standard are as follows:

Table 4 Setting Standards for Relaxation of Midwives in the Obgyn and Child Poly Unit at RSKIA Haryanda

Relaxation factor	Average time	Relaxation standards	
Monthly meetings	90 minutes/ month	(90X12)/120.420	0,00896
Monthly reports	90 minutes/month	(90X12)/120.420	0,00896
Preparation of consumables requirements	45 minutes/month	(45x12)/120.420	0,00448

Time to rest, prayer, eat (ishoma)	45 minutes/month	(45x223)/120.420	0,0833
Number of leeway time			0,1057

The results of the Table calculation show that the relaxation standards at RKSIA Haryanda are 4 categories, namely monthly meetings with an average time of 90 minutes/month to 0.00896 minutes/year, monthly reports with an average time of 90 minutes/month to 0.00896 minutes/year, Preparation of consumables needs with an average time of 45 minutes/month to 0.00448 minutes/year and rest time, Prayer, eating (ishoma) with an average time of 45 minutes/month to 0.0833 minutes/year. This time has become a hospital decree.

Calculation of Human Resources Needs of Obgyn and Child poly units

Calculation of the need for midwives in the Obgyn poly unit with the following data sources:

1. The calculation data obtained from the previous step, namely available working time, workload standards, and relaxation standards.
2. The quantity of the main activities of poly obgyn within one year was obtained from the primary data of the report of each obstetric examination (poly obgyn).

Table 5 Quantity of Main Activities of Midwives in the Obgyn and Child Poly Unit at RSKIA Haryanda

NO	MAIN ACTIVITIES	QUANTITY
1.	The examination conducted a patient's TTV examination	12720
2.	Removing the bandage of the post SC patient	2400
3.	Immunizing children	1680
4.	Fill in the status of the patient's medical records	14400
5.	Filling out the SIMRS	14400

Table 6 Needs of Midwives in the Obgyn and Child Poly Unit at RSKIA Haryanda

No	Main activities	KK	SBK	KT
1.	Examination conducts TTV examination Patients	12720	10.947	1,16
2.	open a post SC patient verb	2400	15.052	0,16
3.	immunizing children	1680	10.035	0,17
4.	Fill in the status of the medical record as a result of the examination Patients	14400	8.028	1,79
5.	Fill in the SIMRS	14400	6.021	2,39
	Sub Total Need for Midwives			5,67

Description :

KK : Quantity of activities for 1 year of SBK : Standard Workload

KT : The Need for Midwives

The need for midwives in the Poly Obgyn & Child unit of RSKIA Haryanda is: The need for midwives = 5.67

Relaxation Standards = 0,11

Quantity = 5,77 (6 orang)

Based on the calculation of WISN, the need for midwives at RSKIA Haryanda is 6 people.

IV. CONCLUSION

Based on the results of observations carried out at RSKIA Haryanda, it shows that the working time available for midwives in the obgyn and pediatric poly unit at RSKIA Haryanda is 120,420 minutes/year, working hours are available 2007 hours/year, and working days are 223 days/year. The Standard Workload for one year is in accordance with the main activities of the obgyn poly unit midwife and child, namely to conduct a patient's TTV examination takes 10,947 minutes/year, opens a post-SC patient's verb takes 15,052 minutes/year, immunization of children takes 10,035 minutes/year, fills in the status of medical records as a result of patient examination takes 8028 minutes/year, and filling out the SIMRS takes 6,021 minutes/year. The standard of relaxation for the existing relaxation factor in the obgyn and pediatric poly unit at RSKIA Haryanda is 0.1057 from monthly meeting activities, monthly reports, preparation of consumables and Isoma. So that the needs of midwife labor that should be needed by the obgyn and child poly unit at RSKIA Haryanda in completing their duties properly using the calculation of the WISN method, which is 6 officers.

The working hours of officers in the Obgyn and Child poly unit at RSKIA Haryanda are 9 working hours. This is not in accordance with Law of the Republic of Indonesia No. 13 of 2003 article 77 paragraph (2) which reads: 7 working hours in 1 day or 40 working hours in 1 week for 6 working days in 1 week; or 8 hours of work in 1 day or 40 hours of work in 1 week for 5 working days in 1 week. In both working hours systems, a limit of working hours is also given, which is 40 (forty) hours in 1 (one) week. If it exceeds the provisions of the working time, then the ordinary working time is considered to be overtime work time so that the worker is entitled to overtime wages. The inconsistency in the working hours of midwives in the Obgyn and Child poly unit at RSKIA Haryanda should be calculated overtime and paid overtime wages, otherwise the workload of midwives in the Obgyn and Child poly unit at RSKIA Haryanda is excessive.

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