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Nursing Analysis Needs To Improve Service Quality In Lontara I Hospital In Rsup Dr. Wahidin Sudirohusodo Makassar

Syafri Arief 1), Basri Rizak 2), Heryani Tahir 3)
Luctures of the STIE Amkop Makassar (STIE=High School economis)

Abstract: *This study aims to analyzethe needs of nurses to improve the quality of services in hospitals. The place of research is Lontara I Inpatient Dr.UP Dr. Wahidin Sudirohusodo Makassar. The method used in the planning of personnel / nurse needs according to Minister of Health Decree No.81menkes / SK / 2004 is the Need for Staff Work Indicators (WISN), which is a method of calculating needs based on workload carried out through workload calculation techniques.*

The results showed that nurses for Lontara I brought front were 5 people / Shift. For Lontara I the top front is 5 people / shift. For Lontara I for the lower back is 7 people / shift. For Lontara I for the upper back is 8 people / Shift.

For my Lontara at the bottom front and top, there is no need to add a nurse. While for Lontara I under the back there were 2 nurses added to shift pie, and for day and night shifts, 3 nurses were added, and Lontara I was behind added by 3 nurses for morning shifts, for afternoon and night shifts each added 4 nurses.

The result of this research Wahidin Sudirohusodo Makassar can be usedas a basis for consideration in taking and determining health policy, especially in terms of analyzing HR needs using the WISN (Workload Indicator for Staff Needs) method. to improve the quality of services in Lontara 1 hospital care.

Keywords: ***Nurse needs, service quality, Workload indicators, Staff Needs.***

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I. Introduction

In line with this, in order to realize the national goal, ASN (State Civil Apparatus) employees are needed. ASN employees are assigned the task of carrying out public service tasks, government tasks, and certain development tasks. Public service tasks are performed by providing services on goods, services, and / or administrative services provided by ASN employees. The governmental tasks are institutional empowerment, staffing and management (RI Law No. 5 of 2014).

One of the public services is a hospital, a hospital is a health service institution that organizes individual health services in a complete manner that provides inpatient, outpatient and emergency services. The complete health services contained in this law explain that health services provided by hospitals must include promotive, preventive, curative, and rehabilitative (Law No. 44 of 2009).

Indicators of effective and efficient hospital success are the availability of adequate human resources with high quality, professional according to the function of each personnel, therefore the availability of human resources in the hospital must be a concern of the leadership, one of the important efforts that must be carried out by the hospital leadership is to plan HR needs are precisely in accordance with the service functions of each unit, section, and hospital installation, Ilyas (2004) in Herniyani Tin (2011).

Macro Human Resources (HR) is a population of productive age even though due to various causes and or problems there are still unproductive because they have not entered the workforce in the community, whereas micro human resources are people or people who work or become members an organization called personnel, employees, employees, workers, labor and others (Hadari, 2010: 37)

One of the HR in the hospital is a nurse. Nurses are those who have the ability and authority to perform nursing actions based on their knowledge obtained through nursing education (RI Law No. 23 of 1992).

HR planning is a systematic process to adjust needs with the availability of human resources both sourced from within and sourced from outside the organization is estimated at a certain period (Wilson, 2012: 8).

HR planning in an organization / company environment consists of quantitative planning and qualitative planning. Quantitative planning is a prediction of the number of human resources needed (demand), while qualitative planning is a prediction of qualifications (requirements) HR that are relevant to the position / job that needs it in the future (Hadari, 2010: 4).

Planning is the first function of management functions, applied in various fields including human resource management. The purpose of this function is to reduce uncertainty in managing human resources to achieve company goals (Wilson, 2012: 112)

One of the HR planning methods in the health sector is regulated in Kepmenkes number: 81 of 2004 concerning Guidelines for Preparation of Health Human Resource Planning at the Provincial, Regency / City and Hospital levels. One method that is often used to calculate the needs of health workers in HR planning is the analysis using WISN (Workload Indicator Of Staffing Need), which is a method of calculating the needs of health HR based on the real workload carried out by each category of health HR in each work unit in the facility health services.

Improving the quality of public services organized by government agencies is now increasingly prominent, even becoming the demands of the community. A problem that is often criticized by the public or service recipients is the perception of "quality" inherent in all aspects of service. The term "quality", according to Tjiptono (1996: 55) includes the notion of:

a. Compliance with requirements
b. Suitable for use
c. Continuous improvement
d. Free from damage / defects
e. Meeting customer needs from the beginning and at any time
f. Do everything right
g. Something that can make customers happy.

In planning the needs of nurses in hospitals, not all use the same method, depending on the type of hospital concerned and the patients being treated. RSUP dr. Wahidin Sudirohusodo Makassar is a National Referral Type A Hospital that treats patients who already have disease complications, so that in planning nurses, the most suitable method to use is the WISN (Workload Indicator Staffing Need) method as regulated in the Minister of Health Decree Number 81 in 2004, and also has never been used in RSUP dr. Wahidin Sudirohusodo Makassar,

RSUP. dr. Wahidin Sudirohusodo Makassar is a national referral center hospital located in Makassar. Hospitals as institutions providing health services need to provide good services. One way to improve services is to provide sufficient human resources. Based on the phenomenon that occurs in the hospital, the service cannot run well due to lack of human resources, marked by the slow service, and also there are patients who complain about the lack of nurses on duty in Lontara 1, so the head of the room always asks for additional staff.

Departing from the problems and phenomena that occur, then to answer the problem of this research needed questions that will be useful for the direction and steps of research in the form of questions. The formulation of the problem proposed is: "Can the determination of the number of nurses based on the WISN (Workload Indicator of **Staffing Need) method improve service quality?"**

II. Research Methology

The method used is the Workload Indicator Staffing Need (WISN) method, arguing that in RSUP dr. Wahidin Sudirohusodo Makassar in determining HR requirements has not used the method, but it is also a decision of the Minister of Health of the Republic of Indonesia Number: 81 / MENKES / SK / I / 2004.

Furthermore, qualitative methods are used to confirm the results of calculations with the WISN (Workload Indicator of Staffing Need) method by conducting in-depth interviews with the head of the room, the nursing committee, the nurse, the patient's family.

The qualitative method is primarily aimed at developing understanding, concepts, which eventually become theories, this stage is known as "ground theory research". (Rusli, 2012).

Qualitative methods are used to understand people's feelings. People's feelings are difficult to understand if not examined by qualitative methods, with in-depth interview data collection techniques, and observation participate to feel what the person feels (Sugiyono, 2011: 24). In addition interviews were also conducted to confirm the calculation results obtained with the conditions of service at the hospital.

III. Results and Discussion

A. Results

Each department of care has a head of room who is responsible for the patient care process, and each treatment room has a team leader responsible for patients who are in the designated room. Specifically for lontara 1 down front and lontara 1 up front have HCU rooms and nurses on duty 1 person each shift.

Table 3.1 List of Nurses and Number of Beds in Lontara 1

No	Care section	Number of nurses (people)	Number of beds (unit))	Number of Patients in 2014 (people)	Utilization of beds (BOR) (%)
1	Lontara 1 Lower Front + HCU	20	33	1424	74,91
2	Lontara 1 Lower Back	17	38	1414	83,35
3	Lontara 1 Top Front + HCU	20	34	1467	79,77
4	Lontara 1 Upper Back	16	38	1519	85,16
	Jumlah	73	143	5824	

Source: Lontara 1 Treatment Room, 2015

The head of the room, the team leader, the implementing nurse work according to their respective main tasks.
The Principal Tasks of the Room / Service Head are:
1. Check the completeness of the initial and follow-up assessment
2. Check the accuracy of the formulation of the diagnosis and action
3. Carry out nursing actions
4. Perform nursing evaluations
5. Do nursing education
6. Make a report on the quality and utilization of beds
7. Conduct an open RM review
8. The initial nursing assessment is fully documented in
9. Complete daily / follow-up studies are documented in
10. Nursing diagnosis with formula
11. Nursing actions are carried out appropriately
12. Evaluate the success of nursing actions
13. Completeness of nursing documentation, starting from the assessment
14. Grading KPC / KNC / KTD reports
15. Assess and interpret quality indicator data
16. Consumer satisfaction
17. Completeness of medical records.

Nurse job description:
1. Interacting or visiting patients.
2. Identifying patients correctly every time they take action.
3. Conduct an assessment of the risk of falls, the risk of decubitus, the risk of errors in the administration of oral medications.
4. Washing used equipment and sterilizing tools.
5. Prepare and make the patient's bed.
6. Adjust the position of patients of minimal dependence.
7. Measure vital signs and pain scale.
8. Move the patient / transfer the patient.
9. Re-assess the risk of falling, decubitus, pain scale
10. Monitor oral drug administration.
11. Monitoring the administration of intravenous fluids.
12. Check the doctor's instructions.
13. Doing BHD and calling timcode blue if there are patients with serious conditions.
14. Accepting new patients entered.
15. Installing an IV.
16. Carry out a skin test
17. Inject the patient.
18. Conducts oxygen relief.
19. Doing ECG recording
20. Take care of minor injuries
21. Do BHD

Human resource planning in the health sector is regulated in Kepmenkes number: 81 of 2004 concerning Guidelines for Preparation of Health Human Resource Planning at the Provincial, Regency / City and Hospital levels. One method that is often used to calculate the needs of workers in HR planning is an analysis using WISN (Workload Indicator Staffing Need).
The steps for calculating HR requirements based on WISN include 5 steps, namely:

1. Establish available work hours, Ilyas (2011) in Tin (2013)

Determine available work time the goal is to obtain available work time for each category of HR working for a period of one year. Data needed to determine available work time.

Data needed to determine available work time are:

A = Working Day (number of workdays / week)

Working days, in accordance with the provisions in force at work, are generally 7 working days.

B = Annual leave

Annual leave, according to the provisions of each HR has the right to leave 9 working days every year.

C = Education and Training

Education and training, according to the provisions in force in the workplace to maintain and improve competence / professionalism each category of HR has the right to attend training / courses / seminars / workshops.

D = National Holidays

National holidays, based on joint ministerial decrees regarding national holidays and joint leave.

E = bsenteeism (in accordance with the average absence from work for a period of 1 year, due to illness, absent from work with or without reason)

F = Working Time (working time in one day)

Working time, according to the provisions in force at work. Working time is 8 hours / day.

Table 3.2: Table of the amount of work time available in a year

Code	Factor	Work Time	Description
A	Workday	365	Days per year
B	Annual Leave	9	Days per year
C	Education and Training	5	Days per year
D	National Holidays	19	Days per year
E	Absence of Work	48	Days per year
F	Working Time	8	Hours per day

Source: Deroktorat SDM processed

Based on these data, further calculations are made to determine the available work time by the formula:

Available Working Time = A - {(B + C + D + E)} x F

= 365 - {(9 + 5 + 19 + 48)} x 8

= 365-81

= 284 x 8 = 2,272 hours / year

Available working time for nurses who do not use shift guard schedules is = 2,272 hours/year.

While the available work time for nurses who use work time per shift is = 284 + 19 = 303

So the total working time available for nurses is = 303 days x 8 hours = 2,424 hours / year.

2. Establish work units and HR categories that are calculated, Ilyas (2011) in Tin (2013)

Establish work units and HR categories for the purpose of obtaining work units and HR categories responsible for organizing activities both inside and outside the workplace. The work unit studied was Lontara I RSUP dr. Wahidin Sudirohusodo Makassar, the HR category is nurses.

3. Develop workload standards, Ilyas (2011) in Tin (2013)

Standard workload is the volume / quantity of workload for 1 year in the HR category. The standard workload for a main activity is based on the time needed to complete it (average time) and the time available per year owned by each category. The workload of the HR category in the work unit includes: the main activities carried out, the average time needed to complete each main activity and the standard workload per 1 year for each HR category.

The workload of each HR category in each work unit includes:

a. The main activities carried out by each category of HR. The main activity is a collection of various types of activities according to service standards and Standard Operating Procedures (SOP) to produce company services carried out by HR with certain competencies.
b. The average time needed to complete the main activity. Average time is the time needed to complete a main activity, by each HR category in each work unit.
c. Standard workload per 1 year for each HR category. Standard workload is the volume / quantity of workload for 1 year per HR category. The standard workload for a main activity is based on the time needed to complete it (average time) and the available working time owned by each HR category.

The standard workload calculation formula is:

$$\text{Standard Workload} = \frac{\text{Available Work Time}}{\text{Average time per main activity}}$$

To find out the average time per nurse activity (hours) / shift can be calculated by looking at the job description and calculating how long the activity is carried out.

The following is a description of the duties of nurses on duty at Lontara Installation 1.

I. For Lontara 1 Lower Front Care + HCU

Table 3.3: Nurse's job description table and average time per activity

No	Activity	Quantity / shift	Activity Frequency / shift	Average time per activity (minute) / shift	Total time per activity (minute) / shift	Average time per activity (Hour)/shift
1	Conducting interactions or visits / visits to patients	28 patients	1	5	140	2.,33
2	Identify patients correctly every time they take	28 patients	1	10	280	4,67
3	Assessing the risk of falls, the risk of decubitus, the risk of errors in oral administration	6 patients	1	8	48	0,80
4	Washing used equipment and sterilizing tools		1	10	30	0,50
5	Prepare and make the patient's bed	5 patients	1	5	25	0,42
6	Set the position of dependency patients at least	3 patients	1	5	15	0,25
7	Measure vital signs and pain scale	2 patients	1	5	10	0,17
8	Transferring patients / transferring	3 patients	1	12	36	0,60
9	Re-assess the risk of falls, decubitus, pain scale	5 patients	1	5	15	0,25
10	Monitor oral administration	7 patients	1	5	35	0,58
11	Monitor the administration of intravenous fluids	8 patients	1	5	40	0,67
12	Check doctor's instructions	10 patients	1	10	100	1,67
13	Conduct BHD and call code blue team if there are serious conditions	1 patients	1	10	10	0,17
14	Accepting new patients	1 patient	1	10	10	0,17
15	Installing an IV	1 patient	1	5	5	0,08
16	Carry out skin tests	1 patient	1	2	1	0,03
17	Inject patients	10 patient	1	5	50	0,83
18	Conduct oxygen relief buckets	1 patient	1	5	5	0,08
19	Carrying out ECG records	1 patient	1	5	5	0,08
20	Caring for minor injuries	1 patient	1	10	10	0,17
21	Doing BHD	1 patient	1	10	10	0,17
	Total					14,68

Source: Lontara 1 Bawah Depan 2015 is processed

The data above is data on productive time (morning shift)
Available working time = 8 hours / shift
The average nurse work time per shift is 14.68 hours
Means the nurse has an excess of 6.68 hours / shift
The average working time per day is 14.68 hours x 3 shifts = 44.04 hours / day.
The average minimum working time per activity = 0.03 hours / shift is to do skin tests, while the largest average working time per activity = 4, 67 hours / shift that is correctly identifying patients each time taking action.

1. Calculating the standard workload, Ilyas (2011) in Tin (2013)

$$\text{Standard Workload} = \frac{\text{Available Work Time}}{\text{Average time per main activity}}$$

Table 3.4: Workload Standards

No	No Activity	Average time per activity (Hours) / shift	Average time per activity (Hours) / year	Standard Workload (hours / year)
1	Conducting interactions or visits / visits to patients	2,33	707	3,43
2	Identifying patients correctly every time they take action	4,67	1414	1,71
3	Assessing the risk of falling, the risk of decubitus, the risk of errors in oral administration of drugs	0,80	242,4	10,00
4	Washing used equipment and sterilizing tools	0,50	151,5	16,00

No	No Activity	Average time per activity (Hours) / shift	Average time per activity (Hours) / year	Standard Workload (hours / year)
5	Prepare and make the patient's bed	0,42	126,25	19,20
6	Set the position of the dependency patient at least	0,25	75,75	32,00
7	Measure vital signs and pain scale	0,17	50,5	48,00
8	Re-assess the risk of falls, decubitus, pain scale	0,60	181,8	13,33
9	Monitor oral drug administration	0.25	75,75	32,00
10	Monitor the administration of IV fluids	0,58	176,75	13,71
11	Check doctor's instructions	1,67	505	4,80
12	Conduct BHD and call code blue team if there is a serious condition patient	0.17	50,5	48,00
13	Receiving new patients entered	0,17	50,5	48,00
14	Installing an IV	0,08	25,25	96,00
15	Carry out skin tests	0,03	10,1	240
16	Injecting patients	0,83	252,5	9,60
17	Conducting oxygen aid	0,08	25,25	96,0
18	Conduct ECG recording	0,08	25,25	96,00
19	Caring for minor injuries	0,08	25,25	96,00
20	Conduct BHD	0,17	50,5	48,00
	Total		4221,8	971,79

Source: Lontara 1 Bawah Depan 2015 is processed

The standard nurse workload per shift / year is 971,79 Hours / year. This fairly large workload standard is a basic consideration for determining the amount of labor needed to complete the work.

The smallest standard workload is 1,71 hours / year with the activity of correctly identifying patients every time they take action. While the highest standard workload is 96,00 hours / year with the type of activities to install infusions, conduct member oxygen assistance, perform ECG recording, treat minor injuries.

2. Arranging for leeway standards, Ilyas (2011) in Tin (2013)

The formulation of allowance standards is the acquisition of leeway factors for each category of HR including the type of activity and the need for time to complete an activity that is not directly related or influenced by the number of main service activities.

Leasing factors can be carried out through observation and interviews with each category.

After the allowance factors for each HR category are obtained, the next step is to prepare the allowance standard by calculating according to the formula below:

$$\text{Allowances Standard} = \frac{\text{Average Time Per Allowance Factor}}{\text{Available Time}}$$

Table 3.5: Allowance Standards

No	Allowance Factor	Average time (hours / month)	Average time (hours / year)	Standard allowance
1	Meeting / Breafing	4	48	0,019
2	Rest of meals & prayer	30	360	0,148
			Total	0,167

Source: Lontara 1 Lower Front Treatment though

$$\text{Allowances Standard} = \frac{\text{Average Time Per Allowance Factor}}{\text{Available Time}}$$

$$= \frac{48 \text{ hours/year}}{2.424 \text{ hours/year}}$$

= 0,019 hours / year

$$\text{Allowances Standard} = \frac{\text{Average Time Per Allowance Factor}}{\text{Available Time}}$$

$$= \frac{360 \text{ hours/year}}{2.424 \text{ hours/year}}$$

= 0,148 hours / year

The standard amount of leeway is = 0,167 hours / year

So nurses have a leeway standard of 0,167 hours / year, meaning nurses have a leeway time that is not directly related to the main task. such as meetings, breaks (praying and eating).

3. Calculating the power requirements per work unit

The goal of calculating HR needs per work unit is to obtain the number and type / category of HR per work unit according to workload for 1 year. Data sources needed for the calculation of HR needs per work unit include:

a. Data obtained from the previous steps, namely:
- Available working time
- Standard workload
- Allowance standards for each HR category

b. Quantity of main activities for each work unit for a period of 1 year.

According to Permenkes No: 81 / Menkes / SK / I / 2004, the need for nurses for lontara 1 down front can be calculated using the formula:

$$\text{Power Needs} = \frac{\text{Quantity of Basic Activities}}{\text{Workload Standards}} + \text{Allowance standards}$$

$$= \frac{4.221,8}{971,79} + 0,167$$

$$= 4,3 + 0,167$$

$$= 4,4 \text{ people}$$

$$= 5 \text{ people / shift}$$

II. For Lontara 1 Lower Back + HCU treatment

To find out the average time per nurse activity (hours) / shift can be calculated by looking at the job description and calculating how long the activity is carried out.

The following is a description of the duties of nurses on duty at Lontara Installation 1.

Table 3.6: Nurse's job description table and average time per activity

No	Activity	Quantity / shift	Activity frequency / shift	Average time per activity (minutes) / shift	Total time per activity (minutes) / shift	Average time per activity (Hours) / shift
1	Conducting interactions or visits / visits to patients	33 patients	1	5	165	2,75
2	Identify patients correctly every time they take action	32 patients	1	7	224	3,73
3	Assessing the risk of falling, the risk of decubitus, the risk of errors in oral administration of	12 patients	1	5	60	1,00
4	Washing used equipment and sterilizing tools		1	10	10	0,17
5	Prepare and make the patient's bed	3 patients	1	5	15	0,25
6	Set the position of dependency patients at least	4 patients	1	5	20	0,33
7	Measure vital signs and pain scale	2 patients	1	5	10	0,17
8	Transferring patients / transferring	3 patients	1	10	30	0,5
9	Re-assess the risk of falls, decubitus, pain scale	3 patients	1	5	15	0,25
10	Monitor oral drug administration	30 patients	1	7	210	3,50
11	Monitor the administration of intravenous fluids in	30 patients	1	5	150	2,50
12	Check doctor's instructions	30 patients	1	7	210	3,50
13	Conduct BHD and call code blue team if there are serious conditions	1 patient	1	10	10	0,17
14	Accepting new patients in	1 patient	1	10	10	0,17
15	15 Installing an IV	1 patient	1	5	5	0,08
16	Carry out skin tests	1 patient	1	2	2	0,03
17	Inject patients	12 patients	1	5	60	1,00
18	Conduct oxygen relief	1 patient	1	5	5	0,08
19	Conduct ECG recording	1 patient	1	10	10	0,17
20	Treat minor injuries	2 patients	1	10	20	0,33
21	Doing BHD	1 patient	1	10	10	0,17
	Total					20,85

Source: Lontara 1 Lower Front Treatment though

The data above is data on productive time (morning shift)
Available working time = 8 hours / shift
The average working time per shift is 20,85 hours
The average working time per day is 20,85 hours x 3 shifts = 62,55 hours / day

The average time per activity required to perform each activity, using the smallest time = 0,03 hours / shift that is doing skin tests, while those who use a long time = 3, 73 that is identifying patients correctly every time taking action.

1. Calculating the standard workload, Ilyas (2011) in Tin (2013)

$$\text{Standard Workload} = \frac{\text{Available Work Time}}{\text{Average Time per main Activity}}$$

Table 3.7: Standard Workload per activity

No	Activity	Average time per activity (Hours) / shift	Average time per activity (Hours) / year	Standard Workload (hours / year
1	Conducting interactions or visits / visits to patients	2,75	833,25	2,91
2	Identifying patients correctly every time they take action	3,73	1131,2	2.14
3	Assessing the risk of falling, the risk of decubitus, the risk of errors in oral administration of drugs	1,00	303	8,00
4	Washing used equipment and sterilizing tools	0,17	50,5	48,0
5	Prepare and make the patient's bed	0,25	75,75	32,00
6	Set the position of the dependency patient at least	0,33	101	24,00
7	Measure vital signs and pain scale	0,17	50.5	48,00
8	Transferring patients / transferring patients	0,50	151,5	16.00
9	Re-assess the risk of falls, decubitus, pain scale	0,25	75,75	32,00
10	Monitor oral drug administration	3,50	1060,5	2,29
11	Monitor infusion	2,50	757,5	3,20
12	Check doctor's instructions	3,50	1060,5	2,29
13	Conduct BHD and call code blue team if there are serious conditions patients	0,17	50,5	48,00
14	Accepting new patients entering	0,17	50,5	48,00
15	Installing an IV	0,08	25,25	96,00
16	Carrying out skin tests	0,03	10,1	240
17	Inject the patient	1,00	303	8,00
18	Conducting oxygen aid	0,08	25,25	96
19	Perform ECG recording	0,17	50.5	48
20	Caring for minor injuries	0,33	101	24
21	Conduct BHD	0,17	50,5	48
	Total	20,85	6317,55	876.82

Source: Lontara 1 Lower back treatment

Total standard workload / year = 876,82 hours / year

This fairly large workload standard is a basic consideration for determining the amount of labor needed to complete the work.

The smallest standard workload = 2,14 hours / year, namely the activity of identifying patients correctly every time they take action, while the biggest workload = 96,00, namely the installation of infusion, and performing member assistance oxygen, because all patients install infusion and use more oxygen assistance.

2. Arranging for leeway standards, Ilyas (2011) in Tin (2013)

Arrangement of allowance standard is the acquisition of allowance factors for each category of HR including the type of activity and the need for time to complete an activity that is not directly related or influenced by the number of key service activities.

Leasing factors can be carried out through observation and interviews with each category.

After the allowance factors for each HR category are obtained, the next step is to prepare the allowance standard by calculating according to the formula below:

$$\text{Allowances Standard} = \frac{\text{Average Time per Allowance Factor}}{\text{Available time}}$$

Table 3.8: Allowance Standards

No	Allowance Factor	Average time (hours / month)	Average time (hours / year)	Standard allowance
1	Meeting / Breafing	4	48	0,019
2	Rest of meals & prayer	30	360	0,148
			Total	0,167

$$\text{Allowance Standard} = \frac{\text{Average Time per Allowance Factor}}{\text{Available time}}$$

$$= \frac{48 \text{ hours/year}}{2{,}424 \text{ hours /year}}$$

= 0,019 hours / year

$$\text{Allowances Standard} = \frac{\text{Average Time per Allowance Factor}}{\text{Available time}}$$

$$= \frac{360 \text{ hours/year}}{2{,}424 \text{ hours /year}}$$

= 0,148 hours / year

The standard amount of leeway is = 0,167 hours / year

So nurses have a leeway standard of 0,167 hours / year, meaning nurses have a leeway time that is not directly related to the main task. such as meetings, breaks (praying and eating).

3. Calculating the power requirements per work unit, Ilyas (2011) in Tin (2013).

The goal of calculating HR needs per work unit is to obtain the number and type / category of HR per work unit according to workload for 1 year.

According to Permenkes No: 81 / Menkes / SK / I / 2004, the need for nurses for lontara 1 down front can be calculated using the formula:

$$\text{Power Needs} = \frac{\text{Quantity of Basic Activities}}{\text{Workload Standards}} + \text{Allowance standards}$$

$$= \frac{6317{,}55}{876{,}82} + 0{,}167$$

= 8,2 + 0,167

= 7,3 people

= 7 people / shift

III. For Lontara Care 1 Upper Front + HCU

Table 3.9: Nurse's job description table and average time per activity

No	Activity	Quantity / shift	Activity frequency / shift	Average time per activity (minutes) / shift	Total time per activity (minutes) / shift	Average time per activity (Hours) / shift
1	Conducting interactions or visits / visits to patients	29 pasien	1	5	145	2,42
2	Identify patients correctly every time take action	29 pasien	1	10	290	4,83
3	Assessing the risk of falls, the risk of decubitus, the risk of errors in oral administration	7 pasien	1	8	56	0,93
4	Washing used equipment and sterilizing tools		1	10	10	0,17
5	Prepare and make the patient's bed	5 pasien	1	5	25	0,42
6	Set the position of dependency patients at least	3 pasien	1	5	15	0,25
7	Measure vital signs and pain	2 pasien	1	5	10	0,17
8	Transferring patients / transferring patients	2 pasien	1	10	20	0,33
9	Re-assess the risk of falls, decubitus, pain scale	2 pasien	1	5	10	0,17
10	Monitor oral administration	7 pasien	1	5	35	0,58
11	Monitoring the administration of intravenous fluids	10 pasien	1	5	50	0,83
12	Check doctor's instructions	10 pasien	1	10	100	1,67
13	Conduct BHD and call code blue team if there are serious conditions	1 pasien	1	10	10	0,17
14	Accepting new patients	1 pasien	1	10	10	0,17
15	Installing an IV	1 pasien	1	5	5	0,08
16	Carry out skin tests	1 pasien	1	2	2	0,03

No	Activity	Quantity / shift	Activity frequency / shift	Average time per activity (minutes) / shift	Total time per activity (minutes) / shift	Average time per activity (Hours) / shift
17	Inject patients	10 pasien	1	5	50	0,83
18	Conduct oxygen relief	1 pasien	1	5	5	0,08
19	Carrying out ECG records of 1 patient	1 pasien	1	5	5	0,08
20	Caring for minor injuries	1 pasien	1	10	10	0,17
21	Doing BHD	1 pasien	1	10	10	0,17
	Total					14,55

Source: Lontara 1 Treatment Upper Front processed

The data above is data on productive time (morning shift)
Available working time = 8 hours / shift
The average working time per shift is 14,55 hours / shift
The average working time per day is 14,55 hours x 3 shifts = 43,65 hours / day. So working time exceeds 24 hours / day.
The lowest average time per activity used = 0,03 hours / shift is the type of activity to carry out skin tests, because not many patients do skin tests. While those who use the largest average time = 4,83 hours / shift are correctly identifying patients every time they take action.

1. Calculating the standard workload, Ilyas (2011) in Tin (2013)

$$\text{Standard Workload} = \frac{\text{Available Work Time}}{\text{Average Time Per Main Activitye}}$$

Table 3.10: Standard Workload per activity

No	Activity	Average time per activity (Hours) / shift	Average time per activity (Hours) / year	Standard Workload (hours / year)
1	Conducting interactions or visits / visits to patients	2,42	732,25	3,31
2	Identify patients correctly every time they take action	4,83	1464,5	1,66
3	Assessing the risk of falls, the risk of decubitus, the risk of errors in oral administration of drugs	0,93	282,8	8,57
4	Washing used equipment and sterilizing tools	0,17	50,5	48,00
5	Prepare and make the patient's bed	0,42	126,25	19,20
6	Set the position of the dependency patient at least	0,25	75,75	32,00
7	Measure vital signs and pain scale	0,17	50,5	48,00
8	Transferring patients / transferring patients	0,33	101	24,00
9	Re-assess the risk of falls, decubitus, pain scale	0,17	50,5	48,00
10	Monitor oral drug administration	0,58	176,75	13,71
11	Monitoring the administration of intravenous fluids	0,83	252,5	9,60
12	Check doctor's instructions	1,67	505	4,80
13	Conduct BHD and call code blue team if there are serious conditions patients	0,17	50,5	48,00
14	Accepting new patients entering	0,17	50,5	48,00
15	Installing an IV	0,08	25,25	96,00
16	Carrying out skin tests	0,03	10,1	240
17	Inject the patient	0,83	252,5	9,60
18	Conducting oxygen aid	0,08	25,25	96,00
19	Conduct ECG recording	0,08	25,25	96,00
20	Caring for minor injuries	0,17	50,5	48,00
21	Conduct BHD	0,17	50,5	48,00
	Total		4408,65	990,45

Source: Lontara 1 Lower Front treatment

Total Standard Workload = 990.45 hours / year
This fairly large workload standard is a basic consideration for determining the amount of labor needed to complete the work.
The smallest standard workload = 1.66 hours / year is by correctly identifying patients every time they take action, while the biggest workload = 96.00 hours / year is by installing infusion, providing oxygen assistance, performing ECG recording .

2. Arranging for leeway standards, Ilyas (2011) in Tin (2013)

Arrangement of allowance standard is the acquisition of allowance factors for each category of HR including the type of activity and the need for time to complete an activity that is not directly related or influenced by the number of key service activities.

Leasing factors can be carried out through observation and interviews with each category.

After the allowance factors for each HR category are obtained, the next step is to prepare the allowance standard by calculating according to the formula below:

$$\text{Allowances Standard} = \frac{\text{Average Time per Allowance Factor}}{\text{Available time}}$$

Table 3.11: Allowance Standards

No	Allowance Factor	Average time (hours / month)	Average time (hours / year)	Standard allowance
1	Meeting / Breafing	4	48	0,019
2	Rest of meals & prayer	30	360	0,148
			Total	0,167

Source: Lontara Care 1 Upper Front

$$\text{Allowance Standard} = \frac{\text{Average Time per Allowance Factor}}{\text{Available time}}$$

$$= \frac{48 \text{ hours/year}}{2{,}424 \text{ hours /year}}$$

$$= 0{,}019 \text{ hours / year}$$

$$\text{Allowances Standard} = \frac{\text{Average Time per Allowance Factor}}{\text{Available time}}$$

$$= \frac{360 \text{ hours/year}}{2{,}424 \text{ hours /year}}$$

$$= 0{,}148 \text{ hours / year}$$

The standard amount of leeway is = 0,167 hours / year

Nurses have a leeway time of 0, 167 which is not directly related to the main task. such as meetings, breaks (praying and eating).

3. Calculating the power requirements per work unit

According to Permenkes No: 81 / Menkes / SK / I / 2004, the need for nurses for lontara 1 down front can be calculated using the formula:

$$\text{Power Needs} = \frac{\text{Quantity of Basic Activities}}{\text{Workload Standards}} + \text{Allowance standards}$$

$$= \frac{4408{,}65}{990{,}45} + 0{,}167$$

$$= 4{,}4 + 0{,}167$$

$$= 4{,}5 \text{ people}$$

$$= 5 \text{ people / shift}$$

IV. For Lontara 1 Treatment Upper Rear + HCU

Table 3.12: Nurse job description and average time per activity

No	Activity	Quantity / shift	Activity frequency / shift	Average time per activity (minutes) / shift	Total time per activity (minutes) / shift	Average time per activity (Hours) / shift
1	Conducting interactions or visits / visits to patients	34 patients	1	5	170	2,83
2	Identifying patients correctly every time 32 patients do it		1	10	320	5,33
3	Assess the risk of falls, the risk of decubitus, the risk of errors in oral administration	10 patients	1	5	50	0,83
4	Washing used equipment and sterilizing tools		3	10	30	0,50
5	Prepare and make the patient's bed	6 patients	1	5	30	0,50
6	Set the position of dependency patients at least	5 patients	1	5	20	0,33
7	Measuring vital signs and pain scale	3 patients	1	5	10	0,17

No	Activity	Quantity / shift	Activity frequency / shift	Average time per activity (minutes) / shift	Total time per activity (minutes) / shift	Average time per activity (Hours) / shift
8	Move patients / transfer patients	3 patients	1	10	30	0,50
9	Re-assess the risk of falls, decubitus, pain scale		3	5	15	0,25
10	Monitor oral drug administration	28 patients	1	7	196	3,27
11	Monitoring the administration of IV fluids	28 patients	1	5	140	2,33
12	Check doctor's instructions	28 patients	1	7	196	3,27
13	Conduct BHD and call code blue team if there are serious conditions	1 patient	1	10	10	0,17
14	Accepting new patients	1 patient	1	10	10	0,17
15	Installing an IV	1 patient	1	5	5	0,08
16	Carry out skin tests	1 patient		2	2	0,03
17	Inject patients	25 patients	1	5	125	2,08
18	Conduct oxygen relief	1 patient	1	5	5	0,08
19	Conduct ECG recording	1 patient	1	10	10	0,17
20	Caring for minor injuries	1 patient	1	10	10	0,17
21	Doing BHD	1 patient	1	10	10	0,17
	Total					23,23

Source: Lontara 1 Lower back treatment

The data above is data on productive time (morning shift)
Available working time = 8 hours / shift
The average working time per shift is 23,23 hours
The average working time per day is 23,23 hours x 3 shift = 69,69 hours / day
The average time per activity that uses the least time = 0,03 hours / shift is to do a skin test, while those who use the greatest time = 3,27 hours / shift is to monitor oral drug administration, and check doctor's instructions.

1. Calculating the standard workload, Ilyas (2011) in Tin (2013)

$$\text{Standard Workload} = \frac{\text{Available Work Time}}{\text{Average Time Per Main Activitye}}$$

Table 3.13: Workload Standards

No	Activity	Average time per activity (Hours) / shift	Average time per activity (Hours) / year	Standard Workload (hours / year)
1	Interacting or visiting patients	2,83	858,5	2,82
2	Identify patients correctly every time they take action	5,33	1616	1,50
3	Assessing the risk of falling, the risk of decubitus, the risk of errors in oral administration of drugs	0,83	252,5	9,60
4	Washing used equipment and sterilizing tools	0,50	151,5	16,00
5	Prepare and make the patient's bed	0,50	151,5	16,00
6	Set the position of the dependency patient at least	0,33	101	24,00
7	Measure vital signs and pain scale	0,17	50,5	48,00
8	Transferring patients / transferring patients	0,50	151,5	16,00
9	Re-assess the risk of falls, decubitus, pain scale	0,25	75,75	32,00
10	Monitor oral drug administration	3,27	989,8	2,45
11	Monitoring the administration of IV fluids	2,33	707	3,43
12	Check doctor's instructions	3,27	989,8	2,45
13	Conduct BHD and call code blue team if there are serious conditions patients	0,17	50,5	48,00
14	Accepting new patients entering	0,17	50,5	48,00
15	Installing an IV	0,08	25,25	96,00
16	Carrying out skin tests	0,03	10,1	240
17	Injecting patients	2,08	631,25	3,84
18	Conducting oxygen aid	0,08	25,25	96,00
19	Perform ECG recording	0,17	50,5	48,00
20	Caring for minor injuries	0,17	50,5	48,00
21	Conduct BHD	0,17	50,5	48,00

No	Activity	Average time per activity (Hours) / shift	Average time per activity (Hours) / year	Standard Workload (hours / year)
	Total	23,23	7039,7	850,09

Source: Lontara 1 Upper Upper Treatment

Standard Workload = 850,09 Hours / year
This fairly large workload standard is a basic consideration for determining the amount of labor needed to complete the work.
The smallest standard workload = 1,50 hours / year that is correctly identifying patients every time they take action, while the highest standard workload = 96,00 hours / year that is giving oxygen assistance, performing infusion, because patients are average - flattened using infusion and oxygen cylinders.

2. Arranging for leeway standards, Ilyas (2011) in Tin (2013)
Arrangement of allowance standard is the acquisition of allowance factors for each category of HR including the type of activity and the need for time to complete an activity that is not directly related or influenced by the number of key service activities.
Leasing factors can be carried out through observation and interviews with each category.
After the allowance factors for each HR category are obtained, the next step is to prepare the allowance standard by calculating according to the formula below:

$$\text{Allowances Standard} = \frac{\text{Average Time per Allowance Factor}}{\text{Available time}}$$

Table 3.14: Allowance Standards

No	Allowance Factor	Average time (hours / month)	Average time (hours / year)	Standard allowance
1	Meeting / Breafing	4	48	0,019
2	Rest of meals & prayer	30	360	0,148
			Total	0,167

Source: Lontara 1 Upper Upper Treatment

$$\text{Allowance Standard} = \frac{\text{Average Time per Allowance Factor}}{\text{Available time}}$$
$$= \frac{48 \text{ hours/year}}{2{,}424 \text{ hours /year}}$$
$$= 0{,}019 \text{ hours / year}$$

$$\text{Allowances Standard} = \frac{\text{Average Time per Allowance Factor}}{\text{Available time}}$$
$$= \frac{360 \text{ hours/year}}{2{,}424 \text{ hours /year}}$$
$$= 0{,}148 \text{ hours / year}$$

The standard amount of leeway is = 0,167 hours / year

Nurses have a leeway time of 0, 167 which is not directly related to the main task. such as meetings, breaks (praying and eating).

3. Calculating the power requirements per work unit

According to Permenkes No: 81 / Menkes / SK / I / 2004, nurses' needs for lontara 1 bottom back can be calculated using the formula:

$$\text{Power Needs} = \frac{\text{Quantity of Basic Activities}}{\text{Workload Standards}} + \text{Allowance standards}$$
$$= \frac{7039{,}7}{850{,}09} + 0{,}167$$
$$= 8{,}2 + 0{,}167$$
$$= 8{,}3 \text{ people}$$
$$= 8 \text{ people / shift}$$

The Douglas Method as a comparison to the WISN (Workload Indicator Staffing Need) method

I. For Lontara 1 Lower Front + HCU

Table 3.15

Classification	Average number of patients in January 2015		
	P	S	M
Minimum	6	5	3
Intermediate	6	4	3
Maximum	2	2	2
Total	14	11	8

Data source: Lontara I Bawah Front is processed

Table 3.16

Classification	The average number of patients using the Douglas method		
	P	S	M
Minimum	6 x 0,17 = 1,02	5 x 0,14 = 0,7	3 x 0,07 = 0,21
Intermediate	6 x 0,27 = 1,62	4 x 0,15 = 0,6	3 x 0,10 = 0,3
Maximum	2 x 0,36 = 0,72	2 x 0,30 = 0,6	2 x 0,20 = 0,4
Total	3,36	1,9	0,91

Data source: Lontara I Bawah Front is processed

Number of nurses: 3,36 + 1,9 + 0,91 = 6,17 nurses

Nurse on vacation / leave = 1/3 x 6,17 = 2,05 people

Head of room 1 person

II. For Lontara I Lower Back

Table 3.17

Classification	Average number of patients in January 2015		
	P	S	M
Minimum	7	5	4
Intermediate	6	5	3
Maximum	3	3	2
Total	16	13	9

Data source: Lontara I Lower Rear

Table 3.18

Classification	The average number of patients using the Douglas method		
	P	S	M
Minimum	7 x 0,17 = 1,19	5 x 0,14 = 0,7	4 x 0,07 = 0,28
Intermediate	6 x 0,27 = 1,62	5 x 0,15 = 0,75	4 x 0,10 = 0,4
Maximum	3 x 0,36 = 0,72	3 x 0,30 = 0,6	2 x 0,20 = 0,4
Total	3,53	2,05	1,08

Data source: Lontara I Lower Rear

Based on the results of calculations according to Douglas (1994) in Windi Rahmawati (2010), then:

Number of nurses: 3,53 + 2,05 + 1,08 = 6,66 nurses

Nurses on vacation / leave = 1/3 x 6,66 = 2,22 people

Head of room 1 person

III. For Lontara I Upper Front + HCU

Table 3.19

Classification	Average number of patients in January 2015		
	P	S	M
Minimum	6	4	3
Intermediate	5	5	3
Maximum	3	2	3
Total	14	11	9

Data source: Lontara I Atas Atas processed

Table 3.20

Classification	The average number of patients using the Douglas method		
	P	S	M
Minimum	6 x 0,17 = 1,02	4 x 0,14 = 0,56	3 x 0,07 = 0,21
Intermediate	5 x 0,27 = 1,35	5 x 0,15 = 0,75	3 x 0,10 = 0,3
Maximum	3 x 0,36 = 0,72	2 x 0,30 = 0,6	3 x 0,20 = 0,6
Total	3,09	1,91	1,11

Data source: Lontara I Atas Atas processed

Based on the results of calculations according to Douglas (1994) in Windi Rahmawati (2010), then:

Number of nurses: 3,09 + 1,91 + 1,11 = 6,11 nurses

Nurses on vacation / leave = 1/3 x 6,11 = 2,03 people

Head of room 1 person

IV. For Lontara I Above Rear + HCU

Table 3.21

Classification	Average number of patients in January 2015		
	P	S	M
Minimum	7	5	4
Intermediate	6	5	3
Maximum	3	3	2
Total	16	13	9

Data source: Lontara I Atas Atas, processed

Table 3.22

Classification	The average number of patients using the Douglas method		
	P	S	M
Minimum	7 x 0,17 = 1,19	5 x 0,14 = 0,7	4 x 0,07 = 0,28
Intermediate	6 x 0,27 = 1,62	5 x 0,15 = 0,75	4 x 0,10 = 0,4
Maximum	3 x 0,36 = 0,72	3 x 0,30 = 0,6	2 x 0,20 = 0,4
Total	3,53	2,05	1,08

Data source: Lontara I Atas Atas, processed

Based on the results of calculations according to Douglas (1994) in Windi Rahmawati (2010), then:
Number of nurses: 3,53 + 2,05 + 1,08 = 6,66 nurses
Nurses on vacation / leave = 1/3 x 6,66 = 2,22 people
Head of room 1 person .

B. Discussion

1. Discussion using the WISN (Workload Indicator Staffing Need) method

Lontara 1 is an inpatient care room specifically handling internal diseases (internal medicine), which consists of 4 (four) parts, namely: Lontara 1 above the front, lontara 1 above the back, lontara 1 lower front and lontara 1 lower back.

Nurses on duty every day are divided into 4 teams, 1 team consists of 4 people, and duty every shift (morning, noon, night) and 1 other shift off.

I. Lontara I Lower Front + HCU

Based on existing data, the number of nurses is 20 people consisting of 3 shifts and 1 other shift off.

There are 5 nurses on duty in each shift, so there is no need to add nurses.

Nurses in charge of each shift are 5 people. The nurse is tasked with serving patients with quality so that patients become satisfied. In accordance with quality theory. Characteristics of the attributes that exist in quality according to Tjiptono (1996: 56) are:

a. Timeliness of service, which includes waiting time and processing time.
b. Service accuracy, which includes error free.
c. Courtesy and friendliness in providing service.
d. Ease of getting services, for example the number of officers serving and the many supporting facilities.
e. Convenience in obtaining services, related to location, service space, parking space, availability of information, etc.
f. Other supporting service attributes such as air-conditioned waiting room, cleanliness, etc.

Collecting the results of the interview then made a conclusion to be a comparison with the theory.

From the results of the interview it can be concluded that the service is not good because some of the nurses lack care and cannot speak good words, so the patient is not satisfied.

Quality is a dynamic condition that affects products, services, people, processes and environments that meet or exceed expectations (Tjiptono, 2011).

Measuring the success of service delivery is determined by the level of satisfaction of service recipients. Service recipient satisfaction is achieved if the service recipient receives services as required and expected (Ratminto and Atik 2005: 28)

According to Tjiptono (1996: 56) Characteristics or attributes that exist in the quality of service are: Timeliness of service, which includes waiting time and process, service accuracy, which includes freedom from mistakes, courtesy and hospitality in providing services, ease of getting services, for example the number of officers serving and the number of supporting facilities, comfort in obtaining services, related to location, space where services, parking lots, information availability, etc. - Other supporting service attributes such as air-conditioned waiting rooms, cleanliness, etc. - other.

II. For Lontara 1 Lower Back + HCU treatment

Based on existing data, the number of nurses is 17 people consisting of 3 shifts and 1 other shift off. Nurses on duty in each morning shift are 5 people, day and night shifts of 4 people each

From the calculation above, the nurses were added by 2 people in the morning shift, and in the afternoon each added 3 people, and 1 other shift was off.

According to Sastrianegara (2014: 217), patient satisfaction is one of the most important things in maintaining the quality of hospital services. There are four aspects of quality that can be used as indicators of evaluating the quality of a hospital's services, namely:

a. Professional appearance in the hospital (clinical aspect).
b. Efficiency and effectiveness of service delivery based on resource use.
c. Safety, security and patient comfort aspects.
d. The aspect of patient satisfaction served.

Collecting the results of the interview then made a conclusion to be a comparison with the theory.

From the results of the interview it can be concluded that the service is not optimal (slow) and is not going well, because nurses are still lacking, so patients feel dissatisfied.

HR planning is the process of establishing a strategy to obtain, utilize, develop, and maintain HR in accordance with the needs of the organization / company now and future development (Hadari, 2010: 44)

WISN (Workload Indicator of Steffing Need) Method. This method of calculating workforce needs based on workload is a method of calculating the need for health workers based on actual workload carried out by each category of health human resources in each work unit in health service facilities including hospitals.

Satrianegara (2014: 217), patient satisfaction is one of the most important things in maintaining the quality of hospital services. There are four quality aspects that can be used as an indicator of the quality of service assessment of a hospital, namely: Professional appearance in the hospital (clinical aspect), Efficiency and effectiveness of service delivery based on resource use, safety, safety, and patient comfort aspects, aspects patient satisfaction served.

III. For Lontara Care 1 Upper Front + HCU

Based on existing data, the number of nurses is 20 people consisting of 3 shifts and 1 other shift off.

There are 5 nurses on duty in each shift, so there is no need to add nurses.

According to Tjiptono (1996: 56). Characteristics that exist in the quality of service are: Timeliness of service, which includes waiting time and process, service accuracy, which includes freedom from mistakes, courtesy and friendliness in providing services, ease of getting service, convenience in obtaining service, etc.

The purpose of human resource planning according to Hadari (2010: 68), namely:

a. Improve HR utilization
b. Adjust HR activities and needs in the future.
c. Increase efficiency in attracting new employees
d. Completing human resource information that can help the activities of HR and other organizational units.

Collecting the results of the interview then made a conclusion to be a comparison with the theory.

From the results of the interview it can be concluded that the service is not good because some of the nurses lack care and cannot speak good words, so the patient is not satisfied.

Quality is a dynamic condition that affects products, services, people, processes and environments that meet or exceed expectations (Tjiptono, 2011).

Measuring the success of service delivery is determined by the level of satisfaction of service recipients. Service recipient satisfaction is achieved if the service recipient receives services as required and expected (Ratminto and Atik 2005: 28)

IV. For Lontara 1 Treatment Upper Rear + HCU

Based on existing data, the number of nurses is 17 people consisting of 3 shifts and 1 other shift off.

Nurses on duty in each morning shift are 5 people, day and night shifts of 4 people each

So nurses were added by 2 people in the morning shift, and in the afternoon each added 4 people, and 1 other shift was off.

All nurses on duty can do their job well so that patients feel satisfied because they get quality service. Conception of service quality is defined as the expected level of excellence and control over the level of excellence to meet customer desires.

The success of service delivery is determined by the level of satisfaction of service recipients. Service recipient satisfaction is achieved if the service recipient receives the service as needed and expected (Ratminto and Atik 2005: 28).

Collecting the results of the interview then made a conclusion to be a comparison with the theory.

From the results of the interview it can be concluded that the service is not optimal (slow) and is not going well, because nurses are still lacking, so patients feel dissatisfied. For this reason, it is necessary to add additional personnel.

HR planning is the process of establishing a strategy to obtain, utilize, develop, and maintain HR in accordance with the needs of the organization / company now and future development (Hadari, 2010: 44)

WISN (Workload Indicator of Steffing Need) Method. This method of calculating workforce needs based on workload is a method of calculating the need for health workers based on actual workload carried out by each category of health human resources in each work unit in health service facilities including hospitals

Satrianegara (2014: 217), patient satisfaction is one of the most important things in maintaining the quality of hospital services. There are four quality aspects that can be used as an indicator of the quality of service assessment of a hospital, namely: Professional appearance in the hospital (clinical aspect), Efficiency and effectiveness of service delivery based on resource use, safety, safety, and patient comfort aspects, aspects patient satisfaction served.

2. Discussion of the Douglas method as a comparison to the WISN (Workload Indicator Staffing Need) method

I. Lontara I Lower Front + HCU

Based on the results of calculations according to Douglas (1984) in Windi Rahmawati (2010), then:

So the number of nurses needed is = 6.17 + 2.05 + 1 = 9.22 = 10 people for 3 shifts

This method is not suitable for use in RSUP dr. Wahidin Sudirohusodo which is a type A hospital, because RSUP dr. Wahidin Sudirohusodo is a referral center hospital in Eastern Indonesia that has a large volume, patient capacity that makes nurses and patients unbalanced, so patients are not satisfied in receiving services.

Satrianegara (2014: 217), patient satisfaction is one of the most important things in maintaining the quality of hospital services. There are four quality aspects that can be used as an indicator of the quality of service assessment of a hospital, namely: Professional appearance in the hospital (clinical aspect), Efficiency and effectiveness of service delivery based on resource use, safety, safety, and patient comfort aspects, aspects patient satisfaction served.

II. Lontara I Lower Back + HCU

So the number of nurses needed is = + 6.66 + 2.22 + 1 = 9.88 = 10 people for 3 shifts.

This method is not suitable for use in RSUP dr. Wahidin Sudirohusodo which is a type A hospital, because RSUP dr. Wahidin Sudirohusodo is a referral center hospital in Eastern Indonesia that has a large volume, patient capacity that makes nurses and patients unbalanced, so patients are not satisfied in receiving services.

All nurses on duty can do their job well so that patients feel satisfied because they get quality service. Conception of service quality is defined as the expected level of excellence and control over the level of excellence to meet customer desires.

The success of service delivery is determined by the level of satisfaction of service recipients. Service recipient satisfaction is achieved if the service recipient receives the service as needed and expected (Ratminto and Atik 2005: 28).

III. Lontara I Upper Front + HCU

So the number of nurses needed is = + 6.11 + 2.03 + 1 = 9.14 = 10 people for 3 shifts.

This method is not suitable for use in RSUP dr. Wahidin Sudirohusodo which is a type A hospital, because RSUP dr. Wahidin Sudirohusodo is a referral center hospital in Eastern Indonesia that has a large volume, patient capacity that makes nurses and patients unbalanced, so patients are not satisfied in receiving services.

Satrianegara (2014: 217), patient satisfaction is one of the most important things in maintaining the quality of hospital services. There are four quality aspects that can be used as an indicator of the quality of service assessment of a hospital, namely: Professional appearance in the hospital (clinical aspect), Efficiency and effectiveness of service delivery based on resource use, safety, safety, and patient comfort aspects, aspects patient satisfaction served.

IV. Lontara I Upper Rear + HCU

So the number of nurses needed is = + 6.66 + 2.22 + 1 = 9.88 = 10 people

This method is not suitable for use in RSUP dr. Wahidin Sudirohusodo which is a type A hospital, because RSUP dr. Wahidin Sudirohusodo is a referral center hospital in Eastern Indonesia that has a large volume, patient capacity that makes nurses and patients unbalanced, so patients are not satisfied in receiving services.

Satrianegara (2014: 217), patient satisfaction is one of the most important things in maintaining the quality of hospital services. There are four quality aspects that can be used as an indicator of the quality of service assessment of a hospital, namely: Professional appearance in the hospital (clinical aspect), Efficiency and effectiveness of service delivery based on resource use, safety, safety, and patient comfort aspects, aspects patient satisfaction served.

IV. Conlusion and Recommedation

Based on the description of the analysis, the results of research and discussion that have been stated previously, the conclusions can be drawn as follows:

1. Nurses on duty in the Lontara 1 treatment room RSUP dr. Wahidin Sudirohusodo Makassar is 73 people consisting of Lontara 1 Lower Front: 20 people, Lontara 1 Lower Back: 17 people, Lontara 1 Upper Front: 20 people and Lontara 1 Upper Front 16 people, and each section has 1 head of the room , and consists of 3 shifts.

The bed in Lontara 1 room, RSUP dr. Wahidin Sudirohusodo Makassar is 143, consisting of Lontara 1 Lower Front: 33, Lontara 1 Lower Back: 38, Lontara 1 Upper Front: 34 and Lontara 1 Upper Front: 38.

2. The need for nurses for Lontara 1 Bottom Front is 5 people for each shift. So there is no need to hold additional energy. The power requirements for Lontara 1 Down Rear are 7 people for each shift. So the nurses were added by 2 people for the morning shift, and for the day and night shift each added 3 people. Nurse needs for Lontara 1 Atas Atas are 5 people for each shift. So there is no need to hold additional energy. The power requirements for Lontara 1 Atas Atas rear are 8 people for each shift. So nurses are added by 3 people for the morning shift, and for day and night shifts each is added 4 people.

3. Patient complaints are more about the slow service due to lack of nurses, nurses' attitudes / behaviors and the lack of care in patients.

4. Determination of the number of nurses based on the WISN (Workload Indicator of Staffing Need) method can improve the quality of service because it is appropriate and meets the workload of nurses, so patients feel satisfied in receiving services.

5. Determination of the number of nurses based on the Douglas method cannot be used in RSUP dr. Wahidin Sudirohusodo as a referral center hospital in Eastern Indonesia and type A hospitals, because the volume and capacity of patients is very large, not balanced with the number of nurses, so it cannot improve the quality of services in the hospital.

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