

## The Influence of Leadership, Smart Posyandu and Service Quality on Patient Satisfaction at Public Health Centers in Tomohon City

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### Abstract

This study aims to determine how much there is or is not a positive and significant relationship between: (1). Leadership of the head of the health center with patient satisfaction, (2). Smart Posyandu with patient satisfaction, (3). Quality of health services with patient satisfaction, Together the leadership of the head of the health center, smart Posyandu and quality of service together with patient satisfaction. This study uses a survey method with correlational analysis which aims to obtain data on patient satisfaction variables to obtain data on the variables of leadership, smart Posyandu and quality of service used data sources from patients of each health center in Tomohon City. The number of samples was set at 320 people from a population of 3922 patients.

By using simple correlation analysis and multiple correlation analysis at error levels of 0.05 and 0.01, it was concluded that the variables of leadership of the head of the health center (X1), smart integrated health post (X2), and quality of service (X3), both individually and together, have a positive and significant relationship with patient satisfaction (Y)..

**Keywords:** Leadership, smart integrated health post, service quality, patient satisfaction

### INTRODUCTION

Health education is a process to improve the community's ability to maintain and improve health. Health education is a form of independent nursing intervention to help clients, both individuals, groups, and communities, in overcoming their health problems. Through learning activities, in which nurses act as nurse educators (Notoatmodjo, 2003:36)

Law Number 36 of 2009 concerning Health and the World Health Organization (WHO) states that the purpose of health education is to improve the community's ability to maintain and improve health levels; both physically, mentally and socially, so that they are economically and socially productive, health education in all health programs; both eradication of infectious diseases, environmental sanitation, community nutrition, and health services such as Community Health Centers (Puskesmas) and Hospitals (Mubarak and Chayatin, 2009: 72).

Community Health Centers are the mainstay of the community that organizes individual health services and public health efforts in the national health system at the first level. Community Health Centers have been established in almost all corners of the country and to reach their working areas, community health centers are strengthened by assistant community health centers, mobile community health centers and for areas far from referral service facilities, community health centers are equipped with inpatient facilities. Classic problems that often arise in community health centers are the availability of insufficient health workers and inadequate completeness of medicines, added to the attitude and behavior of health workers

towards patients.

Alamsyah (2011:51) said that the relationship between officers and patients has not been created properly so that it can cause a low level of trust in the services provided. This greatly affects the public's interest in obtaining health services at the Community Health Center. These problems can affect the use of the Community Health Center which ultimately affects the health status of the community in its working area.

Attitude a patient very influenced by existence criteria assessments that are processed in their understanding and these criteria are formed through a process of social interaction with other people. The quality of Puskesmas services is the most important factor in forming customer or patient trust in health services so that the loyalty of officers in the service increases (Suprihanto, 2003:30).

In order to realize customer satisfaction, an organization needs to provide quality services that are in accordance with the expectations desired by customers and the services felt or received. Puskesmas It is hoped that they will be able to implement good management, increase insight in order to be able to provide quality services.

Customer satisfaction assessment can be done by conducting a service quality assessment that can directly assess the performance of a service (Witriasih, 2012:52). Bardosono (2018:32) stated that the Integrated Service Post (Posyandu) is one of the intersectoral programs implemented by the Health Center. Local Government (Sub-district/Village) and PKK Organization Posyandu is basically a form of Community-Based Health Efforts (UKBM) which are managed and organized from, by, for and with the community. Posyandu has activities for Maternal and Child Health (KIA), Family Planning (KB), Nutrition. Disease Control and Immunization. Posyandu human resources consist of cadres from the community and health workers from the Health Center.

Consumer satisfaction can affect the interest to return to the same health center. Patient satisfaction in assessing the quality or good service, and is an important measurement that is fundamental to the quality of service. This will certainly provide information on the success of quality service providers with the values and expectations of patients who have their own authority to set the desired quality of service standards. Patient satisfaction is a feeling of pleasure or disappointment of a person that arises after comparing the performance (results) that are thought to the performance (results) that are expected (Supriyanto, 2010:20).

Research conducted by Gaghana et al (2012) stated that patients served at the Tuminting health center, patients as service users stated that there were 51.9% who felt satisfied with the health services. It was further stated that customer satisfaction is a very crucial aspect of service quality, therefore customer satisfaction surveys can be used to obtain information for continuous quality improvement and customer satisfaction.

Some of the problems found in Community Health Centers are the quality of professional services (quality of care) and the quality of management services (quality of service) which empirically show that the number of community visits to Community Health Centers is still low, due to the poor image of services in Community Health Centers, including Community Health Center employees who are undisciplined, unfriendly, unprofessional, and inadequate treatment. ineffective, inadequate building facilities and medical and non-medical equipment where people have to be referred to continue treatment or examinations that can actually be done at health centers, or to buy medicines that are not available at health centers even though the geographical conditions in some places do not support this due to the long distance, no transportation, limited health center

opening hours, etc.

In addition, health workers also carry out private practice outside of health center working hours, which allows for hidden competition with health centers, which has an impact on the number of visits to health centers because the community is dissatisfied with health services.

Simply put, patient satisfaction is an attitude based on the perception of quality felt by the patient (customer). Thus, the level of patient satisfaction is a function of the difference between the performance of the health services received and what should be received. There are three levels of satisfaction, namely 1). if the service is less than expected, the patient will feel dissatisfied, 2). if the service is comparable to expectations, the patient will feel satisfied, 3). What are the difficulties in if the service exceeds expectations, the patient will feel very satisfied or happy.

Along with the improvements made, all levels of society are no longer awkward in using the services of the Community Health Center. This is supported by the much better condition of the Community Health Center, namely with a new building, more complete facilities and infrastructure and improvements to the service system. The service system is closely related to the quality of service. Goets and Davis, service quality as a dynamic condition related to products, services, people, processes and environments that meet or even exceed expectations. Service quality is also interpreted as something related to the fulfillment of community expectations/needs, where service is said to be quality if it can provide products and/or services according to community needs (Ibrahim, 2008:22).

Furthermore, Ibrahim, (2008:23) stated that it is important to evaluate organizational performance (government organizations in terms of public services), by looking at how big/far the gap is between the services provided and the services expected by customers/consumers/the public. One of the..The Health Center in Malalayang District is the Bahu Health Center which carries out clinical services. Public health services and administrative services.

The Health Center is led by a Head of the Health Center, which is a structural organization and is positioned as a technical implementing unit of the service. Successful leadership is expected to be able to carry out the authority of independence in depth and holistically, the elements that form its effectiveness and its various advantages and limitations (Trihono, 2005:22). The leadership aspect is the basis for the issuance of the Regulation of the Minister of Health of the Republic of Indonesia Number 75 of 2014 concerning Health Centers, which states that a head of a Health Center must have a minimum education of a bachelor's degree and have public health management competency.

Leadership is a way for a leader to influence the behavior of subordinates to cooperate and work productively to achieve organizational goals. A more sensitive, flexible, and comprehensive approach in capturing phenomena that exist in society. In terms of leadership, it allows the study of leadership practices in a situational context, such as the size of the service location, characteristics of general practitioners/nurses, competencies of the head of the health center, values, beliefs, and others so that a more meaningful understanding of leadership can be obtained. Health center leadership in serving the community, the role of stamng management is always optimized to improve employee performance.

The above problems can affect the utilization of health centers which ultimately affect the health status of the community in their working areas. The low utilization of health facilities, both government and private, is due to, among others, inefficiency and poor quality in the health sector, poor quality infrastructure and many health centers that do not have adequate equipment, inadequate number of doctors in remote areas and high absence of doctors in health centers, and lack of education for health workers.

World Bank (2008), other factors that may have an influence are increased income, better knowledge of health service options and increased expectations of service standards. Dever (2009: 84) the use of health centers has influencing factors, namely consumer factors in the form of; education, livelihood, knowledge, other patient perceptions, organizational factors; resources, service accessibility, social access, factors service provider; Officer behavior officer. To anticipate this, Muninjaya (2011:105) stated that health centers should be able to improve the quality of professional services (quality of care) and quality of management services (quality of service) because good service quality will provide satisfaction to customers and customers will reuse and recommend the health service to others. Empirically, it is said that the low number of community visits to health centers is due to the poor image of services in health centers, including health center employees who are undisciplined, unfriendly, unprofessional, ineffective treatment, inadequate building facilities and medical and non-medical equipment where people have to be referred to continue treatment or examinations that can actually still be done at the health center, or to buy medicines that are not available at the health center even though the geographical conditions in some places do not support it due to the long distance, no transportation, limited health center opening hours and others. In addition, health workers also carry out private practice outside of health center working hours, which allows for hidden competition with health centers, which has an impact on the number of visits to health centers because the community is dissatisfied with health services.

Posyandu is the front guard for toddler health where the services provided are integrated health service post very needed For give convenience And benefits for public health, especially infants and toddlers Yusuf (2012) the obstacles to integrated health posts are 1). Low Service Quality. It is no secret that services at Community Health Centers often provide mediocre services, (2) Medical Personnel. It is commonly known by the public that medical personnel in hospitals are very limited. There are many practitioners who have very limited medical knowledge. General practitioners who are assigned and receive facilities from the state are only present at Community Health Centers for a few hours a day, (3) Health Facilities. We know that health facilities at Community Health Centers are very minimal. The existing facilities are old and not maintained. There is a need for education and training for implementing integrated health center cadres and community users of integrated health posts, because education can develop valuable personalities for the community, and not knowing becomes knowing and understanding and it is hoped that there will be a change in knowledge.

The problem of low quality of services provided by health centers is also felt by the community. Public complaints about the quality of health center services affect patient satisfaction. This is based on research from Rondonuwu (2014) which states that generally respondents feel satisfied with the quality of outpatient services, there are 46 respondents (51.1%), while respondents who feel dissatisfied are 44 respondents (48.9%). Respondents interested in re-using services at Bahu Health Center were 56 respondents (62.2%) and 54 respondents (62.2%) 34 respondents (37.8) who are not interested in health services at the Community Health Center. Poor service at the community health center, people tend to choose to go to the hospital when they need health services. The community health center whose level of service quality is still low, especially regarding the speed of service, is the community health center. According to Aulia and Sasmita, the cause of the problem is the performance of medical/paramedical and non-medical/paramedical personnel who are less professional, for example arriving late, going home early, not keeping appointments with the community, and others.

Based on the description that has been put forward above, the researcher is interested in conducting research on the relationship between leadership, smart

posyandu, and service quality with patient satisfaction at the Tomohon City Health Center. The research problem is formulated as follows:

1. Is there a relationship between the leadership of the head of the health center and patient satisfaction?
2. Is there a relationship between smart integrated health posts and patient satisfaction?
3. Is there a relationship between the quality of health services and patient satisfaction?
4. Is there a joint relationship between the leadership of the head of the health center, smart integrated health posts, and the quality of health services with patient satisfaction?

### Research methodology

This study uses a survey method with correlational analysis which aims to obtain data on patient satisfaction variables. To obtain data on leadership variables, smart integrated health posts and service quality, data sources used were from patients from each health center in Tomohon City. This study was conducted in all community health centers.

(PUSKESMAS) in Tomohon City since March-May 2024, with a total of 3922 patients. The determination of this sample size refers to Roscoe's opinion quoted by Sugiyono who said that if a study will conduct a correlation or multiple regression analysis, then the number of sample members is at least the number of variables studied (Sugiono, 2007:132). The patients who were sampled were visits to the integrated health post, namely pregnant women, KB, PUS, and people whose health was disturbed. Distribution of sample members of health centers in Tomohon City. The sampling is based on the following formula:

Respondents / units

$$S = \frac{\sum \text{respondents/unit}}{\text{Total}} \times \text{Xsample(table)} \quad (\text{Sugiono, 2007 p. 142.})$$

Information :

:

S :Sample

Respondent/Unit : The number of population in the unit Sample

Table Determination of N based on

quantitypopulation

Total AmountPopulation

From the results of the calculation of the determination of the research sample size above, the number of samples used was 320 people.

### Collection TechniquesData

The data collection technique is a questionnaire or questionnaire arranged according to a Likert scale (five possible choices) arranged based on the criteria of each independent variable (X1, X2, X3). The score of each questionnaire item is the average score of each patient.

The dependent variable (Y) uses the score of the number of respondents at each health center sampled in Tomohon City in 2024 who were served at each health center.

### Research Instruments

The instruments in the study consisted of four instruments in the form of questionnaires, namely: the leadership instrument of the head of the health center, smart integrated health posts, and quality of service with patient satisfaction.

1. Definition of the variable Leadership of the Head of the Health Center a Conceptual definition of Leadership of the Head of the Health Center. Leadership is the way the head of the health center influences the behavior of the community so that they can work together. in certain situations in order to achieve excellent service.

2. Operational definition of Head of Health Center Leadership

Leadership is the patient's assessment of how the head of the health center influences the behavior of the community (patients) in order to achieve goals, with the following indicators: (1) directive, (2) supportive, (3) participative, (4) delegative, using a Likert scale consisting of five options, namely; a = always, b = often, c = sometimes, d = rarely, and e = never and the score for each statement is positive.

: a = 5, b = 4, c = 3, d = 2, and e = 1; while the negative statement: a = 1, b = 2, c

= 3, d = 4, and e = 5.

a. Instrument Grid

**Table 3.3**

Leadership Instrument Grid for Head of Health Center

NO	DIMENSIONS	INDICATOR	NUMBER GRAIN	AMOUNT
1.	Directive	Guidelines	1, 2, 3	3
		Clarity of rules	4, 5, 6	3
		The urge to achieve standard	7, 8, 9	3
2.	Supportive	Treatment	10, 11, 12,	4
		Action	13	3
		create	14, 15, 16	4
		Environment	17, 18, 19, 20	
3.	Participatory	Consultation	21, 22, 23	3
		Value	24, 25, 26	3
4.	Delegative	Performance	27, 28, 29,	4
		Work standards	30	4
		Responsibility	31, 32, 33,	4
			34	
			35, 36, 37, 38	
<b>TOTAL</b>				<b>38</b>

b. Trial of the Leadership Instrument for Head of Health Center

In analyzing the validity of the leadership instrument items of the head of the health center, it can be determined based on the Product Moment correlation formula (Karl Pearson). This is as Azwar said, if the item score is not dichotomous, but interval scaled, then the Product Moment correlation technique can be used so that the correlation coefficient of each item with the total item.

1. Variable Definition Smart Integrated Health Post

a Conceptual Definition: Smart Posyandu is an integrated service activity, namely: health, family planning, and education in order to provide joint services for the community. Education

(Posyandu, BKB, and PAUD) in order to provide joint services to the community using the Likert scale.

**Table 3.4**

Smart posyandu grid

NO	VARIABLES	INDICATOR	ITEM NUMBER	AMOUNT
1.	Integrated Health Service Post intelligent	Mother's Knowledge	1, 2, 3	3
		about toddlers	4, 5, 6	3
			7, 8, 9	3
2.		Toddler growth	10, 11, 12, 13	4
			14, 15, 16	3
			17, 18, 19, 20	4
3.		Development	21, 22, 23	3
		Toddler psychomotor skills	24, 25, 26	3
4.		Family Planning Services	27, 28, 29, 30	4
			31, 32, 33, 34	4
5		The number of cadres who on duty	35, 36, 37, 38	4
6		Responsibilities of cadres	39, 40, 41, 42	4
		<b>TOTAL</b>		<b>40</b>

### c. Smart Posyandu Instrument Trial

In analyzing the validity of the Posyandu Cerdas instrument items, it can be determined based on the Product Moment correlation formula (Karl Pearson). This is as Azwar said, if the item score is not dichotomous, but interval scaled, then the Product Moment correlation technique can be used so that the correlation coefficient of each item with the total item.

#### 1. Definition of service quality variables

##### a. Conceptual definition of Service Quality

Service quality is a response from external customers of the health center to the feedback given by the health center.

##### b. Operational definition of Service Quality

Service quality is a response from external customers of the health center to feedback given by the health center, which is measured through:

- (1) physical evidence (tangibles),
- (2) reliability,
- (3) responsiveness,
- (4) assurance,
- (5) empathy (Zeithaml, Valarie, 2009), using a Likert scale consisting of five options, namely: a always, b often, c sometimes, d = rarely, and e = never and the score for each positive statement: a 5 b 4, c 3, d 2. and e =1 ; while the negative statements: a=1, b=2, c=3, d=4 and e=5

c. Instrument Grid

**Table 3.5**  
 Service Quality Instrument Grid

NO	INDICATOR	ITEM NUMBER	AMOUNT
I .	Physical evidence	1, 2, 3, 4, 5,6	6
2.	Reliability	7, 8, 9, 10, 11, 12	6
3.	Responsiveness	13, 14, 15, 16, 17, 18	6
4.	Guarantee	19, 20, 21, 22, 23, 24	6
5.	Empathy	25, 26, 27, 28, 29, 30	6
	<b>TOTAL</b>		<b>30</b>

d. Service Quality Instrument Trial

In analyzing the validity of the service quality instrument items, it can be determined based on the Product Moment correlation run (Karl Pearson). This is as stated by Azwar, if the item score is not dichotomous, but interval scaled, then the Product Moment correlation technique can be used so that the correlation coefficient of each item with the total item.

**Definition of Patient Satisfaction Variable**

a. Definition of Patient Satisfaction Concept

Patient satisfaction is the result of patient assessment based on the benefits received and felt, regarding the provision of health services in health centers regarding patient satisfaction regarding the availability of health services (available), the fairness of health services (appropriate), the continuity of health services (continue), the acceptance of health services (acceptable), the attainability of health services (accessible), the affordability of health services (accessible), and the accessibility of health services.

health (affordable), efficiency of health services (efficient) and quality of health services (quality)

b. Operational Definition of Patient Satisfaction

Patient satisfaction is the result of patient assessment based on the benefits and feelings, regarding the provision of health services in health centers, including: regarding the availability of health services (available), the fairness of health services (appropriate), the continuity of health services (continue), the acceptance of health services (acceptable), the achievement of health services (accessible), the affordability of health services (affordable), the efficiency of health services (efficient) and the quality of health services (quality) using a Likert scale.

e. Instrument Grid

**Table 3.6**

Patient Satisfaction Instrument Grid

NO	INDICATOR	ITEM NUMBER	AMOUNT
1.	<i>Available</i>	1, 2, 3, 4, 5,6	6
2.	<i>Appropriate</i>	7, 8, 9, 10, 11, 12	6
3.	<i>Continue</i>	13, 14, 15, 16, 17, 18	6
4.	<i>Acceptable</i>	19, 20, 21, 22, 23, 24	6
5.	<i>Accessible</i>	25, 26, 27	3
6	<i>Affordable</i>	28, 29, 30	3
	<i>TOTAL</i>		30

a. Patient Satisfaction Instrument Trial

In analyzing the validity of patient satisfaction instrument items, it can be determined based on the Product Moment correlation formula (Karl Pearson). This is as Azwar said, if the item score is not dichotomous, but interval scaled, then the Product Moment correlation technique can be used so that the correlation coefficient of each item with the total item.

Data Analysis Techniques

The preliminary analysis stage is carried out using descriptive statistics, namely by describing the data for each variable individually. While inferential statistics are used to test the hypothesis. Before

presenting the hypothesis, the analysis requirements were tested, namely linearity and normality tests. The descriptive statistics used were the mean, standard deviation, frequency table and histogram graph. Hypothesis testing was carried out using simple and multiple correlation analysis, as well as simple and multiple regression analysis at the alpha level of 0.05 and 0.01. Kolmogorov equation  $D_n = \sup |F_n(X) - F(X)|$

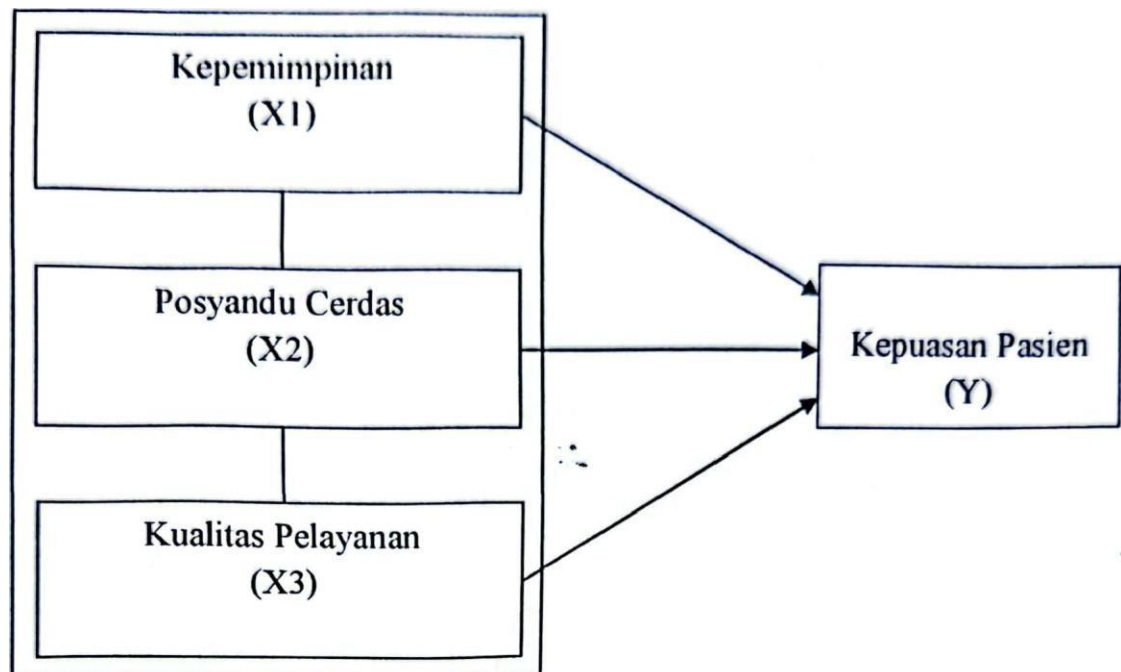
The sum of the absolute value differences of the two distributions is compared with the Kolmogorov-Smirnov table to determine whether we accept  $H_0$  or accept  $H_1$ . The hypothesis testing

$H_0$  : Normally Distributed Data

$H_1$  : Data is not normally distributed

Figure 3.1

Research Constellation



### Statistical Hypothesis

Based on hypothesis testing techniques, the following statistical hypotheses can be proposed:

1.  $H_0$  :  $\rho_{y1} = 0$

$H_1$  :  $\rho_{y1} > 0$

2.  $H_0$  :  $\rho_{y2} = 0$

H1	:Py2	> 0
3.H0	: Py3	= 0
H1	: Py3	> 0
4.H0	: Py123	= 0
H1	: Py123	> 0

Information :

The calculated F value is greater than the F table ( $68.62 > 2.62$ ). Because  $F_h >$  from the F table, the multiple correlation coefficient found is significant.

To find out whether the correlation coefficient  $R_{y.123}$  obtained is significant or not, it can be tested using the F Test. The results of the F test analysis obtained a value of 68.62. This value is consulted with the value of the t table (0.01) obtained a value of 2.62, which indicates that the correlation coefficient between the leadership of the head of the health center, integrated health post and quality of service together with patient satisfaction is very significant. Thus the third hypothesis stating that there is a positive relationship between the Leadership of the Head of the Health Center, quality of service together with patient satisfaction is accepted and the test results can be stated as significant.

To find out the contribution of the variables of leadership of the head of the health center, smart integrated health posts and quality of service to patient satisfaction, it can be done by squaring the magnitude of the correlation coefficient. The result of squaring the magnitude obtained a magnitude of 0.396. Thus, it can be concluded that the contribution of leadership of the head of the health center, smart integrated health posts and quality of service together to patient satisfaction is 39.6%.

**Discussion**

Based on the results of testing the four research hypotheses, it was proven. reject  $H_0$ . The variables of leadership of the Head of the Health Center (X1), Smart Integrated Health Post (X2) and Quality of Service (X3) are positively and significantly related to patient satisfaction (Y).The positive and significant relationship between the independent variables and the dependent variables in this study is explained as follows:

**First**, through simple regression and correlation analysis of the variables of leadership of the head of the health center with patient satisfaction, an equation was obtained regression line  $Y = 35.4 + (0.536) X_1$  and correlation coefficient of 0.595 which are significant  $\alpha = 0.01$ . These two variables are positively and very significant related, where 35.4% of the variance that occurs in patient satisfaction can be explained by the leadership of the head of the health center regression line equation  $Y = 35.4 + (0.536) X_1$ . This proves that the leadership of the head of the health center is one of the predictors of patient satisfaction.

The results of simple regression and correlation analysis on the variable of the Head of the Health Center are positively and significantly related to patient satisfaction, obtained a regression line equation of  $Y = 35.4 + (0.536) X_1$  and a correlation coefficient of 0.529, each of which is significant at  $\alpha = 0.01$ . This proves that the leadership of the head of the health center is one of the predictors of patient satisfaction. These two variables are positively and very significantly related, where 28% of the variance that occurs in patient satisfaction can be explained by the leadership of the head of the health center through the regression line equation  $= 35.4 + 536) X_1$ .

This shows that effective and dynamic leadership of the head of the health center is a dominant element in determining the level of patient satisfaction.

Leaders who influence the behavior of health center components to be able to work together in certain situations in order to achieve health service goals, with indicators: (a) directive, (b) supportive, (c) participatory, (d) delegative, have contributed to the level of patient satisfaction at the Manado City Health Center. The bureaucratic leadership style that is considered by health center staff and patients is pleasant, able to provide encouragement, and can increase the level of patient satisfaction which in turn will have an impact on increasing the quality of service. As the results of research from Salam et al (2013), stated that there is a relationship between leadership style (instruction, consultation, participation and delegation) in this case the head of the Wara Selatan Health Center with the performance (attendance, cooperation, quality of work, attitude, and knowledge of work) of health workers in this case doctors, midwives, nurses and patients. As in the research of Windartik and Solihah (2014) stated that leadership style is also influenced by the personal characteristics of the leader, the characteristics of the subordinates being led, and the situation being faced. This means that a person's leadership will affect the service and also have an impact on the satisfaction of the patients being served.

**Second**, through simple regression and correlation analysis of the smart posyandu variables with patient satisfaction, the regression line equation  $Y$  was obtained.  $= 44.665 + (0.523) X_2$  and a correlation coefficient of 0.512, each of which is significant at 0.05. These two variables are positively and highly related, where 26.2% of the variance that occurs in patient satisfaction can be explained by the level of smart posyandu activities, the regression line problem  $= 44.665 + (0.523) X_2$ .

This proves that smart posyandu with indicators of maternal knowledge about toddlers, toddler growth, toddler psychomotor development, family planning services, number of cadres on duty as well as health knowledge, and cadre responsibility is one of the predictors of patient satisfaction. As the results of research from Widasari and Ismayadi (2010), stated that all respondents (100%) received moderate service and the majority of respondents (77.6%) were dissatisfied, (19.7%) were satisfied and (3 0/0) felt very satisfied with the posyandu service. Also stated by Aldha (2013) in his research that health workers and cadres always provide explanations regarding the services to be provided, explain the purpose of the actions given health and cadres always provide attention while at the posyandu and cadres provide support to improve health status, cadres are clean and tidy, health workers speak politely, are always given health insurance, have good skills when providing services and all respondents are made comfortable and free from fear, health workers always respond to complaints quickly, are good in responding to complaints, and always provide services according to complaints.

**Third**, the results of simple regression and correlation analysis on service quality and patient satisfaction indicate that service quality is one of the predictors of patient satisfaction. This is evidenced by the regression line equation  $= 42.864 + (0.525) X_3$  and the correlation coefficient of 0.513, each of which is significant  $a = 0.05$ . These two variables are positively and very significant, where 26.3% of the variance that occurs in the level of patient satisfaction can be explained by the service quality of the regression line equation. This proves that service quality is one of the predictors of patient satisfaction, as stated by Valarie (2009) that service quality includes physical evidence, reliability, responsiveness, assurance, empathy is one of the predictors of patient satisfaction. As stated by Haru (2013) in his research that there is a very significant positive relationship between service quality and consumer satisfaction. According to Saragih (2009) states that there are 4 (four) dimensions of satisfaction that have a significant relationship with patient visits seen from the aspects of reliability, responsiveness, assurance and physical

evidence. Agung Utama (2013) in the results of the study stated that the five dimensions of service quality turned out to be the reliability dimension which had the most influence on customer satisfaction (patients) most influenced by the perception of patient service quality at Cakra Husada Klaten General Hospital in providing the promised services immediately, accurately and satisfactorily.

**Fourth**, from the results of the regression analysis and multiple correlations on the leadership of the head of the health center, smart integrated health post and quality of service together with patient satisfaction, a regression line equation Y was obtained.  $Y = 11.415 + 0.396X_1 + 0.241X_2 + 0.616X_3$  and correlation coefficient of 0.629 each significant at a 0.05. The independent variables and dependent variables are positively and very significantly related, where 39.6% of the variance that occurs in patient satisfaction can be explained together through the leadership of the head of the health center, smart posyandu and quality of service through the regression equation. This proves that the variables of the leadership of the Head, smart posyandu and quality of service together are predictors of patient satisfaction.

### Research Novelty

The novelty of this research is the discovery of a regression equation between the independent variables and the dependent variables. The following is the regression equation or mathematical model in this research.

1. Relationship between Leadership and Patient Satisfaction  $Y = 35.4 + (0.356)X$
2. Relationship between Smart Posyandu and Patient Satisfaction  $e = 44.665 + (0.523)X_2$
3. Relationship between Service Quality and Patient Satisfaction  $e = 42.864 + (0.525)$
4. The relationship between leadership, smart Posyandu, quality service with Patient Satisfaction.

$$Y = 11.415 + 0.396X_1 + 0.241X_2 + 0.616X_3$$

### Conclusion

Testing the proposed research hypothesis proved that the variable of principal leadership health center ( $X_1$ ), integrated health service post intelligent ( $X_2$ ), and quality service ( $X_3$ ), both individually and collectively, has a positive and significant relationship with patient satisfaction ( $Y$ ).

The correlation coefficient between the leadership of the head of the health center and patient satisfaction shows that the leadership of the head of the health center also provides sufficient contribution to increasing patient satisfaction. This means that the large contribution of the leadership variable of the head of the health center to patient satisfaction states that the more professional and high the leadership contributes to service to patient satisfaction, the higher the patient's use of the health center. In other words, the leadership of the health center can be used to predict the level of patient satisfaction.

The correlation coefficient between smart posyandu and patient satisfaction shows that smart posyandu can contribute to increasing patient satisfaction. This means that the large contribution of smart posyandu variables to patient satisfaction states that the higher the contribution of the smart posyandu team's performance, the higher the increase in patient satisfaction. In other words, the effective performance of the smart posyandu team can be used to predict the level of patient satisfaction.

The correlation coefficient between service quality and patient satisfaction shows that service quality also has a sufficient contribution to increasing patient satisfaction. This means that the contribution of service quality variables to patient satisfaction is large. The results of the analysis show a positive relationship between service quality and patient satisfaction. This relationship states that the higher the effective contribution and achievement of service quality, the higher the number of patient visits to the health center. In other words, service quality can be used to predict the level of patient satisfaction.

From the results of the correlation and multiple regression of the smart integrated health center, the leadership of the head of the health center, and the quality of service together with patient satisfaction, a large correlation coefficient of the contribution that occurs to patient satisfaction can be explained together through the leadership of the head of the health center, smart integrated health center and quality of service through the regression equation. The results of the analysis show a positive relationship, health center leadership, smart integrated health center, quality of service together with patient satisfaction. In other words, the higher the contribution of good management of the health center leadership, the better the team performance. together with patient satisfaction. In other words, the higher the contribution of good management of health center leadership, the performance of the intelligent, effective posyandu team and the achievement of service quality can be used to predict the high and low levels of patient satisfaction.

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