The Effect of Team Work and Motivation of Nurses’ Work on the Quality of Health Services at a Military Hospital in Indonesia

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Abstract—This research is to investigate the effect of team work and motivation of nurse’s work on quality of health services at a military hospital in Indonesia. This research is a quantitative research method survey with analysis approach path analysis with sample as many as 147 nurses. The way to collect the data needed in this research is done through questionnaires and tests that have been prepared in advance. Study examines the relationship between variables research, and measure the influence of the variables with each other variables. The results showed that 1) There is a direct influence team work with the quality of service, 2) There is a direct influence of work motivation with the quality of service, 3) There is a direct influence of team work with work motivation. Research results provide benefits practical for leaders, staff and employees a military hospital in Indonesia.

Keywords—teammwork; work motivation; the quality of service

I. INTRODUCTION

To achieve high quality health care achievement hospital is trying to implement the vision, mission and strategy of the hospital. The vision, mission and strategy of the hospital are the goals and objectives to be achieved collectively among its members. All work steps of employees are directed towards achieving these goals and objectives. Hospital is its management uses the "Three Zero" strategy, namely (1) Zero accident contains the meaning of no danger to patients or officers due to negligence or procedural errors. (2) Zero cost is a minimum or even no cost incurred by members of the military and their families for examination, maintenance and even procurement of drugs to cure patients. (3) Zero complain means there is no patient complaint against health service standards in hospital. Competition in every hospital / company certainly happens. If a company is not strong in the face of competition, the company will not last long. For that, every company must have its own way to be able to develop their company.

To understand about health services in hospitals there are several problems that can be identified as follows: The quality of health services is still low as a result of the lack of performance of nurses in providing services to patients. Lack of solid teamwork carried out by nurses, motivation of nurses' work to improve employee performance on duty needs to be improved, lack of welfare of nurses, reward and punishment have not been effective.

II. LITERATURE REVIEW

A. Service Quality

Service Quality, in everyday practice doing quality assessments is not easy, because everyone has a different background, and has their own interests.

According to Tutian that in general, quality is the advantage of a product or service. The importance of acceptable quality and quality standards has increased dramatically. Customers now demand high quality goods and services [1].

Strategic perspective, quality is the result of how the company completes its main activities and support. Thus, quality exists when goods or services are met by the company and exceed customer expectations, statement from [2].

The Note Fitzsimmons explains that service quality can be seen from five dimensions, namely: (1) Reliability, willingness to provide precisely and correctly, the type of service that has been promised to consumers or customers. (2) Responsiveness, awareness or desire to help consumers and provide fast service. (3) Assurance, knowledge or insight into politeness, self-confidence of service providers, and respect for consumers. (4) Empathy, the willingness of service providers to approach, provide protection, and try to find out the desires and needs of consumers. (5) Tangibles, the appearance of employees and other physical facilities, such as equipment or equipment that support services [3]. According to Akmal that service quality using five dimensions of service quality (reliability, responsiveness, assurance, empathy and tangibles) to measure the quality of the public service sector in Malaysia has always been a sensitive issue [4].

B. Teamwork

Team are a small number of people with complementary skills who are committed to a common purpose, set of
performance goals, and approach for which they hold themselves mutually accountable, this is note from Thomas and Scott [1].

In the other argument Jason et al. explains that teams are comprised of two or more people who work interdependently over some time period to accomplish common goals related to some task-oriented purpose [5].

C. Work Motivation

Based from statement Thomas and Scott that motivation refers to forces that energize, direct, and sustain a person’s efforts. All behavior, except involuntary reflexes like eye blinks (which have little to do with management), is motivated. A highly motivated person will work hard to achieve performance goals. With adequate ability, understanding of the job, and access to the necessary resources, such a person will be highly productive [1].

The opinion about motivation Michael and Stephen explains that motivation is goal directed behavior. People are motivated when they expect that a course of action is likely to lead to the attainment of a goal and a valued reward, one that satisfies their needs and wants. Motivation strategies aim to create a working environment and to develop policies and practices that will provide for higher levels or performance from employees [6].

Motivation is a psychological process through which unsatisfied wants or needs lead to drives that are aimed at goals or incentives, this is suitable with note [7].

III. Method

This research was conducted using a survey method with a path analysis approach. The way to collect the data needed in this research is done through questionnaires and tests that have been prepared in advance. This study will examine the relationship between research variables, and measure the influence of one variable with other variables. In this study there are third variables to be studied, namely teamwork, work motivation, and service quality.

![Diagram of research variables](Image)

Fig. 1. Theoretical model of research variables.

IV. Results and Discussion

The results of this research include data description of each research variable, testing the requirements of the analysis, testing the research hypothesis, discussing the results of the study and the limitations of the study.

A. Data Description

In this study, the data collected were data from four variables which included health service quality as exogenous variables, teamwork and work motivation as endogenous variables. The description of each research variable can be explained as follows:

1) Quality of health services: Based on data obtained from 147 research respondents after being processed statistically showed the following results: The minimum score obtained was 78 and the maximum score were 101 from the calculated range, Subsequent calculations, give an average value (\( \bar{X} \)) as many as to 88.47, Median (Me) of 88 and Mode (Mo) of 88, standard deviation of 4.74 and range of scores of 23. If the data is arranged in a frequency list there are 8 classes presented in the frequency distribution table. To find out more detailed data descriptions can be seen in the frequency distribution Table 1.

| No | Interval class | Absolute Frequency | Relative Frequency |
|----|----------------|-------------------|-------------------|
| 1  | 78 - 80        | 7                 | 4.76              |
| 2  | 81 - 83        | 15                | 10.20             |
| 3  | 84 - 86        | 28                | 19.05             |
| 4  | 87 - 89        | 39                | 26.53             |
| 5  | 90 - 92        | 33                | 22.45             |
| 6  | 93 - 95        | 13                | 8.84              |
| 7  | 96 - 98        | 7                 | 4.76              |
| 8  | 99 - 101       | 5                 | 3.40              |
| Total |                | 147               | 100.00            |

From the distributive frequency table, it can be seen that the highest score was in the score group 87-89 (26.53%), followed by the group score 90-92 (22.45%), group score 84-86 (19.05%), score group 81 - 83 (10.20%), group score 93 - 95 (8.84%), group score 96 - 98 (4.76%), group score 78 - 80 (4.76%) and the last group score 99 - 101 (3.40%). The average value is in the class 87-89, about 49.66% of respondents 'answers are below the average value and around 50.34% of respondents' answers are in the average value and above the average value.

| No | Indicator | Item | Average |
|----|-----------|------|---------|
| 1  | Tangibles | 2-3  | 3.65    |
| 2  | Reliability | 4 – 6 | 3.63 |
| 3  | Responsiveness | 7 – 9 | 3.57 |
| 4  | Competence | 10 – 12 | 3.56 |
| 5  | Courtesy | 14 – 15 | 3.56 |
| 6  | Credibility | 16 – 17 | 3.59 |
| 7  | Security | 19 – 20 | 3.56 |
| 8  | Access | 22, 24 | 3.51 |
| 9  | Communications | 25 – 27 | 3.46 |
| 10 | Understanding The Customer | 28 - 30 | 3.51 |

Based on the table above shows that the lowest score is communications (3.46) and the highest score tangibles (3.65).
2) Team work: Based on data obtained from 147 research respondents, after being processed statistically showed the following results: The minimum score obtained was 106 and the maximum score was 137 from the calculated range. Subsequent calculations provide an average value (\( \bar{X} \)) of 120.24, a median (Me) value of 120 and a Mode (Mo) of 119, a standard deviation of 7.00 and a score range of 46. If the data is arranged in a frequency list then there are 8 classes presented in the frequency distribution table. To find out more detailed data descriptions can be seen in the frequency distribution table presented below.

### Table III. Frequency Distribution of Team Work

| No | Interval class | Absolute Frequency | Relative Frequency |
|----|----------------|--------------------|--------------------|
| 1  | 106 - 109      | 8                  | 5.44               |
| 2  | 110 - 113      | 20                 | 13.61              |
| 3  | 114 - 117      | 26                 | 17.69              |
| 4  | 118 - 121      | 31                 | 21.09              |
| 5  | 122 - 125      | 27                 | 18.37              |
| 6  | 126 - 129      | 21                 | 14.29              |
| 7  | 130 - 133      | 8                  | 5.44               |
| 8  | 134 - 137      | 6                  | 4.08               |
|    | Total          | 147                | 100.00             |

From the distributive frequency table, it can be seen that the highest score is in the score group 118 - 121 (21.09%), followed by group score 122 - 125 (18.37%), group score 114 - 117 (17.69%), score group 126 - 129 (14.29%), score group 110 - 113 (13.61%), group score 106 - 109 (5.44%), group score 130 - 133 (5.44%) and the last group score 134 - 137 (4.08%). The average value is in the class 118 - 121, about 52.38% of respondents’ answers are below the average value and around 47.62% of respondents’ answers are in the average value and above the average value.

### Table IV. Data Analysis of Team Work Research Variables

| No | Indicator       | Item | Average |
|----|----------------|------|---------|
| 1  | Goal           | 1 – 4 | 3.67    |
| 2  | Cooperation    | 5 – 8 | 3.65    |
| 3  | Consistency    | 9 – 12| 3.60    |
| 4  | Interaction    | 13 – 15| 3.64  |
| 5  | Role           | 17 – 19| 3.73  |
| 6  | Responsible    | 21 – 24| 3.65  |
| 7  | Will           | 25 – 28| 3.66  |
| 8  | Integration    | 29 – 32| 3.54  |
| 9  | Trust          | 33.35 - 36 | 3.59 |

Based on the table above shows that the lowest score is cohesiveness (3.46) and the highest score of the role (3.73).

3) Work motivation: Based on data obtained from 147 research respondents, after being processed statistically showed that the following results: The minimum score obtained was 76 and the maximum score was 107 from the calculated range. Subsequent calculations provide an average value (\( \bar{X} \)) of 90.50, a median (Me) value of 90 and a Mode (Mo) of 91, a standard deviation of 6.77 and a score range of 46. If the data is arranged in a frequency list then there are 8 classes presented in the frequency distribution table. To find out more detailed data descriptions can be seen in the frequency distribution table presented below.

### Table V. Frequency Distribution of Work Motivation

| No | Interval class | Absolute Frequency | Relative Frequency |
|----|----------------|--------------------|--------------------|
| 1  | 76 - 79        | 6                  | 4.08               |
| 2  | 80 - 83        | 18                 | 12.24              |
| 3  | 84 - 87        | 28                 | 19.05              |
| 4  | 88 - 91        | 35                 | 23.81              |
| 5  | 92 - 95        | 24                 | 16.33              |
| 6  | 96 - 99        | 19                 | 12.93              |
| 7  | 100 - 103      | 13                 | 8.84               |
| 8  | 104 - 107      | 4                  | 2.72               |
|    | Total          | 147                | 100.00             |

From the distributive frequency table, it can be seen that the highest score is in the score group 88 - 91 (23.81%), followed by the group score 84 - 87 (19.05%), group score 92 - 95 (16.33%), score group 96 - 99 (12.93%), group score 80 - 83 (12.24%), group score 100 - 103 (8.84%), group score 76 - 79 (4.08%) and the last group score 104 - 107 (2.72%). The average score is in the 88 - 91 class, about 52.38% of respondents’ answers are below the average value and around 47.62% of respondents’ answers are in the average value and above the average value.

### Table VI. Data Analysis of Research Results of Work Motivation Variables

| No | Indicator | Item       | Average |
|----|-----------|------------|---------|
| 1  | Needs     | 1–6, 8–10  | 3.475   |
| 2  | Encouragement | 11–17, 20 | 3.513   |
| 3  | Incentive | 21–29      | 3.466   |

Based on the table above it can be seen that the lowest score is incentives (3.466) and the highest score of encouragement (3.513).

B. Analysis of Requirements Analysis

Before the data is analyzed further, to test hypotheses based on existing data it is necessary to do some test requirements analysis. Testing requirements analysis for path analysis is the relationship between variables in the model must be linear, so that the requirements meet the requirements of regression analysis. The tests included normality tests and linearity tests and the significance of regression and correlation.

1) Normality test: Normality test is used to determine whether the regression model is normally distributed or does not use Shapiro-Wilk that is comparing the probability value with the critical value of 0.05.

### Table VII. Shapiro-Wilk Test Results

| Variable          | Statistic | p     | Description |
|-------------------|-----------|-------|-------------|
| Service quality (Y) | 0.986     | 0.140 | Normal      |
| Team work (X2)    | 0.985     | 0.121 | Normal      |
| Work motivation (X3) | 0.987      | 0.173 | Normal      |
Based on the results of the calculation above the significance value ($p = 0.140$) on service quality variables greater than 0.05, the data on these variables are normally distributed. The significance value ($p = 0.121$) on the team work variable is greater than 0.05, so the data on the variable is normally distributed. The significance value ($p = 0.173$) in the work motivation variable is greater than 0.05, so the data on the variable is normally distributed.

2) Linearity test: The guidelines used to test the linearity of the regression line are carried out by testing the significance of the F value. The linearity test results of the relationship can be seen in the following table 8:

| Relationship                        | F   | p    | Description |
|-------------------------------------|-----|------|-------------|
| Team work (X1) and work motivation (X2) | 0.867 | 0.665 | Linear      |
| Team work (X1) and service quality (Y) | 1.155 | 0.288 | Linear      |
| Work motivation (X2) and service quality (Y) | 0.881 | 0.645 | Linear      |

Based on the calculation results above the p value on the relationship between team work and work motivation (0.665) is greater than 0.05, so the relationship between these variables is linear. The p value on the relationship between team work and service quality (0.288) is greater than 0.05, so the relationship between these variables is linear. The p value on the relationship between work motivation and service quality (0.645) is greater than 0.05, so the relationship between these variables is linear.

C. Discussion

1) Team work has a positive effect on the quality of health services: The results of hypothesis testing show that team work has a positive effect on the quality of health services. This positive influence shows that high team work will have implications for improving the quality of health services. Preparation of strategies to improve the quality of service, teamwork becomes something that must be the main concern, because team work has a direct influence on the quality of health services in hospital. Nine dimensions of teamwork consisting of goals, cooperation, consistency, interaction, roles, responsibilities, willingness, integration, and trust must truly be implemented in the field.

The work of the nursing team in hospital is still lacking in integration indicators. This of course must be addressed in the future so that all team members have the same direction and goals, the team leader must be able to see the potential of each member so that it will be easier to integrate the abilities of the team members. Simulations can be done so that the integration between members is more solid.

The results of this study in line with Slamet states that to improve service quality can be done by developing soft skills and hard skills of each employee [8]. One dimension of soft skills is working with teams in addition to initiative, integrity, critical thinking, willingness to learn, be responsible, communicate, deft, trustworthy and able to solve problems.

According to Tutiand and Novita that improving the quality of care for patients must pay attention to patient care management that is managed by doctors, nurses and other health workers who must collaborate, coordinate, collaborate with each other to provide information and have a common goal of healing patients [9].

2) Work motivation has a positive effect on good service quality: The results of testing hypotheses show that work motivation has a positive effect on the quality of health services. This positive influence shows that high work motivation will have implications for improving the quality of health services. Furthermore, it can be said that in the preparation of service quality improvement strategies, work motivation is something that must be considered, because work motivation has a direct influence on the quality of health services in hospital. Three dimensions of motivation are considered in relation to the quality of service, namely needs, encouragement and initiative.

Quality of health services in hospital is still lacking in communication indicators. This of course must be improved again both the nurse communication with patients and families. This communication is important to know what is desired from the patient so that what is the patient's complaint can be overcome. The existence of good communication nurses can convey advice to patients and families more easily.

Nurse work motivation is stimulation caused by a need that moves and directs the nurse's behavior in order to achieve certain goals. If work motivation is understood and applied it will cause work passion and enthusiasm for nurses in the form of high work productivity which in turn will affect the quality of health services. This means that nurses who have high motivation tend to have high work performance so that they will provide good services to patients. Therefore, by giving motivation to the nurse, it means that it will give the nurse the urge to exert their skills, expertise and skills in carrying out their duties and obligations. It is this high work motivation that encourages nurses to always improve the quality and quantity of their work so that the quality of hospital services will increase.

Statement to Michael also has a similar opinion that the key to performance is ensuring that evaluations and results are structured so that employees will focus their actions according to the desires desired by the organization, resulting in the type of performance needed and appropriate rewards. The stronger the relationship between each element in the motivation process, the greater the motivation given to employees can improve their performance which ultimately can improve service quality. The process must aim to strengthen the perceived relationship between action and results [10].

The results of this study are in line with Sunarto which reveals that changes in work motivation can affect service quality [11]. Argument to Enceng that the motivation of working for government officials has a significant influence on the quality of public services. This means that the increasing work motivation of the sub-district government officials will improve the quality of community services [12].
3) **Teamwork has a positive effect on work motivation:** The results of hypothesis testing show that team work has a positive effect on work motivation. This positive influence shows that high team work will have implications for increasing work motivation. The results of this study are in line with Misbah and Samreen which states that managers and upper bodies create teamwork in their organizations so teamwork has a major impact on organizational productivity and employee motivation [13]. Opinion to Agwu that there is a significant relationship between team work and an increase in employee motivation/ commitment [14].

Work motivation of nurses in hospital are still lacking in intensive indicators. This of course must be addressed by the Head of hospital consider the existence of rewards or bonuses that refer to performance so that in the nurse there will be an urge to work harder.

Team work reflects team spirit or the spirit of togetherness of members of a group or organization. The spirit of group togetherness is a driving force that motivates teamwork to do or not do something. As a spirit of togetherness, in teamwork there is a feeling of loyalty in the inner members that expresses a sense of belonging between one another, or one for all, all for one. The emergence of a collective positive attitude is triggered by the existence of a match between the expectations of the team's work and the goals of the organization. If the spirit of togetherness can be understood positively, it will also have a positive effect on the solidarity of a team or organizational work that will ultimately improve the ability of professionalism of the team's work. But if the motivation of togetherness is understood negatively, it will have a detrimental effect, including the feeling of boredom and lack of commitment to achieve a goal.

V. CONCLUSION

Based on the statistical analysis performed, the research findings are as follows:

- Team work has a direct positive effect on the quality of health services. This means that if teamwork increases it will lead to an increase in the quality of health services.
- Work motivation has a direct positive effect on the quality of health services. This means that if work motivation increases, it will lead to an increase in the quality of health services.
- Team work has a direct positive effect on work motivation. This means that if teamwork increases it will lead to an increase in work motivation.

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