



## The Relationship of Health Workers' Workload with the Quality of Interpersonal Communication Services at the West City Health Center

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### ABSTRACT

The workload of health workers at the West City Health Center is characterized by high patient visits, limited number of officers, and administrative tasks that must be completed simultaneously. This condition often causes work pressure and has the potential to disrupt interpersonal communication in the ministry. This study aims to determine the relationship between the workload of health workers and the quality of interpersonal communication in services at the West City Health Center.

The type of quantitative research with the analytical survey method uses a cross-sectional design. The research population of all health workers at the West City Health Center amounted to 58 health workers with a total sampling technique. Data collection using workload questionnaires and interpersonal communication quality questionnaires. Data analysis using the Spearman's Rank test.

Based on data analysis, it was shown that there was no relationship between workload variables and the quality of interpersonal communication in health workers at the West City Health Center with the Spearman's Rank test value  $p$ -value = 0.428 ( $P > 0.05$ ), there was no relationship between workload and the quality of interpersonal communication.

In conclusion, even though the workload is quite high, health workers at the West City Health Center continue to carry out interpersonal communication well between health workers in the service. Suggestions, health workers are expected to maintain effective, empathetic, and open communication with patients and colleagues.

### INTRODUCTION

Health workers in primary care facilities such as health centers are not only required to have clinical competence, but also good interpersonal communication skills so that interactions with patients and colleagues are effective and empathetic. In the theory of health human resource management, workload is defined as the number of tasks or responsibilities that a workforce must complete in a certain period of time, both physically and mentally, and this can affect the quality of a person's performance and work behavior. (Handayani et al., 2025)

The workload is affected by several factors, namely in the form of external factors which include: tasks, work organization and work environment, while for internal factors the workload includes: work time pressure, working hours, *role ambiguity and role conflict*, noise, excessive information, high temperatures, *repetitive actions* and responsibilities.

The World Health Organization (WHO) through the *Workload Indicators of Staffing Need (WISN)* guidelines emphasizes that the preparation of health worker needs must be based on the actual workload faced by health facilities, not solely based on the ratio of personnel to population. This approach ensures a fair distribution of personnel so that the quality of service is maintained and does not cause work fatigue that can affect the quality of communication and patient safety. When the distribution of labor is disproportionate, the consequence is an increase in workload per individual which has an impact on the effectiveness of interpersonal interactions in health services. (World Health Organization, 2023)

According to the Ministry of Health of the Republic of Indonesia (Kemenkes) in 2023, the number of health workers serving in health centers throughout Indonesia reached 521,304 people in 2022, including doctors, nurses,

midwives, nutritionists, and public health workers. However, the distribution is not evenly distributed; Many health centers do not have complete health workers according to standards, especially in remote and border areas. Staffing shortages in some areas cause one health worker to handle more patient burdens than other areas, so the potential for fatigue and decreased service quality increases. (Ministry of Health, 2023)

Workload is an important factor in human resource management in the health sector. Workload includes the volume of tasks, intensity of services, and administrative responsibilities that health workers must carry out in a certain period of time. The condition of inequality shows that nationally there are indeed a large number of health workers available, but the workload borne by each individual is uneven. Health centers with large working areas and high number of patient visits face tough challenges in maintaining optimal service quality. The imbalance between the number of health workers and the volume of work can cause physical and mental stress, as well as have an impact on the deterioration of the quality of communication with patients. (Zota et al., 2023)

Research conducted by showed that interpersonal communication had the greatest influence on nurse loyalty at 34.13%, while workload had the greatest influence on loyalty by 23.22%. This study confirms that the better the interpersonal communication between nurses and between nurses and superiors, the more loyalty to the organization increases, despite the high level of workload. The findings illustrate that interpersonal communication can be a reinforcing variable (moderator) in dealing with high work pressure. Sinaga et al. (2022)

Based on initial observations at the West City Health Center which has around 58 health workers, the author conducted interviews with 7 health workers from various professions, namely 2 nurses, 1 midwife, 1 nutritionist, 1 laboratory worker, 1 surveillance worker, and 1 dentist. The results of the interviews showed that 6 out of 7 health workers carried out dual duties in addition to the main duties of service. This condition reflects the administrative and mental workload, because health workers not only provide direct services to patients, but are also responsible for program implementation, data input, and routine report preparation.

Regarding interpersonal communication, the results of the interview showed that 5 out of 7 health workers said that communication between health workers generally went well, especially because of the habit of coordinating when services are crowded and when there are officers who are not on site. However, 4 out of 7 speakers revealed that there are still communication dynamics in the implementation of daily services. These forms of dynamics include miscommunication related to data differences between programs, miscommunication of information when services are crowded, and coordination obstacles when certain personnel are not present so that tasks must be taken over by other officers. The purpose of this study is to analyze the relationship between the workload of health workers and the quality of interpersonal communication in services at the West City Health Center.

## RESEARCH METHODS

Types of quantitative research with analytical survey research methods. This research was carried out at the West City Health Center located in Gorontalo City. This research was carried out for 2 months, namely in January-February 2026. The population in this study includes all health workers working at the West City Health Center, in the period from January 28 to February 6, 2026. With a sample of 58 respondents using *the total sampling technique*. Data were collected using a questionnaire that has been tested for validity and rehabilitation. Data analysis was conducted univariate and bivariate using *the spearman rank p-value = 0.428* test ( $P > 0.05$ ) there was no relationship between workload and the quality of interpersonal communication.

## RESULTS

### Respondent Characteristics

Table 1 Distribution of Health Worker Characteristics by Gender at the West City Health Center

Gender	Total	
	n	%
Male	6	10,3
Women	52	89,7
<b>Total</b>	<b>58</b>	<b>100,0</b>

Source : Primary Data, 2026

Table shows that health workers with a male gender group of 6 people (10.3%), while the most female sex with a total of 52 people (89.7%).

### Characteristics of Respondents by Age

Table 2. Distribution of Health Worker Characteristics by Age at West City Health Center

Age Group (Year)	Total	
	n	%
Early Adulthood (20-29)	9	15,5
Middle Adult (30-39)	25	43,1
Late Adulthood (40-49)	17	29,3
Advanced Adults (50-59)	7	12,1
<b>Total</b>	<b>58</b>	<b>100,0</b>

Source : Primary Data, 2026

Table 4.3 shows that health workers with the most age group at the age of 30-39 years (middle adults) are 25 people (43.1%), while the least are at the age of 50-59 years (advanced adults) with a total of 7 people (12.1%).

### Characteristics of Health Workers Based on Education

Table 3. Distribution of Health Worker Characteristics Based on Education at the West City Health Center

Education	Total	
	n	%
High School	2	3,4
D1	5	8,6
D3	21	36,2
D4	4	6,9
S1	20	34,5
S2	2	3,4
Profession of Physician	1	1,7
NERS	3	5,2
<b>Total</b>	<b>58</b>	<b>100,0</b>

Source: Primary Data, 2026

Table 3 shows that the most health workers with the most education are in D3 Education as many as 21 people (36.2%), while the least is in Medical Professional Education with a total of 1 orang (1.7%).

### Distribution of Health Worker Characteristics by Occupation

Table 4. Distribution of Health Worker Characteristics Based on Work at West City Health Center

Jobs	Total	
	n	%
ASN	36	62,1
Full-Time P3K	7	12,1
Part-Time P3K	15	25,9
<b>Total</b>	<b>58</b>	<b>100,0</b>

Source : Primary Data, 2026

Table 4 shows that health workers with the most jobs are ASN with 36 people (62.1%), while the least is Full-Time P3K jobs with 7 people (12.1%).

### Distribution of Health Worker Characteristics by Working Period

Table 5 Distribution of Health Worker Characteristics Based on Working Period at West City Health Center

Tenure (Years)	Total	
	n	%
< 1 Year	5	8,6
1-5 Years	11	19,0
6-10 Years	13	22,4
11-20 Years	22	37,9

Tenure (Years)	Total	
	n	%
≥ 20 Years	7	12,1
<b>Total</b>	<b>58</b>	<b>100,0</b>

Source : Primary Data, 2026

Table 6 shows that health workers with the most working period groups in the 11-20 years of service period amounted to 22 people (37.9%), while the group of the least working period in the 1-year working period < 5 people (8.6%).

### Univariate Analysis

#### Distribution of the Number of Health Workers by Workload

Table 7. Distribution of the Number of Health Workers Based on Workload at West City Health Center

Workload	Total	
	n	%
Lightweight	1	1,7
Medium	17	29,3
Weight	40	69
<b>Total</b>	<b>58</b>	<b>100,0</b>

Source : Primary Data, 2026

Table 7 shows the number of health workers who experienced a light workload of 1 person (1.7%), a medium workload of 17 people (29.3%), and a heavy workload of 40 people (69%).

#### Distribution of the Number of Health Workers Based on the Quality of Interpersonal Communication

Table 1 Distribution of the Number of Health Workers Based on the Quality of Interpersonal Communication at the West City Health Center

Quality of Interpersonal Communication	Total	
	n	%
Less	4	6,9
Good	54	93,1
<b>Total</b>	<b>58</b>	<b>100,0</b>

Source : Primary Data, 2026

Table 8 shows that the number of health workers who have a poor quality of interpersonal communication is 4 people (6.9%), while the number of health workers who have good quality of interpersonal communication is 54 people (93.1%).

### Bivariate Analysis

The Relationship between Health Workers' Workload and the Quality of Interpersonal Communication in Services at West City Health Centers

Table 2 Cross-tabulation of Health Workers' Workload with Interpersonal Communication Quality at West City Health Center

Workload	Quality of Interpersonal Communication				Total		P- Value
	Good	%	Less	%	n	%	
Lightweight	1	1,7	0	0	1	1,7	0,428
Medium	15	25,9	2	3,4	17	29,3	
Weight	38	65,5	2	3,4	40	69	
<b>Total</b>	<b>54</b>	<b>93,1</b>	<b>4</b>	<b>6,9</b>	<b>58</b>	<b>100%</b>	

Source : Primary Data, 2026

Table 9 shows that of 1 health worker with a light workload (1.7%), have good interpersonal communication quality. Furthermore, of the 17 health workers with a moderate workload (29.3%), 15 people (25.9%) had a good quality of interpersonal communication, while 2 people (3.4%) had poor interpersonal communication quality. Meanwhile, of the 40 (69%) health workers with heavy workloads have good interpersonal communication quality, namely 38 people (65.5%), and as many as 2 people (3.4%) have poor interpersonal

communication quality. Overall, of the 58 health workers, 54 people (93.1%) had good interpersonal communication quality and 4 people (6.9%) had poor interpersonal communication quality.

The results of the statistical test using *the Spearman's Rank* test obtained a  $p\text{-value} = 0.428$  ( $p > 0.05$ ), so it can be concluded that there is no significant relationship between the workload of health workers and the quality of interpersonal communication in services at the West City Health Center.

## DISCUSSION

### Analysis of the Workload of Health Workers at the West City Health Center

Health workers who experience a light workload of 58 health workers are 1 (1.7%) health workers. This is because, 1 health worker works as a counter guard where the health worker only guards the counter from working hours from 08.00-12.00 WITA while the other 2 counter guards are on duty until 14.00 WITA. So, the health worker does not feel pressure in their work. It can be seen from the indicators of time burden and mental business burden, namely that health workers are not fully burdened with work targets in a certain time and do not dominantly feel high psychological pressure in the implementation of their work.

As for 17 (29.3%) health workers who experienced a moderate workload, it showed that the demands of the work felt were in a balanced condition. This is because health workers who have a moderate workload are in the field of nutrition where the workload tends to be carried out at certain times, such as weighing activities, counseling, or scheduled nutrition services. This condition causes the workload felt by health workers to still be able to complete work according to the specified time without experiencing excessive pressure. It can be seen from the indicators of time load, mental effort load and psychological load that show a balanced workload. Medium workload reflects optimal working conditions, where health workers can carry out health service tasks effectively and still maintain performance quality.

Health workers who experienced heavy workload from 58 health workers were 40 people (69%). Of the three indicators in the workload questionnaire, respondents agreed with the statement that workload can arise from time burden, mental workload and psychological burden. This is because health workers feel high job demands, both in terms of the number of patients, time pressure, and service responsibilities. Health workers who often experience heavy workloads are doctors, nurses, laboratory staff and survey personnel whose work requires a high level of responsibility, precision, and the ability to make decisions quickly and precisely. Based on the results of the questionnaire, heavy workload is characterized by high demands on time load, mental workload, and psychological pressure, such as the number of jobs that must be completed in a short time, high concentration requirements, and work risks that have a direct impact on patient safety. It can be seen from the indicators of time burden and mental workload that show a high burden where health workers show the demands of completing tasks in a limited time, work done simultaneously, and pressure to complete work immediately. Heavy workload can be caused by the high number of patient visits, limited number of health workers, and administrative obligations that must be completed along with direct services to patients. This high work pressure has the potential to cause physical and mental fatigue if not managed properly. (Arnis et al., 2024)

This is in line with the research where Indah Lestari et al. (2024) the results of the research were obtained from 117 respondents, namely a fairly high workload of 63 respondents (53.8%), and a high workload of 33 respondents (28.2%). From each category contained in the research questionnaire, respondents agreed with the statement that workload can arise from physical workload, mental workload.

### Analysis of the Quality of Interpersonal Communication at the West City Health Center

Based on the results of the study, an interpersonal communication questionnaire was used which included several indicators, namely openness, empathy, supportive attitudes, positive attitudes, and equality. Each indicator was assessed based on respondents' perceptions, then summed up to obtain a total score of the quality of interpersonal communication. The quality score categories of interpersonal communication were categorized into good ( $\geq 36$ ) and poor ( $< 36$ ). The results showed that out of 58 health workers, 54 people (93.1%) had good interpersonal communication quality, while 4 people (6.9%) had poor interpersonal communication quality. This is because these health workers have not fully built openness, mutual respect, and a supportive atmosphere between colleagues. It can be seen from the questionnaire indicators where there is an imbalance where there is no openness in conveying information between colleagues so that interpersonal communication is lacking, and in the indicators of empathy, support and equality, respondents answered that in empathy between colleagues there is less attention to colleagues who are in difficulty and there is no support and assistance provided between colleagues towards others. So that there is less interpersonal communication which causes hampered services and cooperation between colleagues. . Sankaran (2023) In order for interpersonal communication to take place effectively, there are several aspects that must be considered, namely Openness, which is the willingness to open oneself in revealing information honestly according to the actual circumstances of interacting. The second is Empathy, which is the ability of a person to know what another person is going through at a certain moment, from the perspective of another person, through the eyes of others. The third is a supportive attitude. Support includes three things. First, *descriptiveness*, a descriptive atmosphere helps create a supportive attitude. Second, *spontaneity*, which is the ability of a person to communicate spontaneously and frankly who has an open attitude in conveying his thoughts.

Third, *provisionalism*, the ability to think openly. The fourth is Positive Attitude, which is a person's ability to view themselves positively and feel positive when communicating, and the fifth is Equality, Interpersonal communication will be effective if the atmosphere is equal. That is, there must be recognition from both sides that it is equally valuable and valuable and that there is something important to contribute.

Health workers with good interpersonal communication quality showed that the scores obtained were in the high value range with a score ( $\geq 36$ ), which reflected the ability of health workers to be open, show empathy, provide support, and maintain a positive attitude and equality in service interactions. On the other hand, health workers with poor interpersonal communication quality with scores ( $< 36$ ) indicating that the scores obtained were in the low value range. This is due to obstacles in one or more indicators of interpersonal communication, such as lack of openness or empathy in interacting with patients.

This is in line with the study Murharyati et al. (2023) which showed that of the 44 respondents of the study nurses, 44 respondents (100%) had interpersonal communication in the good category and 0 respondents (0%) were in the poor category. So this is in line because most health workers have good interpersonal communication quality. This is also in line with the research by Ryandini et al. (2025) showing the results of the research from 286 health worker respondents there were 253 respondents in the good category (88.5%) and the quality of interpersonal communication in the poor category as many as 33 respondents (11.5%).

### **The Relationship between Workload and the Quality of Interpersonal Communication in Services at the West City Health Center**

Based on the results of the analysis of 58 health workers between the workload of health workers and the quality of interpersonal communication using the *Spearman's Rank* statistical test,  $p\text{-value} = 0.428$  ( $p > 0.05$ ) was obtained that there was no significant relationship between the workload of health workers and the quality of interpersonal communication in services at the West City Health Center. This is because even though health workers face heavy workloads, they are still able to maintain good interpersonal communication in service. This condition can be caused by the professionalism of health workers who require them to continue to provide optimal services, including in terms of communication with patients. In addition, these conditions can also be influenced by the work experience of health workers who have been working for a long time, even up to decades, so that they are used to and able to adapt to high workloads.

A total of 54 people (93.1%) health workers have good interpersonal communication quality, while only 4 people (6.9%) have poor communication. This high percentage of good communication shows that in general, health workers at the West City Health Center have been able to implement interpersonal communication effectively in health services, both in interactions with patients and in coordination with colleagues. This is because interpersonal communication is an important part of health services and is also because the work environment that demands teamwork and professionalism is also a factor that encourages health workers to maintain good interpersonal communication quality. However, there are still 4 health workers who have poor interpersonal communication, this may be due to individual and situational factors, such as fatigue, service pressure at certain times, and differences in ability to manage stress so that it can affect openness, empathy, and effectiveness of communication in service.

In the light workload category, all respondents, namely 1 person (1.7%), showed good interpersonal communication quality. This condition is in accordance with workload theory which states that when the demands of the job are within the limits of the individual's ability, the psychological condition tends to be stable and does not cause significant stress. In the medium workload category, as many as 15 people (25.9%) had good interpersonal communication and 2 people (3.4%) had poor communication. This condition shows that at a moderate workload level, health workers are still able to maintain good communication. This can be caused because the perceived work demands, such as work targets in a certain time, performing several tasks at the same time, and the existence of work that must be completed immediately, are still within the limits of individual abilities so that they can be managed properly. However, there are still 2 people who show poor interpersonal communication which can be attributed to moderate workload conditions caused by health workers experiencing limitations in interacting optimally, resulting in low openness, lack of empathy, lack of support, as well as less positive communication attitudes and lack of equality in expressing opinions to colleagues. Even though the workload is in the medium category, individuals still have sufficient capacity to manage the demands of the job while maintaining the quality of interpersonal communication.

Health workers in the heavy workload category of 58 health workers, as many as 38 people (65.5%) still showed good interpersonal communication and 2 people (3.4%) showed poor communication. This condition shows that despite being at a high workload, most health workers are still able to maintain the quality of interpersonal communication. This can be because health workers are used to facing high job demands, such as completing many tasks at the same time, working with a high level of concentration, and facing pressure in decision-making, so that the ability to be open, empathetic, supportive, positive, and equal in communication is maintained. In addition, work experience and the ability to adapt to dynamic work situations also allow health workers to remain able to communicate effectively even in heavy workload conditions. However, there are respondents who show poor communication, which can be attributed to the high demands of work that have the potential to cause

limitations in interacting optimally, such as decreased openness, empathy, and support in communication. This condition shows that heavy workload does not always have a negative impact on interpersonal communication, because the ability of individuals to manage work pressure, experience, and adaptation to the work environment has an important role in maintaining the quality of communication, although in individuals heavy workloads can still affect interpersonal communication less than optimally. However, the results of this study show that 38 (65.5%) of the health workers were still able to maintain good communication despite being in the heavy workload category.

### CONCLUSION

Based on the results of the study, the relationship between the workload of health workers and the quality of interpersonal communication in services at the West City Health Center showed that there was no significant relationship between the workload of health workers and the quality of interpersonal communication in services at the West City Health Center with the statistical test value of *Spearman's Rank* obtained  $P\text{Value} = 0.428$  ( $p > 0.05$ ).

### ADVICE

It is hoped that the next researcher is expected to be an additional reference for developing research and can be carried out with different designs, such as qualitative approaches or *mixed methods*, as well as at a wider location and sample number to obtain more comprehensive results.

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