

Analysis Of Factors Influencing The Use Of The Electronic Application Health Information System - Community Based Nutrition Reporting Recording (E-Ppgbm) In The Makassar City Health Office

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KEYWORDS

benefit/net benefit; e-PPGBM application; HOT-FIT models

ABSTRACT

Until now, Indonesia is still facing nutritional problems. The three burdens of malnutrition currently faced include undernutrition, hidden hunger, and excess body weight. This condition has encouraged the Indonesian Ministry of Health to develop an electronic application information system for Community-Based Nutrition Reporting Recording (e-PPGBM). Makassar City has implemented the e-PPGBM information system, but until now, the level of user acceptance cannot be known because there is no related research. This study aims to analyze the factors that influence the use of the electronic Health Information System application - Community Based Nutrition Reporting Recording (e-PPGBM) in the Makassar City Health Service. This type of research is quantitative research namely analytical observational with a cross sectional study approach. The sample for this study used total sampling, namely all officers using the e-PPGBM application in 47 Community Health Centers. Data collection with a questionnaire using Google Form. Processing uses the chi square test and logistic regression test. Based on the research results, it shows that system use does not have a significant influence on benefits/net benefits with $p \text{ value} = 0.818 \geq 0.05$, user satisfaction has a significant influence on benefits/net benefits with $p \text{ value} = 0.009 < 0.05$, organizational structure does not have a significant influence on benefits/net benefits with $p \text{ value} = 0.525 \geq 0.05$, the organizational environment has a significant influence on benefits/net benefits with a value of $p = 0.003 < 0.05$, system quality has a significant influence on benefits/net benefits with $p \text{ value} = 0.006 < 0.05$, information quality has a significant influence on benefits/net benefits with a value of $p = 0.001 < 0.05$, service quality has a significant influence on benefits/net benefits with $p \text{ value} = 0.005 < 0.05$.

1. Introduction

"Health is a Fundamental Human Right" is a concept of the World Health Organization (WHO) to ensure that everyone can live healthily to produce¹. The world is currently still faced with the problems of hunger and malnutrition. According to the Food and Agriculture Organization (FAO) report, the number of people suffering from malnutrition in the world reached 768 million people in 2020, an increase of 18.1% from the previous year of 650.3 million people. Until now, Indonesia is still facing nutritional problems. The three burdens of malnutrition currently faced include undernutrition, hidden hunger, and excess body weight. This threatens survival, children's growth and development, and the development of the nation.

Facing nutritional problems is one of the 17 goals to be achieved from Indonesia's Sustainable Development Goals (SDGs) for Health, with the main target of eliminating hunger and malnutrition for toddlers and adults by 2030. One third of toddlers in the world still experience malnutrition, namely short stature. (stunting), being thin (wasting), or being overweight².

Children are the next generation who must be considered carefully. Mistakes in development from birth will have fatal consequences for the future. These fatal consequences not only affect himself but also his parents, people around him and also the country³.

Based on the 2022 Indonesian Nutritional Status Study (SSGI) carried out by the Health Development Policy Agency (BKPK) of the Ministry of Health, it was found that the prevalence of underweight and very underweight toddlers was 17.1%. Meanwhile, based on growth monitoring activities in 2022 reported via electronic Community-Based Nutrition Reporting and Reporting (e-PPBGM), the percentage of babies under two months (underweight) is 1.1% and underweight toddlers is 5.6%. The

province with the highest percentage of very underweight and underweight is West Papua Province, while the lowest province is South Sumatra Province. Apart from that, 1.1% of toddlers are very underweight and 6.2% are underweight as depicted in Figure 5.42. The province with the highest percentage is East Nusa Tenggara, while the province with the lowest percentage is South Sumatra Province.

Human Resources (HR) are the main factor needed for successful national development. The quality of human resources is a harmonious and balanced guide between physical, mental (spiritual) and social⁴. In this modern era, it cannot be denied that information technology has become one of the main resources in an organization which plays an important role in increasing competitiveness and optimal service.⁵

In the current era, technology in the fields of health and information is developing very rapidly. Currently, the health sector is very dependent on developments in information technology to provide fast and accurate services to the public⁶. There is an opinion that the health system must develop more quickly and efficiently in order to better meet existing and emerging needs⁷. One form of implementation is through a service system that utilizes information technology through the use of a computer-based information system⁸.

The Community-Based Nutrition Recording and Reporting information system (e-PPGBM) is a nutrition information system platform developed by the Ministry of Health since 2016 and is used to determine data on community nutritional status and the nutritional status of toddlers in each region. This information system is Web and Android based so it can be used on computers and mobile phones⁹. Data on the nutritional status of toddlers and the community produced by the e-PPGBM information system can be used as a basis for planning activities and evaluating policies made by policy stakeholders. In fact, in terms of health management at the district/city, provincial and central levels, the e-PPGBM application information system has not played much of a role because it has not produced accurate and timely data/information.¹⁰ The application of this application is because community nutrition data is a data requirement in several areas or areas to know the extent of existing nutritional problems as a basis for planning activities, evaluating performance and interventions taken by policy stakeholders.¹¹

Makassar City Health Service In an effort to improve the quality of public health services, several non-inpatient health centers have had their status upgraded to inpatient health centers in 2020. The number of community health centers in Makassar City consists of 47 units, consisting of 35 non-inpatient health centers and 12 inpatient health centers, and 33 Subsidiary Health Centers. The ratio of community health centers per 100,000 population is 47 community health centers divided by the entire population of Makassar City multiplied by 100,000 residents. This requires the puskesmas to build an Information System, namely the Puskesmas Information System.

In running the information system through the use of the e-PPGBM application from the user's point of view (Puskesmas nutrition officers) within the work area of the Makassar City Health Service, it is useful to assist in carrying out work in reporting nutrition programs. However, in collecting initial data during an interview with the head of the family health and nutrition section in the Public Health sector, it was revealed that there were still several obstacles faced by users (Puskesmas nutrition officers). Data on toddlers from cadres cannot yet be reported optimally on the e-PPGBM application, there is 70% of the achievement of toddler data that can be reported on the use of the Electronic Community-Based Nutrition Recording and Reporting (e-PPGBM) application from 47 task implementing units called Community Health Centers under the region services from the Makassar Health Service, lack of nutrition workers at the Community Health Center, nutrition workers still carry out double duties, cadres are volunteer workers who are recruited to help run health services, including recording reports at the Posyandu.

The implementation of the e-PPGBM Information System still often encounters several obstacles, so it is necessary to conduct research on the use of the e-PPGBM information system. This Hot Fit model

was chosen by researchers because this model is complete and best suits the existing problem conditions compared to other models, where this model places 3 important aspects, namely human, technological and information aspects in evaluating an information system (Krisbiantoro et al, 2015). This HOT FIT method is in line with research conducted by the HOT FIT method. This method is in line with research conducted by (Mulyadi & Abdul, 2017; Anis & Lutfan, 2018; and Dewi et al, 2021) who use the HOT FIT model method in evaluating success an information system¹².

2. Methodology

This research is quantitative research using a cross sectional study approach. The sample for this study used total sampling, namely all officers using the e-PPGBM application in 47 Community Health Centers. Data collection uses a questionnaire instrument. Data processing uses the SPSS application with data analysis using univariate, bivariate with the chi square test and multivariate with the binary logistic regression test. This research has received ethical approval Number: 937/UN4.14.1/TP.01.02/2024.

3. Result and Discussion

Respondent characteristics include gender, age, and Length of Use of the e-ppgbm Application can be seen in the following table.

Table 1. Distribution Based on Respondent Characteristics in the Working Area
Makassar City Health Service in 2024

Characteristics	Frequency (n=74)	Percent (%)
Gender		
Woman	43	91.5
Man	4	8.5
Age		
26-35 years old	6	12.8
36-45 years old	18	38.3
46-55 years old	11	23.4
56-65 years old	12	25.5
Length of Use of the e-ppgbm Application		
1-3 years	12	25.5
4-5 Year	29	61.7
4-6 > 5 years	6	12.8
Total	74	100.0

Table 1 shows that the majority of research respondents were female, namely 43 nurses (91.5%). Based on the age of the officers, the majority were 36-45 years, 18 people (38.3%). Meanwhile, the highest length of use of the e-PPGBM application was 4-6 years, as many as 29 people (61.7%).

Table 2. Distribution of Respondents Based on the Variables studied in Makassar City Health Service in 2024

Variable	Frequency (n = 74)	Percent (%)
System Usage		
Not good	21	44.7

Good	26	55.3
User Satisfaction		
Not good	30	63.8
Good	17	36.2
Organizational structure		
Not good	3	6.4
Good	44	93.6
Organizational Environment		
Not good	30	63.8
Good	17	36.2
Quality System		
Not good	32	62.7
Good	15	29.4
Information Quality		
Not good	33	64.7
Good	14	27.5
Service Quality		
Not good	35	68.6
Good	12	23.5
Total	74	100

Table 2 shows that the majority of officers have good use of the system (55.3%). Officer user satisfaction in useElectronic-Recording of Community-Based Nutrition Reporting (e-PPGBM) is in the poor category (63.8%), organizational structure is in the good category, namely (93.6%), organizational environment is in the poor category (63.8%), System quality in the use of electronic-Recording Community-Based Nutrition Reporting (e-PPGBM) is in the poor category (62.7%), the quality of information in the use of electronic Community-Based Nutrition Reporting (e-PPGBM) is in the poor category (64.7%), while the quality of service in the use of electronic- Recording of Community Based Nutrition Reporting (e-PPGBM) is in the poor category (68.6%).

Table 3. Bivariate AnalysisDeterminantBenefits/ Net Benefits at the Makassar City Health Service in 2024

Variable (System use, user satisfaction, organizational structure, organizational environment, system quality, information quality, service quality)	Benefit/ <i>Net Benefits</i>				Total		Mark <i>p</i>
	Not good		Good				
	N	%	n	%	N	%	
Not good	8	10.3	13	10.7	21	100	0.181
Good	15	12.7	11	13.3	26	100	
Not good	13	17.2	17	12.8	30	100	0.009

Good	14	9.8	3	7.2	17	100	
Not good	2	1.5	1	1.5	3	100	0.525
Good	21	21.5	23	22.5	44	100	
Not good	22	17.2	8	12.8	30	100	0.003
Good	5	9.8	12	7.2	17	100	
Not good	14	18.4	18	13.6	32	100	0.006
Good	13	8.6	2	6.4	15	100	
Not good	24	19.0	9	14.0	33	100	0.001
Good	3	8.0	11	6.0	14	100	
Not good	16	20.1	19	14.9	35	100	
Good	11	6.9	1	5.1	12	100	0.005

Table 3 shows that the results of bivariate statistical tests show that the system usage variable has a value of $p=0.181 \geq 0.05$, user satisfaction variable with $p \text{ value}=0.009 > 0.05$, organizational structure variable with $p \text{ value}=0.525 \geq 0.05$, organizational environment variable with $p \text{ value}=0.003 < 0.05$, system quality variable with a value of $p=0.006 < 0.05$, information quality variable $p=0.001 < 0.05$, service quality variable with $p \text{ value}=0.005 < 0.05$. This results show that there is an influence on user satisfaction, organizational environment, system quality, information quality and service quality utilization *electronic*-Recording of Community Based Nutrition Reporting (E-PPGBM) at the Makassar City Health Service, and there is no influence on system use and organizational structure utilization *electronic*-Recording of Community Based Nutrition Reporting (E-PPGBM) at the Makassar City Health Service.

Table 4. Analysis Multivariate Simple Logistic Regression Which Has the Most Influence on Benefits/ Net Benefits at the Makassar City Health Service in 2024

Variable	B	S.E	Wald	Df	Sig.	Exp (B)
User satisfaction	-.168	,190	,783	1	,376	,845
Organizational environment	-.269	,238	1,326	1	,249	,764
System quality	-.383	,232	2,736	1	,098	,682
Information quality	,846	,321	6,942	1	,008	2,330
Quality of service	-.644	,153	,823	1	,364	,871

Table 4 shows that the information quality variable is statistically significant at $p < 0.05$. This means that the information quality variable has the most influence on benefits/Net Benefits, seen from the $\exp \beta$ value of information quality which is greater than the other four variables, namely user satisfaction, organizational environment, system quality, information quality and service quality.

Discussion

Use of the System with Benefits/Net Benefit

System use is the output of an information system such as reports as a form of assessing the success of the system. System use is also related to the people who use it, level of use, training, literacy knowledge and skills in using computers, beliefs, expectations of the user's implementation of the system, and acceptance or rejection.

System users include the level of use (frequency, duration), use of how the system works, experience/skills, resistance and training¹³.

The results of this research show that there is no significant influence between system use and benefits at the Makassar City Health Service. This is shown by the p value = $0.181 > 0.05$, which means H_0 (Null Hypothesis) is accepted. The results of the influence of system use on benefits show that 24 nutrition officers (24.0%) have good net benefits, of which 13 people (10.7%) have good system use and 11 people (13.3%) have poor use of the system. Meanwhile, 23 nutrition officers (23.0%) had poor net benefits, of which 15 people (12.7%) had good use of the system and 8 people (10.3%) had poor use of the system.

It is known that of the 24 nutrition officers who have good benefits/net benefits, there are 13 people who have good use of the system, and of the 23 nutrition officers who have poor benefits/net benefits, there are 8 people who have poor use of the system. This proves that whether an information system is useful or not is not influenced by the high intensity of use of the system. Intensity of use does not affect the net benefits because users in carrying out their duties are not only related to the application but there are several other jobs that are not directly related to existing processes.

The results of this research are in line with (Sari, 2023), namely that the use of information systems has no effect on net benefits, which states that the high behavioral intention of users to use the system has been empirically proven to have no significant effect on the net benefits obtained.⁸ This research is also not in line with research (Faigayanti, 2022). Based on the regression equation analysis, it can be seen that the System Use coefficient value is 0.246 which is positive. If SIMRS usage is increased by 1%, it will increase the benefits of SIMRS Khanza by 24.6%.⁸

This is not in line with research conducted by (Fitriani, 2022). The use of nutritional information systems such as e-PPGBM can also be influenced by certain factors. There are also a number of studies that have tried to look at these various factors. Evaluation of the nutritional information system (SIGIZI) in Trenggalek using the extended TAM model found that use of the nutritional information system was influenced by self-efficacy, perceived usefulness, perceived ease, and intention to use. However, no influence of attitude was found on the use of SIGIZI. A similar evaluation was also carried out to assess the use of the nutrition information system in Jember Regency using the TAM evaluation model. All variables in the TAM evaluation model construct were found to have a positive relationship with the use of the implemented nutrition information system¹⁴.

The use of the e-PPGBM information system is good, it can be seen in terms of the level of system use, user attitudes in using the system, user knowledge and user acceptance of the e-PPGBM information system. However, question number 4, namely in terms of user attitudes, received the lowest score from all indicators of system use because many users felt they were not too dependent on the e-PPGBM information system in carrying out their work. Meanwhile, question number 1 received the highest score from all indicators of system use because in terms of the level of system use, the e-PPGBM information system is often used by users to record and report the nutritional status of the community¹².

User Satisfaction with Benefits/Net Benefit

User satisfaction is the act of evaluating all activities in using an application. In this case it refers to perceived usefulness and user satisfaction¹³. The potential impact of the system and the user's overall experience in using the system is defined as user satisfaction¹⁵.

The results of this research show that there is a significant influence between user satisfaction and benefits at the Makassar City Health Service. This is shown by the p value = $0.009 < 0.05$, which means H_0 (Null Hypothesis) is rejected. The results of the influence of user satisfaction on benefits show that 27 nutrition officers (27.0%) have poor benefits/Net Benefits, of which 14 people (9.8%) have satisfied user satisfaction and 13 people (17.2%) which has dissatisfied user satisfaction. Meanwhile, 20 nutrition officers (20.0%) had good net benefits, of which 17 people (12.8%) had dissatisfied user satisfaction and 3 people (7.2%) had satisfied user satisfaction.

The results of the analysis show that the distribution of respondent satisfaction is less, there are 17 respondents with good benefits/net benefits, while there are 3 respondents with satisfied users with

good benefits/net benefits. This research is also in line with research (Sari, 2023) that user satisfaction with the e-PPGBM information system is good, it can be seen in terms of satisfaction felt by users and user satisfaction with the e-PPGBM information system. However, question number 4 is in terms of getting the lowest score from all user satisfaction indicators because many users are not satisfied with the service received from the service provider. Meanwhile, question number 1 received the highest score from all indicators of system satisfaction because users of the e-PPGBM information system were satisfied with the existence of this information system because it can make it easier and easier for users to manage nutritional data.¹².

Research (Herwati, 2022) which shows the results that there is a relationship between user satisfaction and benefits (net benefit)¹⁶. These results are in line with previous research which states that the level of satisfaction has an influence on system benefits, where the higher the value of the influence of user satisfaction on benefits (net benefit), the higher the value of system utilization.

Organizational structure

Organizational structure consists of nature including type and size, culture, politics and hierarchy, autonomy, systems, planning and control, strategy, management and communication. Leadership support from top management and sponsorship of medical personnel can also be measured from organizational factors¹⁶.

The results of this research show that there is no influence between organizational structure and benefits at the Makassar City Health Service. This is shown by the p value = $0.525 < 0.05$, which means H_0 (Null Hypothesis) is accepted. The results of the influence of organizational structure on benefits show that 24 nutrition officers (24.0%) have good benefits/Net Benefits, of which 23 people (22.5%) have a good organizational structure and 1 person (1.5%) has poor organizational structure. Meanwhile, 23 nutrition officers (23.0%) had poor net benefits, of which 21 people (21.5%) had a good organizational structure and 2 people (1.5%) had a poor organizational structure.

In this research, there were 24 nutrition officers who had good benefits/net benefits, there were 23 people who had a good assessment of the organizational structure, and of the 23 nutrition officers who had poor benefits/net benefits, there were 21 people who had a good assessment of the organizational structure. This shows that even though top management support for the implementation of the e-PPGBM information system is good, it does not guarantee that the use of the e-PPGBM Health information system application provides good net benefits.

This research is in line with research (Sari, 2023) that the results of data analysis that have been carried out show that organizational structure is not related and has an effect on net benefit⁸. The results of this research are in accordance with research by Hendra et al. (2015) which states that organizations cannot directly increase system users' perceptions of benefits or net benefits. Betri's (2017) research also explains that encouragement from the organization can only significantly motivate users to use the system. Once users are motivated to use the system, then only then will they be able to increase the perception of usefulness (net benefit) and the quality of the technological factor must still be developed and improved.

This research is not in line with research (Sari, 2023) that user satisfaction with the e-PPGBM information system has an influence, this shows that user satisfaction with the e-PPGBM information system is good, it can be seen in terms of strategy and top management support for the implementation of the e-PPGBM information system. However, in question number 2 or last, in terms of support, top management received the lowest score from the two organizational structure indicators because management has not fully provided support for the implementation of the system. This can be seen from the lack of a firm attitude from management towards system users who often delay. input nutritional data into the system. Meanwhile, question number 1 received the highest score from all organizational structure indicators because the e-PPGBM information system is quite good in terms of recording and reporting nutritional status¹².

Organizational Environment (Environment)

The organizational environment is an organizational component which is implemented from aspects consisting of government sources, politics and inter-organizational relations.

The results of this research show that there is an influence between the organizational environment and benefits at the Makassar City Health Service. This is shown by the p value = $0.003 < 0.05$, which means H_0 (Null Hypothesis) is rejected. The results of the influence of the organizational environment (environment) on benefits show that 27 nutrition officers (27.0%) have poor benefits/Net Benefits, of which 22 people (17.2%) have a poor organizational environment (environment) and 5 people (9.8%) who have a good organizational environment. Meanwhile, 20 nutrition officers (20.0%) had good net benefits, of which 12 people (7.2%) had a good organizational environment and 8 people (12.8%) had a good organizational environment. not good.

In this research, there were 27 nutrition officers who had poor benefits/net benefits, 22 people had poor assessments of the organizational environment, and of the 20 nutrition officers who had good benefits/net benefits, there were 12 people who had good assessments of the organizational environment. . This shows that the support of the organizational environment for the implementation of the E-PPGBM information system is good and can guarantee that the use of the E-PPGBM Health information system application provides good net benefits.

This research is in line with (Fitriani, 2022) that the results of the research that has been carried out show that the organizational system environment is related to net benefits. Erlirianto (2015) shows that the organizational environment shows a significant influence on the implementation of information systems. The regulations in force in an organization will influence management information system development plans and the policies implemented by the organization in implementing its information system⁸.

According to (Sari, 2023) that the role of the organizational environment in implementing the E-PPGBM information system is good. This can be seen from the perspective of government and relationships between organizations. Where there are regulations from the Minister of Health of the Republic of Indonesia regarding the Implementation of Nutrition Surveillance Techniques and good information system flow¹².

System Quality

System quality is used to measure the quality of the organization's own system. Several indicators to measure the value of system quality are ease indicators which include: easy to use (ease of use) and easy to learn (ease of learning), efficiency indicators which include response time and loading time.

The results of this research show that there is an influence between system quality and benefits at the Makassar City Health Service. This is shown by the p value = $0.006 < 0.05$, which means H_0 (Null Hypothesis) is rejected. The results of the relationship between system quality and benefits show that 27 nutrition officers (27.0%) have poor benefits/Net Benefits, of which 14 people (18.4%) have poor system quality and 13 people (8.6%) have system quality is good. Meanwhile, 20 nutrition officers (20.0%) had good net benefits, of which 18 people (13.6%) had poor system quality and 2 people (6.4%) had good system quality.

In this research, there were 27 nutrition officers who had poor benefits/net benefits, 14 people had an assessment of the quality of the system that was not good, and of the 20 nutrition officers who had good benefits/net benefits, there were 18 people who had an assessment of the quality of the system that was poor. Good. This shows that even though the system quality regarding the use of the E-PPGBM information system is good, it does not guarantee that the use of the E-PPGBM application health information system provides good benefits/net benefits.

This research is in line with research (Herwati, 2022) which states that the results of the research show that there is an influence of system quality on system users, with the direction of the positive influence

showing that the better the system quality, the better the system users will be. These results are in accordance with several previous studies by Yusog & Arifin (2008); Poluan, F., Lumenta, A., and Sinsuw.

This research is not in line with research (Fitriani, 2022) that the results of data analysis that have been carried out show that system quality is not related to net benefit. This is in accordance with James' theory in Ikhsan and Bustamam (2016) that a system is considered to be running effectively if it is able to meet the needs and desires of quality information for users in the company both individually and as a group. The information is quality if it is accurate, timely, complete and concise⁸.

Sari et al., (2023) that the quality of the E-PPGBM information system is good on average. This can be seen in terms of ease of use, ease of learning, response time, system reliability, security and availability. But in question number 3, namely in terms of system reliability, it gets the lowest score of all system quality indicators because the E-PPGBM information system is used by all Health Services and Community Health Centers throughout Indonesia so that when everyone is accessing E-PPGBM at the same time, the system is often unstable. and often experience errors. Meanwhile, question number 1 gets the highest score from all system quality indicators because users find it easy to use the E-PPGBM information system.

Information Quality

Several indicators used to measure the value of information quality are relevant information, which includes the relevance of the information produced to user needs, and usefulness indicators, which include easy to read, concise and concise, informative, important, - level of reliability. data: data accuracy, timeliness, comparability and verifiability.

Results This research shows that there is a significant influence between the quality of information and benefits at the Makassar City Health Service. This is shown by the p value = $0.001 < 0.05$, which means H_0 (Null Hypothesis) is rejected. The results of the influence of information quality on benefits show that 27 nutrition officers (27.0%) have poor benefits/Net Benefits, of which 24 people (19.0%) have poor quality information and 3 people (8.0%) which has good quality information. Meanwhile, 20 nutrition officers (20.0%) had good net benefits, of which 11 people (6.0%) had good quality information and 9 people (14.0%) had poor quality information.

It is known that 27 nutrition officers have poor benefits/net benefits, there are 24 people who have poor quality information, and of the 20 nutrition officers who have good benefits/net benefits, there are 11 people who have good quality information. This proves that the quality of E-PPGBM information is good. This can be seen in terms of completeness of information, accuracy, readability and relevance of data. This is because the information produced by the E-PPGBM information system is complete starting from individual data by name by address.

This research is in line with research (Sari, 2023) that the quality of information produced by the E-PPGBM information system is good. This can be seen in terms of completeness of information, accuracy, readability and relevance of data. This is because the information produced by the E-PPGBM information system is complete starting from individual data by name by address¹².

This research is not in line with research (Fitriani, 2022) that the results of data analysis that have been carried out show that the quality of information is not related and has no effect on net benefit. According to Yusof et al. (2008), the quality of information is assessed from the level of accuracy and level of relevance of the information data. It is said to be accurate if the information is free from error and is not biased. Meanwhile, information is said to be relevant if the information has benefits for its users⁸.

Service Quality

Service quality is the overall support received from system service providers. Service quality can be assessed by response speed, guarantees and technical support to system users.

The results of this research show that there is a significant influence between service quality and benefits at the Makassar City Health Service. This is shown by the p value = $0.005 < 0.05$, which means H_0 (Null Hypothesis) is rejected. The results of the influence of service quality on benefits show that 27 nutrition officers (27.0%) had poor benefits/Net Benefits, of which 16 people (20.1%) had poor service quality and 11 people had good service quality (6.9%). Meanwhile, 20 nutrition officers (20.0%) had good net benefits, of which 19 people (14.9%) had poor service quality and 1 person (5.1%) had good service quality.

It is known that 27 nutrition officers have poor benefits/net benefits, there are 16 people who have poor service quality, and of the 20 nutrition officers who have good benefits/net benefits, there are 19 people who have poor service quality. This proves that healthcare system maturity may be an important contextual issue to consider, offering flexibility and applicability to a variety of contexts and situations, thus enabling its use in a variety of healthcare integration initiatives.

This research is in line with research (Fitriani, 2022) that the results of the data analysis that has been carried out show that service quality is related to and influences net benefit⁸. Management information system service quality focuses on the overall support received by the system or technology service provider¹⁷.

According to research Sari et al., (2023) that the quality of the E-PPGBM information system service is good. This can be seen in terms of speed of response, guarantee and follow-up service. This is because if the information system experiences an error, the developer provides a good response and if there is notification of a nutritional problem, follow-up services for nutritional problems will be carried out immediately

4. Conclusion and future scope

1. There is no influence between system use and the use of the E-PPGBM application health information system at the Makassar City Health Service.
2. There is an influence between user satisfaction and the use of the E-PPGBM application health information system at the Makassar City Health Service.
3. There is no influence between organizational structure on the use of the E-PPGBM application health information system in the Makassar City Health Service.
4. There is an influence between the organizational environment (Environment) on the use of the E-PPGBM application health information system in the Makassar City Health Service
5. There is an influence between system quality on the utilization of the E-PPGBM application health information system at the Makassar City Health Service.
6. There is an influence between the quality of information on the utilization of the E-PPGBM application health information system at the Makassar City Health Service.
7. There is an influence between service quality on the utilization of the E-PPGBM application health information system at the Makassar City Health Service.
8. The information quality variable is the factor that has the most influence on the utilization of the E-PPGBM application health information system at the Makassar City Health Service.

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