

Optimizing Officer and Cadre Satisfaction with the Family Posyandu Reporting System with (Si Lina Gesit) Google Spreadsheet Online Information System at the Klampis Health Center

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ABSTRACT

Background: Posyandu is a form of Community-Resourced health effort that is managed, by and for the community to empower it and make it easier for the community to obtain health services, especially in the reporting system carried out by village midwives and cadres.

Purpose: Analyzing the satisfaction of officers and cadres with the Family Posyandu Reporting System using (Si Lina Gesit) Google Spreadsheet online information system at the Klampis Community Health Center.

Methods: Type of experimental research: pre-post test One Group Design, sampling technique with purposive sampling, sample size of 44 officers and cadres analyzed statistically using the Wilcoxon test.

Results: There are differences in the Tangible, Reliability, Responsiveness, Assurance and Empathy indicators between before and after the intervention was given, apart from that, based on the Wilcoxon Test analysis on satisfaction, the P value was $(0.000) < \alpha (0.05)$.

Conclusion: There is a difference in satisfaction between before and after the intervention was given to cadres at the Klampis Community Health Center.

Keywords: cadres, family posyandu, google spreadsheet, officers, satisfaction

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BACKGROUND

Posyandu is a form of Community-Resourced health effort that is managed, by and for the community to empower the community and make it easier to obtain basic health services. Posyandu is also an activity post carried out to monitor the health conditions of pregnant women and children under five years (toddlers) every month (Damayanti et al., 2022). The reporting system used by the village midwife and cadres is to do the report manually. After the report has been completed, it is collected when the village midwife calls in the morning at the health center. However, this system is not effective and reporting is always late, manual data is lost and time efficiency is lacking so evaluation is delayed. The use of paper or manuals causes ineffective recording and reporting (Dewi, 2020).

Every month the Village Midwife collects reports on Posyandu activities at the Puskesmas and submits them to the person in charge of the Posyandu, then after the reports have been collected they are recapped and evaluated. The Klampis Health Center working area has 22 villages with a total of 71 Posyandu spread across all villages (Klampis Health Center Profile, 2024). Reports are collected in the form of weighing results, body height, arm circumference, head circumference, nutritional status, and immunization. In collecting village midwife Posyandu reports, it is not timely because many reports are made manually and there are too many records so the data reported is sometimes different between one program and another so that the reporting is not synchronized. The cause of late reports in Posyandu is that the manual data that must be sent from the Posyandu location to the Puskesmas requires a long distance, and the report data made on the assistance card requires a lot of paper, is less efficient and impractical. Posyandu recording and reporting which is done manually creates the possibility of data inconsistencies, namely inconsistent data, and as a result re-recording is carried out (A. R. Pratiwi et al., 2022).

The Si Lina Agile application (Family Posyandu Online Application with Google Sheets) is an application created by the author that is used to facilitate the delivery of Posyandu reports. This system will be implemented for all Posyandu in the Klampis Health Center working area. After completing the Posyandu, the cadres and Village Midwife carry out a data recapitulation then in the application the data can be directly linked and read by the person in charge of the Posyandu at the Puskesmas. The author made this innovation because all work is now digital-based, easy to access, and practical. Of course, village cadres and midwives can easily access it either via laptop or gadget (Wellia Novita et al., 2023).

METHODS

The type of research used in this research is experimental research. The research design in this study is a pre-post-test One Group Design, this design attempts to uncover cause and effect by involving a control group in addition to the experimental group (Suhron, 2024). The variable in this research is the independent variable (SI LINA GESIT) online information system with Google spreadsheet, and the dependent variable is Family Posyandu Reporting. The population in the innovation project were all Family Posyandu Reporting Officers in the Klampis Community Health Center working area and a sample of Family Posyandu Reporting Officers in the Family Posyandu Reporting Officer category in the Klampis Community Health Center working area, cooperative in the research. The sampling technique was purposive sampling. The sample size was 44 officers. This innovation project was carried out by collecting family Posyandu data. The instrument in this innovation project is innovation project satisfaction (SI LINA GESIT) which has indicators of Tangible, Reliability, Responsiveness, Assurance, and Empathy. Statistical analysis uses the Wilcoxon test. The research was

conducted in December 2024, and an ethical feasibility test was carried out at NHM University with Number: 2393/KEPK/UNIV-NHM/EC/XI/2024.

RESULTS

Table 1. Distribution of the frequency of registrar officers

Characteristics Family N (44)	Mean±SD
Age (M)	55±13.2
Gender	N =%
Male	28 (64)
Female	16 (36)
Living in one house with the officer	12 years ±9.2
Marital status	
Divorced	13 (30)
Married	31 (70)
Employment	
Full-time/part-time	12 (27)
Unemployed/retired	32 (73)
Education	
Primary	29 (66)
Middle	12 (27)
High	3 (7)
Characteristics of Registrar N (44)	Mean±SD
	Frequency
Age (M)	19.2±9.3
Gender	N =%
Male	21 (48)
Female	23 (52)
Education	
Primary	10 (23)
Middle	11 (25)
High	23 (42)

Source: primer 2024

Based on the table above, it was found that most of the characteristics of families in this study were Age Mean±SD= (55±13.2), male, namely, 28 (64%), while living in one house with adolescents with an average year 12 years ± 9.2, for marital status, 13 (30%) were Divorced while 31 (70%) Married, for Teenage Family Employment, 12 (27%) Full-time/part-time, 32 (73) Unemployed/ Retired (%), for Education with a Primary level of 29 (66%), Middle 12 (%) 27), High 3 (7%). While most of the characteristics of officers and cadres in this study were female, namely as many as 23 (52%), male 21 (48%), for Education with a Primary level of 10 (23%), Middle 11 (25%), High 23 (42%).

Table 2 Differences in satisfaction of Posyandu reporting auditors between before and after being given the Innovation (Si Lina Gesit) at the Klampis Community Health Center (N=44).

Variable	Pre	Post	P-Value
	Mean±SD Max-Min	Mean±SD Max-Min	
<i>Tangible</i>	13.67±3.082	25.90±2.853	0,000

	(18-6)	(30-21)	
Reliability	4.48±0.994	8.62±0.909	0,000
	(6-2)	(10-7)	
Responsiveness	4.48±1.042	8.57±0.991	0,000
	(6-2)	(10-6)	
Assurance	11.38±2.429	21.67±2.323	0,000
	(15-5)	(25-18)	
Empathy	11.24±2.397	21.52±2.432	0,000
	(15-5)	(25-17)	
<i>Uji Wilcoxon Test</i>			
<i>P-Value</i>	0,000		

Source: primer 2024

Based on Table 4.4, from 42 cadres obtained before being given the intervention, it was found that the value (mean $\pm$ SD) for Tangible Indicators was (13.67 $\pm$ 3.082), Reliability was (4.48 $\pm$ 0.994), Responsiveness was (4.48 $\pm$ 1.042), Assurance was (4.48 $\pm$ 1.042), and Empathy was (11.24 $\pm$ 2.397), whereas after being given the intervention the value was obtained. (mean $\pm$ SD) for Tangible Indicators is (25.90 $\pm$ 2.853), Reliability is (8.62 $\pm$ 0.909), Responsiveness is (8.57 $\pm$ 0.991), Assurance is (21.67 $\pm$ 2.323), and Empathy is (21.52 $\pm$ 2.432). Based on the Wilcoxon Test analysis on all satisfaction indicators, a P value of (0.000) $< \alpha$ (0.05) was obtained, which showed that there was a difference in the indicators of Tangible, Reliability, Responsiveness, Assurance, and Empathy between before and after the intervention was given. Apart from that, based on the Wilcoxon Test analysis on satisfaction, a P value of (0.000) $< \alpha$ (0.05) was obtained, this shows that there was a difference in satisfaction between before and after the intervention was given to cadres at the Klampis Community Health Center.

DISCUSSION

Respondent Characteristics of Families Registrar

Based on the table above, it was found that most of the characteristics of families in this study were Age Mean $\pm$ SD (55 $\pm$ 13.2), the family an elderly age which can help in supporting the registrar in obtaining data about the Posyandu, this is in accordance with other research that health workers can obtain data relating to the current situation, at least known weight and height, pulse, blood pressure, physical complaints and illnesses that the family takes to the Posyandu, the family always advises the elderly to be active in activities at the Posyandu. The results of this research mean that health workers get data about their patterns and way of life, and get data on psychological conditions, which may appear in the physical complaints expressed (Hikmawati, NNL., Sudaryanto, A., Setyawati, 2014). While the characteristics of registrar officers have a high level of education, this is in line with other research that knowledge is a very important domain in shaping a person's actions. Therefore, cadres who have poor knowledge tend to have poor performance and vice versa. Due to the lack of information received and possessed by cadres, cadres' knowledge about Posyandu is not good. Basically, knowledge is one of the factors that influences behavior and actions. Apart from knowledge, lack of education also supports the low performance of Posyandu cadres, and vice versa (Vira Kadek Ni, 2019). Good knowledge will support the realization of good actions as well. The higher the level of knowledge of cadre members, the wider their understanding of their duties, roles, and functions in improving the performance of Posyandu cadres (W. Pratiwi et al., 2024).

Analysis of Reporting Auditor Motivation

Based on the research results, it was found that all satisfaction indicators, namely Tangible, Reliability, Responsiveness, Assurance, and Empathy, experienced an increase in satisfaction, in accordance with other research that there is an influence between the excellence of the health center and the patient's quality of health service (reliability), will always feel happy and satisfied. Responsiveness, assurance, and empathy (Muhammad Fazar Sidiq Alhayat et al., 2023). In the Tangible indicator, comfort is related to health services which are not directly related to clinical effectiveness, but can influence patient satisfaction when reporting and recording Posyandu services and their willingness to return to the family Posyandu health facility to obtain excellent Posyandu services. Convenience is also important because it can influence patient confidence in health services (Permana & Febrian, 2023), moreover, in the Reliability aspect, accurate service is related to the reliability of the ability of health workers to record and report reliably during Posyandu services to provide immediate, accurate service from the first time the patient arrives, without making any mistakes, as well as satisfying the patient so that the patient is truly confident in the ability of health workers and is impressed as good, skilled, and responsible. Being responsible and always informing and reporting good records is required with performance results that must be in accordance with the rules. The better the patient's perception of reliability, the higher the patient satisfaction will be. If the patient's perception of reliability is poor, then patient satisfaction will be lower (Vira Kadek Ni, 2019), it is confirmed that the better the performance of health cadres, the higher the level of satisfaction of mothers of toddlers. From the results of this research, it is hoped that it can improve the performance of cadres in providing services regarding the role of cadres to achieve a goal, namely improving the health of children under five (Ferlina & Kostania, 2023). This is reinforced in other research that there is an influence between the reliability dimension and community satisfaction (Dewi, 2020).

In the Responsiveness aspect, namely, the ability to provide services that are accurate, precise, fast, easy to use, and provide clear information delivery. Ease of use and ease of access are important points in an information system including the Si Lina Gesit Innovation (Online Information System with Google Spreadsheet). The better the convenience felt by application users, the greater their satisfaction will be (Damayanti et al., 2022). As for other research, the statement that the quality of service needs to be improved is that cadres must listen to pregnant women's complaints and inform them of the weighing results based on whether the baby's weight is increasing or decreasing. Based on information obtained from the public, cadres often only fill out the card book for Healthy without providing an explanation if the baby's weight is decreasing (Betty et al., 2019), this is different from research that is related to the willingness and ability of employees to help patients and respond to their requests responsively, as well as informing services appropriately so that if the information is obtained well it will affect patient satisfaction (Hanifah Hasnur, Vera Nazhira Arifin, 2023). It was made clear in other research that there is a relationship between cadre performance and the level of satisfaction with Posyandu services (Indrayani et al., 2022).

Guarantee and certainty (assurance), namely an explanation of how to use the application, as well as the application's ability to create a sense of security and trust for users. The Si Lina Gesit Innovation (Online Information System with Google Spreadsheet) does not store user identities so it is safe from data leaks. Advantages of Si Lina Gesit (Online Information System with Google Spreadsheet). The findings also imply that faculty members should be aware of the growing need for spreadsheet and data analysis capabilities, as well as the rise in the need for teamwork abilities and the number of jobs that permit remote work. To make sure students are comfortable with both, programs should take into account a balance

between in-person and remote work. In order to help students develop collaboration abilities in both online and in-person settings, faculty members should also assess and make sure that there are enough collaborative projects that call for both. In order to make sure that students are exposed to a range of skills, including but not limited to statistical analyses such as trends, descriptive statistics, and regression; pivot tables; and efficient chart and graph techniques, faculty should finally look at the depths and applications of data analysis and spreadsheet skills throughout the curriculum.

Apart from that, the use of the Si Lina Gesit Innovation (Online Information System with Google Spreadsheet) does not interfere with the use of the gadget or the use of other applications contained in the gadget. Became more understanding of making financial reports using Google spreadsheets, so as to be able to provide knowledge and improve their ability to make financial reports (Sulistiani et al., 2022). This service activity seeks to solve the problem of reporting immunization data by implementing Google's cloud computing. The reporting system created will implement Google Looker Studio, App Script, and Google Sheet, making it easier for regional midwives to input data via a user form with CRUD (Create, Read, Update, Delete) features and a reporting dashboard containing graphs and tables that display immunization coverage report data in real-time (Rachmawati et al., 2024). The Google platform offers Google Spreadsheet, a sheet-making tool that can be used to summarize data in the form of tables and columns, and it is readily available for free on Google Drive. It is thought to be less effective and efficient to manage a report of activities carried out conventionally, which involves multiple complex processes and usually takes a long time, so it is highly ineffective to make observations in the form of data collection, by directly observing an existing problem (Aini et al., 2019). The use of Google Spreadsheets can be used as a medium for making financial reports which can provide convenience to perpetrators (Wellia Novita et al., 2023). It can be concluded that the feasibility of using this app from Google is valid after comparing it with manual calculations and with the advantages of automating the results and the interactive graphic dashboard it produces (Novitasari et al., 2022).

As for the Empathy aspect, namely according to user needs, helping users in solving certain problems, understanding the wishes of users or report takers, and can be used at any time. In this case, the Si Lina Gesit Innovation (Online Information System with Google Spreadsheet) can be used if the registrar does not bring the report manually. This monitoring has been designed according to the Posyandu group, in accordance with other research that Posyandu management for the elderly is very important because it will affect the quality of life of the elderly. The management in question includes the elderly Posyandu program (Samsualam et al., 2023). Posyandu activities can find problems or deviations in the child's growth or development, so this reporting becomes the basis that can be carried out by mothers and families who are recorded in reporting with the Si Lina Gesit Innovation (Online Information System with Google Spreadsheet) in order to maintain and care for children's growth and development more effectively.

CONCLUSION

The Lina Agile application (online information system with Google Spreadsheet) is effective in improving Posyandu reporting in the Klampis Health Center working area so as to provide a level of satisfaction on all satisfaction indicators, namely Tangible, Reliability, Responsiveness, Assurance, and Empathy.

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