

## Analysis of the Use of Family Information System Applications for Family Planning Counselors in West Sumbawa Regency

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### Abstract

The objectives of this research are: 1. To determine the development of the Family Planning (KB) Program in West Sumbawa Regency. 2. To analyze the effect of using the Family Information System application on the quality of Family Planning (KB) extension services in West Sumbawa Regency. This research uses a mix of methods, namely quantitative methodology using inferential statistical analysis and qualitative methods using descriptive methods, where this research was conducted to fully or clearly describe the Family Information System Application Innovation for Family Planning Counselors in West Sumbawa Regency. There are generally two types of data, namely quantitative data and qualitative data which will be explained below. The author uses quantitative and qualitative data in carrying out this analysis. Data sources are all forms of information in the form of data. The population in this study were Family Field Officers (PLKB) or Extension Officers spread across 8 (eight) Districts of West Sumbawa Regency. In this study, the sample was 1 (one) person who was responsible as a Family Information System (SIGA) officer at the Family Planning Extension Office (PKB) in 8 (eight) sub-districts. Data collection procedures in research are documentation, questionnaires, interviews and observation. The research results show that the problem of delays in the distribution of monthly reports is a top priority to be resolved. In order for the distribution of this monthly report to run smoothly, the following steps need to be taken: education for data collection officers in villages and sub-districts about the importance of monthly reports being sent on time to districts so that PKB and District Data Managers can report to BKKBN on time, there needs to be supervision the process of sending monthly reports starts from the village, sub-district and district levels so that if problems occur they can be handled immediately, and increasing the number of data collection officers and data managers so that the data collection process can be carried out quickly so that monthly reports can be sent on time. Conclusion on the criteria for data management using the optimal SIGA application. The flow of data and reports from villages, sub-districts, districts and the center or vice versa can run on time and there are no data errors. Data processing officers understand how to use the SIGA application. Suggestions include: In order for the distribution of monthly reports to run optimally, support from data processing officers, internet networks and SIGA servers is needed, SIGA application data is valid, data checking, maintenance and backup processes are needed, efforts can be made to optimize data management using applications SIGA. Addition of data collectors and data managers who have an IT educational background. Periodic SIGA application training for data processing officers, the integration process of three subsystems, namely contraceptive services, field control and family data collection and SIGA application development must be completed immediately and increase the capacity and speed of the SIGA Server and increase internet connection bandwidth.

### Abstrak

Tujuan penelitian ini, adalah: 1. Untuk mengetahui perkembangan Program Keluarga Berencana (KB) di Kabupaten Sumbawa Barat. 2. Untuk menganalisis pengaruh penggunaan aplikasi Sistem Informasi Keluarga terhadap kualitas pelayanan penyuluh Keluarga Berencana (KB) di Kabupaten Sumbawa Barat. Penelitian ini menggunakan mix metode yaitu metodologi kuantitatif dengan menggunakan analisis statistik inferensi dan metode kualitatif dengan metode deskriptif, dimana penelitian ini dilakukan untuk menggambarkan secara utuh atau jelas Inovasi Aplikasi Sistem Informasi Keluarga Bagi Penyuluh Keluarga Berencana di Kabupaten Sumbawa Barat. Ada dua macam jenis data pada umumnya yaitu data kuantitatif dan data kualitatif yang akan di jelaskan di bawah ini, penulis menggunakan data kuantitatif dan kualitatif dalam melakukan analisis ini. Sumber data adalah segala bentuk informasi berupa data. Populasi dalam penelitian ini merupakan Petugas Lapangan Keluarga (PLKB) atau Penyuluh yang tersebar di 8 (delapan) Kecamatan Kabupaten Sumbawa Barat. Pada penelitian ini yang dijadikan sampel adalah 1 (satu) orang yang bertanggungjawab sebagai petugas Sistem Informasi Keluarga (SIGA) Kantor Penyuluh Keluarga Berencana (PKB) di 8 (delapan) Kecamatan. Prosedur pengambilan data dalam penelitian adalah dokumentasi, kuisioner, wawancara dan observasi. Hasil penelitian, bahwa masalah keterlambatan pendistribusian laporan bulanan menjadi prioritas utama untuk diselesaikan. Agar pendistribusian laporan bulanan ini dapat berjalan lancar perlu dilakukan langkah-langkah berikut ini : edukasi bagi petugas pengumpul data di desa dan kecamatan tentang pentingnya laporan bulanan dikirimkan tepat waktu ke kabupaten agar PKB beserta Pengelola Data Kabupaten dapat melaporkan ke BKKBN tepat waktu, perlu adanya pengawasan proses pengiriman laporan bulanan mulai dari tingkat desa, kecamatan dan kabupaten sehingga apabila terjadi kendala dapat langsung ditangani, dan penambahan jumlah petugas pengumpul data dan pengelola data agar proses pengumpulan data dapat dilakukan dengan cepat sehingga laporan bulanan bisa dikirimkan tepat waktu. Kesimpulan kriteria pengelolaan data menggunakan aplikasi SIGA yang optimal Aliran data dan laporan dari desa, kecamatan, kabupaten dan pusat atau sebaliknya dapat berjalan tepat waktu dan tidak ada kesalahan data. Petugas pengolah data paham tentang cara pemakaian aplikasi SIGA. Saran berupa antara lain : Agar pendistribusian laporan bulanan dapat berjalan optimal maka perlu dukungan dari petugas pengolah data, jaringan internet dan server SIGA, data aplikasi SIGA valid maka perlu proses pengecekan, pemeliharaan dan pencadangan data, upaya yang dapat dilakukan untuk mengoptimalkan pengelolaan data menggunakan aplikasi SIGA. Penambahan petugas pengumpul data dan pengelola data yang memiliki latar belakang pendidikan IT. Pelatihan aplikasi SIGA secara berkala bagi petugas pengolah data, proses integrasi tiga subsistem yaitu pelayanan kontrasepsi, pengendalian lapangan dan pendataan keluarga dan pengembangan aplikasi SIGA harus segera diselesaikan dan peningkatan kapasitas dan kecepatan Server SIGA dan penambahan bandwidth koneksi internet.

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## 1. INTRODUCTION

Family Planning (KB) is a government program designed to balance needs and population. The family planning program by the government is so that the family as the

smallest unit of national life is expected to accept the Happy and Prosperous Small Family Norms (NKKBS) which are oriented towards balanced growth. The Indonesian National Family Planning Movement has been around for a very long time, namely in the 70s and the world community considers it successful in reducing the birth rate in a meaningful way. (Law Number 52 of 2009).

Family Planning (KB) Instructors as field staff, have a strategic role in achieving the goals of the Family Planning (KB) program, so Family Planning (KB) Instructors must be professional and competent. One of the competencies that must be possessed is technical competency. The technical competence of Family Planning (KB) Instructors is the work ability of every State Civil Apparatus (ASN) which includes aspects of knowledge, skills and work attitudes that are absolutely necessary in carrying out their office duties (BKKBN, 2022).

The problem faced by the Population Control Service, Family Planning, Women's Empowerment and Child Protection, West Sumbawa Regency in realizing this program based on geographical location, is that the number of Family Planning Field Instructors (PLKB) is not proportional to the number of villages and population, so that the development of the Family Planning Program in West Sumbawa Regency is still ongoing, slow. Apart from this problem, travel distance also affects the proper implementation of this program so that access to information provided to fellow family planning field officers and the community is very limited. Based on the background above, in this thesis report the author took the title "Analysis of the Use of Family Information System Applications for Family Planning Counselors in West Sumbawa Regency"

## **2. Literature Review, Framework of Thought and Hypothesis**

### **2.1. Literature review**

#### **2.1.1 Basic System Concepts**

The definition of a system according to Sutabri (2012:3), says that a system can be defined as a collection or set of elements, components or variables that are organized, interact with each other, depend on each other and are integrated. According to Gordon B. Davis in his book Sutabri (2012:6), states, systems can be abstract or physical. An abstract system is an orderly arrangement of interdependent ideas or conceptions. Meanwhile, a physical system is a series of elements that work together to achieve a goal. According to L. Enger in Sutabri (2012: 7), states that a system can consist of related activities to achieve company goals such as inventory control or production scheduling. According to Tata Sutabri (2012:16). In simple terms, a system can be defined as a collection or set of elements, components, or variables that are organized, interact with each other, depend on each other, and are integrated. From the definitions above, it can be concluded that a system is a network of procedures that are integrated and interact with each other to achieve a goal.

#### **2.1.2 Basic System Concepts**

According to Cornford and Shaikh (2013: 40), the general definition of a system is a collection of components that interact together and can be seen collectively as carrying out the same goal. According to Jogiyanto (in Noviyanto and Djuniadi, 2014), an information system is a unit of processed data that is integrated and complementary and produces output in the form of images, sound and writing. An Information System can be defined technically as a set of interrelated components that collect, or retrieve, process, store and distribute information for decision making and control of an organization (Laudon and Laudon, 2014: 45). Based on this definition, it can be said that an information

system is a collection of components that are interconnected, interrelated, and work together with each other to process data so that information is produced that can be used as a basis for decision making. The three activities in an information system produce the information an organization needs to make decisions, control operations, analyze problems, and create new services or products. These activities are input, process, output. Input captures or collects raw data from within the organization or from the external environment.

### **2.1.3 Family Information System (SIGA)**

According to the Head of BKKBN Regulation Number 481 of 2016, the Family Information System (SIGA) is a system that includes data, information, indicators, procedures, devices, technology and human resources that are related and managed according to policy standards or decisions that are useful for supporting family development. .

Implementation of a Family Information System (SIGA) to provide data and information related to families through recording family so that it can be used by central and regional governments as a basis for determining policies, implementing population development, family development, family planning and other developments.

### **2.1.4 Data and Information in the Family Information System (SIGA)**

The Family Information System is a procedure for collecting, processing and presenting data and information regarding population and families. Family data collection must be carried out by Regency and City Regional Governments simultaneously every 5 (five) years, which includes national and regional data carried out by local cadres. With the guidance of Family Planning (KB) instructors and/or Family Planning (KB) field officers. 2.1.5 Population and Family Data in the Family Information System (SIGA)

Population and family data resulting from family data collection must be updated every year. The results of family data collection are used for operational control of programs for implementing population development and family development, and family planning starting from planning, implementation and evaluation. Family Data consists of: a. routine data; and b. non-routine data. Routine data is collected regularly by Village Family Planning Assistants, Family Planning Counselors and/or Family Planning Field Officers as well as Health and Family Planning Service Facility organizers, Regional Government agencies, and agencies collected at any time according to the needs and priorities of family development determined by the Government. Non-routine data) consists of: a. custom data; and b. amazing data. Special data as referred to in paragraph (4) letter a includes data on special targets, risk factors, environment and others that support population development and family development and family planning programs. External data includes data collected internally incident extraordinary circumstances, epidemics, disasters and emergencies, population development and family development programs and public health family planning.

### **2.1.5 2.1.6 Sources of Data and Information in the Family Information System (SIGA)**

Family data and information in the implementation of the family information system comes from: Health Facilities, Including Government, Regional Government and Private Health Service Facilities; Assistant Village Family Planning Supervisor/PPKBD; Family Planning Extension Officer and/or Family Planning Field Officer; and Society, Both Individuals and Groups. Family data and information can be sourced from relevant government agencies and local

governments.

#### **2.1.6 Processing, Presenting and Storing Data and Information in the Family Information System (SIGA)**

Processing of family data is carried out in stages to determine targets and operational plans. Processing data from family registration in provincial, district and city areas is carried out through information technology.

Processing of recording and reporting is carried out periodically in the context of controlling and evaluating the implementation of population development and family development programs. Processing of family data and information is carried out using a family development electronic system which has electronic transaction capabilities in accordance with statutory provisions. The Electronic System can be connected to the development Electronic System family managed by the Minister. In the event that the family development Information System manager does not yet have family development Electronic System infrastructure, family data and information processing can be carried out through a non-electronic system.

#### **2.1.7 Data and Information Storage**

Family data and information is stored in a database in a safe place and is not damaged or easily lost using electronic and/or non-electronic storage media. The database as intended in paragraph (1) must be managed by the family Information System manager in accordance with the provisions of statutory regulations. The database can be connected to the database managed by the Minister. Storage of family data and information is carried out for a minimum of 10 (ten) years for family data and information non-electronic and a minimum of 25 (twenty five) years for electronic family data and information according to the archive retention schedule.

#### **2.1.8 Information Security and Confidentiality**

Securing family information is carried out to ensure that family information: a. remains available and maintains its integrity; and b. Confidentiality is maintained for closed family information. Security Family information must be carried out according to security standards. Confidentiality of family information and security standards are implemented in accordance with statutory provisions. c. create a system to prevent damage to family data and information (intruder detection/prevention system and security incident response team). Recording and reporting in the family information system) must be carried out by district and city governments on a regular basis in accordance with established guidelines.

#### **2.1.9 Staffing in the Family Information System (SIGA)**

National, provincial, district/city Family Information System management units, and Health and Family Planning Service Facilities must have human resources to manage the System Information Family. Human resources who manage the family Information System must have at least competence in the fields of statistics, computers and epidemiology.

#### **2.1.10 Monitoring, Reporting and Guidance in the Family Information System (SIGA)**

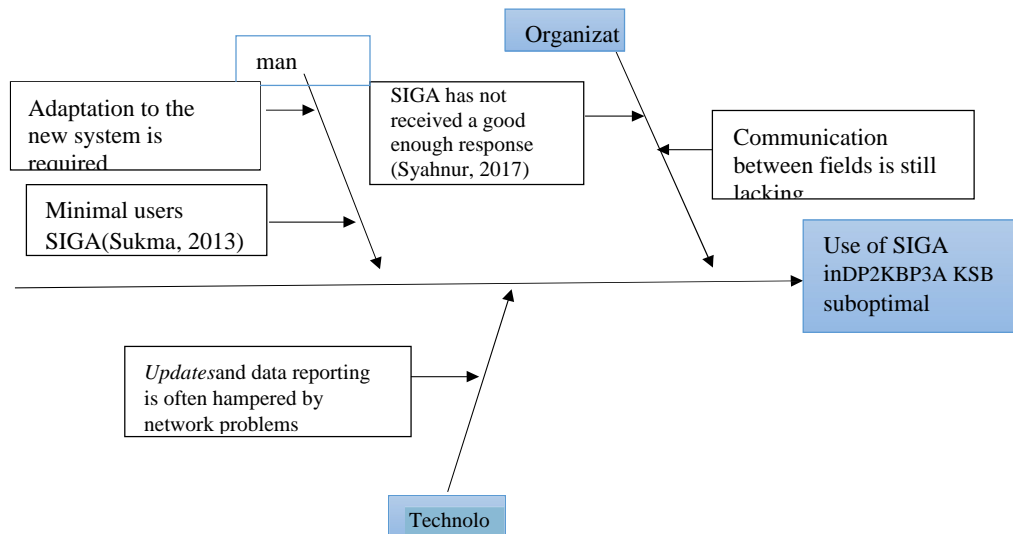
Monitoring and Reporting, Guidance and Supervision. Implementation of the Family Information System is aimed at increasing integration and synergy between various programs to improve family quality. Coordination of population development and family development is carried out by the Central, Provincial and Regency/City governments according to the level of government. To support the

implementation of population development and family development, development is carried out related to: Implementation of population development and family development; implementation of family planning; and implementation of family information systems. funding: funding related to population development and family development, family planning, and the implementation of a family information system comes from: the state revenue and expenditure budget according to the state's financial capacity; regional income and expenditure budget according to regional financial capabilities; and/or other sources that are legal and non-binding in accordance with statutory regulations.

**2.2 Framework of Thought**

This research examines the development of the Family Planning (KB) Program in West Sumbawa Regency. And to analyze the effect of using the Family Information System application on the quality of Family Planning (KB) extension services in West Sumbawa Regency. However, there is a condition where the use of the Family Information System application affects the quality of Family Planning (KB) extension services in West Sumbawa Regency and the development of the Family Planning (KB) Program in West Sumbawa Regency. The following is a research framework using a fishbone diagram to describe the obstacles employees face in using the Family Information System (SIGA) at the Population Control Service, Family Planning, Women's Empowerment and Child Protection (DP2KBP3A) West Sumbawa Regency, which is presented in Figure 2.1 below:

Figure 2.1 Framework for Thinking



**2.3 Research Hypothesis**

A statistical hypothesis can be called a statement or conjecture about one or more populations. Carrying out a hypothesis cannot necessarily provide definite results, unless the entire population is examined. This is of course very difficult to do, because it requires more time and a lot of energy in many certain situations (Walpole, 2012). As a backup option, random sampling can be carried out from unique or interesting population areas so that data results can be obtained that can be used to support the hypothesis or rejection of the hypothesis will be obtained (Walpole, 2012). The structure of hypothesis testing is described by the term null hypothesis. The hypothesis tested in the research is the null hypothesis which is symbolized by H0 and H1 as a form of alternative hypothesis that rejects the H0 hypothesis (Walpole, 2012). To formulate a hypothesis, it must be stated in a declarative sentence (statement), consist

of two variables, contain an estimate/prediction, and must be testable. There are two hypotheses based on the analysis, namely the correlative hypothesis and the comparative hypothesis. A correlative hypothesis is a statement regarding whether or not there is a relationship between variables. A comparative hypothesis is a statement regarding the differences between two or more groups. Based on the form of the hypothesis, there is a null hypothesis ( $H_0$ ), namely  $H_0$  which means neutral in a situation and an alternative hypothesis ( $H_a$ ) (Muhson, 2013). Alternative hypotheses have the symbols  $\neq$  or  $<$ , or  $>$ . This hypothesis consists of one-way and two-way hypotheses which are determined from the hypothesis statements used in the research. The two-tailed hypothesis is used in testing hypotheses where there is no difference in value between variables, such as testing whether vehicle emissions exceed the limit or are insufficient (Muhson, 2013). Meanwhile, a one-way hypothesis of a relationship between variables has a different value or clear direction of the relationship, for example testing the positive influence of X on Y. The following is an example of writing a testing hypothesis (Muhson, 2013).

The form of two-way testing is  $H_a : \mu \neq \text{number}$

The one-way (positive/right) form of testing is  $H_a : \mu > \text{number}$ .

The one-way (negative/left) form of testing is  $H_a : \mu < \text{number}$ .

### **3 . RESEARCH METHOD**

#### **3.1 Place and Time of Research**

This research was carried out for approximately three months. The location of this research was carried out at the Office of Population Control, Family Planning, Women's Empowerment and Child Protection (DP2KBP3A) West Sumbawa Regency because this research looked at how the use of the Family Information System Application for Family Planning Counselors can work well to achieve goals.

#### **3.2 Research Design**

This research uses a mix of methods, namely quantitative methodology using inferential statistical analysis and qualitative methods using descriptive methods, where this research was conducted to fully or clearly describe the Family Information System Application Innovation for Family Planning Counselors in West Sumbawa Regency.

#### **3.3 Data Types and Data Sources**

##### **3.2.1 Data Type**

There are generally two types of data, namely quantitative data and qualitative data which will be explained below. The author uses quantitative and qualitative data in carrying out this analysis.

#### **3.4 Data Source**

Data sources are all forms of information in the form of data. Based on the location, data can be divided into two, namely primary data and secondary data.

#### **3.5 Population and Sample**

##### **3.5.1 Population**

According to Burhan Bungin "The research population is the whole (universum) of research objects which can be humans, animals, plants, air, symptoms, values, events, attitudes to life, so that these objects can be sources of research data." The population in this study is Family Field Officers (PLKB) or Extension Officers spread across 8 (eight) Districts of West Sumbawa Regency.

##### **3.5.2 Sample**

According to Winarto, "A sample is taking a portion of the population that will be needed to represent the population and will be used as respondents in a study."

The sample is the result of part of the population. The researcher took 1 (one) Family Information System Management Officer (SIGA) in each sub-district in West Sumbawa Regency. Due to limited time and energy. In this study, the sample was 1 (one) person who was responsible as a Family Information System (SIGA) officer at the Family Planning Extension Office (PKB) in 8 (eight) sub-districts.

### **3.6 Operational Definition of Variables**

#### **3.6.1 Population Control Service, Family Planning, Women's Empowerment and Child Protection (DP2KBP3A) West Sumbawa Regency.**

In accordance with West Sumbawa Regency Regional Regulation Number 11 of 2016 concerning the Establishment and Structure of West Sumbawa Regency Regional Apparatus, the nomenclature has changed from the Office of Women's Empowerment, Child Protection and Family Planning to the Population Control, Family Planning, Women's Empowerment and Child Protection Office Type A. In context This.

#### **3.6.2 Family Information System (SIGA)**

The Family Information System (SIGA) is a complete set of tools and resources that take effective actions/decisions related to family development.

A set of arrangements that includes data, information, indicators, procedures, tools, technology and human resources that are interrelated and managed in an integrated manner to direct actions or decisions that are useful in supporting family development. (Regulation of the Head of the National Population and Family Planning Agency Number 481 /Per/ G4 /2016).

#### **3.6.3 Family Information System Manager (SIGA)**

Is an officer appointed to carry out activities related to recording, collecting, processing, analyzing and presenting data related to routine family data collection and updating, carried out from the field line to the central level in accordance with a predetermined system. (Regulation of the Head of the National Population and Family Planning Agency Number 481 /Per/ G4 /2016).

### **3.7 Data Collection Procedure**

The data collection procedures in research are:

#### **3.7.1 Documentation**

The documentation method is looking for data regarding things or variables or in the form of transcript notes, books, newspapers, magazines, inscriptions, meeting minutes, leggers, agendas, and so on.

#### **3.7.2 Questionnaire**

A questionnaire is a list of written questions used to obtain information from respondents.

#### **3.7.3 Interview**

An interview is a tool for gathering information by asking questions orally. Interviews are part of a communication technique where data seekers hold questions and answers with sources to extract the required data.

#### **3.7.4 Observation**

Observation means that researchers conduct research by making direct and careful observations of all phenomena related to poverty and then recording them to complete the data obtained.

### **3.8 Research Instrument**

Research instruments play an important role in determining the quality of research. According to Sugiyono, "A research instrument is a data collection tool used to measure

observed natural and social phenomena." Thus, the use of research instruments is to seek complete information about a problem, natural or social phenomenon. The instrument used in this research is intended to produce accurate data, namely by using an instrument in the form of a checklist obtained from respondents' responses regarding the Family Information System variable.

### 3.9 Data analysis

According to Sugiyono (2009:169), descriptive analysis is statistics used to analyze data by describing or illustrating the data that has been collected as it is without the intention of making general conclusions or generalizations. In this research, we will obtain an overview of the development of Family Planning in West Sumbawa Regency and the use of the Family Information System (SIGA) on the quality of Family Planning (KB) extension services in West Sumbawa Regency.

According to Sugiyono (2009:170), data analysis in qualitative research is carried out while data collection is taking place, and after completing data collection within a certain period. At the time of the interview, the researcher had analyzed the interviewee's answers. If the interviewee's answers after analysis feel unsatisfactory, the researcher will continue asking questions again, until a certain stage, data is obtained that is considered credible. Activities in data analysis, namely data collection, data reduction, data presentation, and drawing conclusions and verification.

## 4. RESULTS AND DISCUSSION

### 4.1 General description of the research site

Based on West Sumbawa Regency Regional Regulation Number 11 of 2016 concerning the Establishment and Structure of the Family Planning Population Control Service, Women's Empowerment and Child Protection, West Sumbawa Regency and West Sumbawa Regent Regulation Number 49 of 2016 concerning Details of the Main Duties and Functions and Work Procedures of the Population and Family Control Service Planning, Women's Empowerment and Child Protection. The position of the West Sumbawa Regency Population Control, Family Planning, Women's Empowerment and Child Protection Service is to support the duties of the Regional Head in the field of Population Control, Family Planning and Women's Empowerment and Child Protection.

### 4.2 Results

#### 4.2.1 Development of the Family Planning (KB) Program in West Sumbawa Regency

The success of the development of the Family Planning (KB) program that has been achieved by West Sumbawa Regency can be seen from various indicators of New and Active FP participants, the number of PUS, and the number of PUS who are not KB participants as follows:

Table 4.1 Service Indicators for New and Active FP participants, Number of EFA, and Number of PUS who are not FP participants

No.	Service Indicators	2018 Achievements	2019 Achievements	2020 Achievements	Achievements in 2021	Achievements in 2022
1.	New KB Participants	1120	1463	1537	1537	3407



2.	Active Family Planning Participants	15615	16024	16043	16043	17790
3.	Amount PUS SY	21945	33324	22292	22262	23541
4.	Amount PUS SY Which not a participant KB	5110	6837	6249	6249	5745

Source: KSB PPKBP3A Service, 2022.

**4.2.2 Use of the Family Information System application for Family Planning (KB) counselors in West Sumbawa Regency**

Distribution Flow, Obstacles and Challenges. The use of the Family Information System application influences the quality of Family Planning (KB) extension services in West Sumbawa Regency provided to data processing officers.

**4.3 Discussion**

**4.3.1 Description of Indicators for Use of Family Information Systems (SIGA)**

Delay in Distribution Monthly Reports (Physical Evidence of Reports) From the results of data collection it was found that the problem of delays in the distribution of monthly reports was a top priority to be resolved. In order for the distribution of this monthly report to run smoothly, the following steps need to be taken:

- a. Education for data collection officers in villages and sub-districts about the importance of sending monthly reports to the district on time so that PKB and District Data Managers can report to BKKBN on time.
- b. There needs to be supervision of the process of sending monthly reports starting from the village, sub-district and district levels so that if problems occur they can be handled immediately.
- c. Increasing the number of data collectors and data managers so that the data collection process can be carried out quickly so that monthly reports can be sent on time.

**4.3.2 Hardware Problem Analysis**

1. Less than optimal internet network. Geographical conditions are the main cause of internet network problems that are less than optimal. For remote areas where fiber optic internet networks cannot yet reach these areas, wireless internet networks via radio frequency are the main mainstay. However, this wireless internet network is greatly influenced by geographical conditions, thus affecting the strength of the signal received. A weak signal can cause an unstable internet connection, which can result in a less than optimal internet network. To overcome this problem, you need to take the following steps:

- a. Migration to a fiber optic internet network system. However, this migration can be carried out if a fiber optic internet network provider is available in these areas,
- b. A wireless internet network system can be optimal if you use an external antenna. By using an external antenna, the signal received will be stronger

and more stable. It is necessary to prioritize the use of internet bandwidth for existing computers. The computers used to transmit Siga data need to be given the highest priority and the largest internet bandwidth allocation.

- c. Firewall settings on each computer or you can also use a special firewall to set ports, protocols, site addresses and content that can be accessed.
2. The SIGA information system server often goes down. A down server is closely related to the CPU (Central Processing Unit), storage media, RAM (Random Access Memory) and internet bandwidth used. To overcome this problem, you need to take the following steps:
  - a. Increase CPU speed by replacing the server with a higher speed specification.
  - b. Increasing storage media capacity and using types of storage media that have faster data access capabilities, for example SSD (Solid State Disk).
  - c. Increased RAM capacity to be able to process larger amounts of data.
  - d. Increased internet bandwidth used by the server to be able to transfer larger transaction data. This allows more users to access the SIGA server at the same time.

### 4.3.3 Results and Discussion of Validity and Reliability Tests

Valid research results are if there are similarities between the data collected and the data that actually occurs on the object being studied. Validity is a measure that shows the levels of validity or validity of an instrument. A valid or valid instrument has high validity. On the other hand, an instrument that is less valid means it has low validity. (Arikunto, 2020). Validity testing in this research is carried out by comparing (to look for similarities) between the criteria in the instrument and the empirical facts in the field. (Sugiyono, 2008).

The instrument reliability test in this research used Test Retest Reliability Test, which is one of the popular methods used in computing reliability coefficients (Azwar S, 2012: 52). This approach is carried out by presenting a measuring instrument to one group of subjects twice after a certain period of time between the two presentations. Computing measurement reliability using a test-retest procedure produces a reliability coefficient. The method used for reliability testing in this research is test-retest, so that later the scores in the pre-test research will be compared with the post-test research, so in this research, the researcher carries out the test again after conducting the pre-test, in order to determine the reliability of the data in this study, it is seen from the correlation interval value as explained previously.

## 5. CONCLUSION

### 5.1 Conclusion

Conclusion: The criteria for data management using the SIGA application is that the optimal flow of data and reports from villages, sub-districts, districts and the center or vice versa can run on time and without data errors. Data processing officers understand how to use the SIGA application. The SIGA application has integrated three subsystems, namely contraceptive services, field control and family data collection. The SIGA server and internet connection are able to handle all SIGA application users. Problems encountered related to the implementation of data management using the SIGA application:

- a. The integration process of three sub systems, namely Contraceptive services, field control and family data collection are three efforts so that the progress of the Family Planning (KB) program in West Sumbawa Regency can be known.

The development of family planning in West Sumbawa Regency can be known by

accessing the Family Information System application.

- b. The flow of data and reports from sub-districts, districts and the center or vice versa is often late and files are corrupt and data processing officers do not understand how to use the SIGA application

## 5.2 Suggestions

Suggestions Related to Analysis Results Related to the results of the analysis in Chapter IV, the author provides suggestions in the form of, among others:

- a. The integration process of the three subsystems, namely contraceptive services, field control and family data collection and the development of the SIGA application must be completed immediately, so that the progress of the Family Planning (KB) program in West Sumbawa Regency can be known.
- b. In order for the distribution of monthly reports to run optimally, support from data processing officers, internet networks and SIGA servers is needed. And so that SIGA application data is valid, data checking, maintenance and backup processes are needed.

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