



## Application of Individual Nursing Care Software for Public Health Nurses at the Indramayu District Health Center

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### ABSTRACTS

Public Health Nursing (Perkesmas) is one of the health centers' efforts that supports the improvement of public health status by integrating nursing knowledge/practice with public health through the support of active community participation. Perkesmas service activities can be carried out inside and outside the Puskesmas building. Nurses provide nursing care for individuals who come to the puskesmas, provide family nursing care and nursing care for special groups/health-prone groups in the Perkesmas target area (home visits to vulnerable families). The problem for partners who are appointed in this community service program is the Documentation of Individual Nursing Care in the Perkesmas program which is less than optimal. This program offers solutions that are expected to help solve partner problems. The method used is to develop an application system in the documentation of individual nursing care in the health care program. As a result of this community service program, partners have an application system that will make it easier for community health workers in documenting individual nursing care in the community health program. The results of this program will also be published in accredited national or international journals.

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## **1. INTRODUCTION**

With the increase in science and technology, it has a lot of impact on all fields, many systems are used in modernizing, inseparable in the nursing care process. The demand for improving the quality of nursing care services is absolutely obtained by every patient undergoing treatment, as well as nurses who perform nursing care. This is in line with what the government is promoting, namely the application of the Industrial Revolution 4.0, the purpose of the application is the existence of a digitalization system in achieving the right and fast targets in every service in an agency (Nurdianita Fonna, 2019).

Nursing care is a series of activities in nursing practice that are provided directly to clients/patients in various health care settings. It is carried out according to the principles of nursing as a profession based on nursing knowledge and tips, humanistic in nature, and based on the client's objective needs to address the problems faced by the client. Nursing care can be accounted for based on scientific substance, namely logical, systematic, dynamic and structured. (Yulianingsih Kodim, 2018)

In carrying out nursing care for patients, both in hospitals, clinics and in health centers, nursing documentation is needed. Nursing documentation is an important record made by nurses both electronically and manually in the form of a series of activities carried out by nurses which includes five stages, namely: 1) Assessment, 2) Determination of nursing diagnoses, 3) Nursing action planning, 4) Implementation/implementation of nursing plans, and 5) Evaluation of care (Hidayat, 2021)

The inhibiting factors in documenting nursing care according to research results (Rasdiana, 2019) are high workloads, delaying documentation, the number of activities that must be documented, forgetting to document some of the actions that have been taken, time constraints and medical records used by health workers at the same time. the same one. Perkesmas service is one of the Puskesmas efforts that supports the improvement of public health status by combining nursing knowledge/practice with public health through the support of active community participation that prioritizes promotive and preventive services on an ongoing basis without neglecting comprehensive and integrated curative and rehabilitative services, aimed at individuals, families, groups and communities to participate in improving the optimal functioning of human life so that they are independent in their health efforts. (Yoost, Barbara L.; Crawford, 2019)

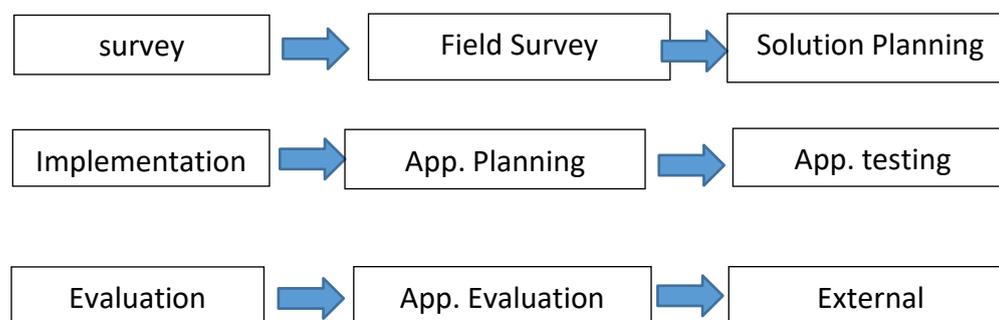
Perkesmas is carried out by all nurses in the puskesmas, without exception the Perkesmas nurses also have to document the nursing care they have done both inside the building and outside the building. Nursing care inside the building includes nursing care for individuals while nursing care outside the building includes individual, family, group and community aspects (Nurianto, 2020).

Indramayu Regency has 49 Puskesmas spread across all sub-districts in Indramayu. Based on reports from the Indramayu District Health Office regarding the Perkesmas program, the target has not been fully achieved (Indramayu District Health Office, 2018), as well as in nursing documentation for reasons that are almost the same as the research results (Rasdiana, 2019), namely a high workload with In other words, there is a lack of nurses who serve as nurses implementing health services, nurses delay doing documentation which eventually leads to forgetting, nurses forget to document some of the actions that have been taken and many have to be documented.

The partner problem raised in this community partnership program is the documentation of individual nursing care in the health care program that is less than optimal. Documentation of nursing care that is not carried out optimally can reduce the quality of nursing services because it cannot assess the extent to which the level of success of nursing care that has been provided. So, it is necessary to find a solution that can solve this problem effectively.

## 2. METHODS

The implementation method is the basis or reference so that the process in this community service program runs in a systematic, structured, and directed. After the field observation process and problem identification done, then design a solution. Furthermore, the solutions that have been planned are offered to partners. The method used in this program is shown in the figure below.



Picture 1. Program Implementation Method

## **Survey**

In the survey stage, the proposer will make a visit to the partner's location to conduct field reviews and reviews of nursing care documentation at the Puskesmas. In addition, monitoring and evaluation will also be carried out on nursing care carried out by Puskesmas nurses at the puskesmas. This monitoring and evaluation aims to identify obstacles or problems that arise. Constraints that commonly occur in the documentation of nursing care are high workloads, nurses delay doing documentation, many have to be documented, nurses forget to document some of the actions that have been taken, medical records are used by all health workers at the same time and time constraints. (Aziz Alimul Hidayat, 2015)

## **Implementation**

After the mapping process is complete, the next stage is the implementation of PKM. This stage begins with the introduction of the program to PKM partners, with the aim that partners can understand the series of activities and plans that have been made by the PKM Team. The next step is the process of making a nursing care documentation software application for individuals at the Puskesmas, then socialization and the adjustment process and if needed, the application will be redeveloped from the existing system. (Nursalam, 2011)

## **Evaluation**

In order for the implementation of PKM to run well, it will be evaluated against the achievement of the set output targets. The results of the evaluation will become a new strategy and plans will be rearranged as well as its implementation. After the application has been formed, it will be socialized to partners and after being approved by the partners, it will be socialized and trained to health care nurses in the puskesmas, then implemented and monitored and evaluated together with partners in this case is the Indramayu District Health Office.

## **3. RESULTS AND DISCUSSION**

This Individual Nursing Care application is called ASPRI (Individual Nursing Care). From the application that has been made, there are 3 users, first, namely the Health Office (partners), partners can monitor visit report activities that have been carried out by nurses in every puskesmas in Indramayu district (49 puskesmas). The second user is the health care

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coordinator as an admin at the puskesmas level who will monitor which families the nurse has visited and can see the results of the nurse's home visit as report material which will be forwarded to the Partner (Health Department). The third user is the implementing nurse at the puskesmas who carries out individual nursing care for patients who are in contact with the puskesmas. The explanation regarding the results of the PKM is explained in the following discussion:

### Individual Nursing Care (ASPRI)

This application contains individual nursing care carried out at the puskesmas in the form of community health program activities.

#### Login

Access to the built application is limited, therefore the main page asks to enter the username, password and check I am not a robot then press the enter button.



Picture 2. Login

The Health Service account level will be provided directly by the application development team. After successfully verifying (login), the system will display several menus on the main page as follows:

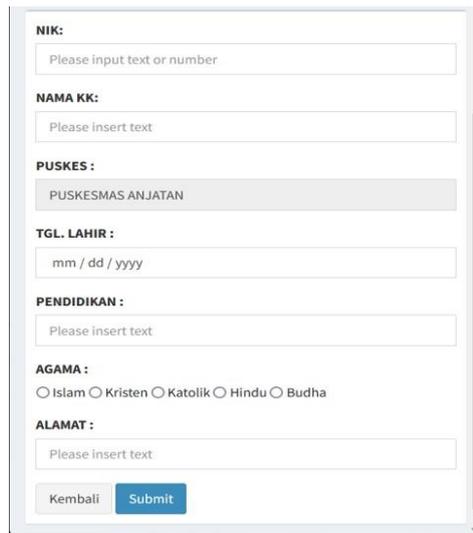


Picture 3. Main Page Menu

## Biodata

Information related to application profiles can be managed on this page. To use it, you can use the following methods:

- 1) Click menu 
- 2) Click Biodata



The screenshot shows a web form for entering personal data. It includes the following fields and options:

- NIK:** A text input field with the placeholder "Please input text or number".
- NAMA KK:** A text input field with the placeholder "Please insert text".
- PUSKES:** A dropdown menu currently showing "PUSKESMAS ANJATAN".
- TGL. LAHIR:** A text input field with the placeholder "mm / dd / yyyy".
- PENDIDIKAN:** A text input field with the placeholder "Please insert text".
- AGAMA:** Radio button options for "Islam", "Kristen", "Katolik", "Hindu", and "Budha".
- ALAMAT:** A text input field with the placeholder "Please insert text".
- At the bottom, there are two buttons: "Kembali" (light grey) and "Submit" (blue).

Picture 4. Biodata

The feature which appeared on these pages:

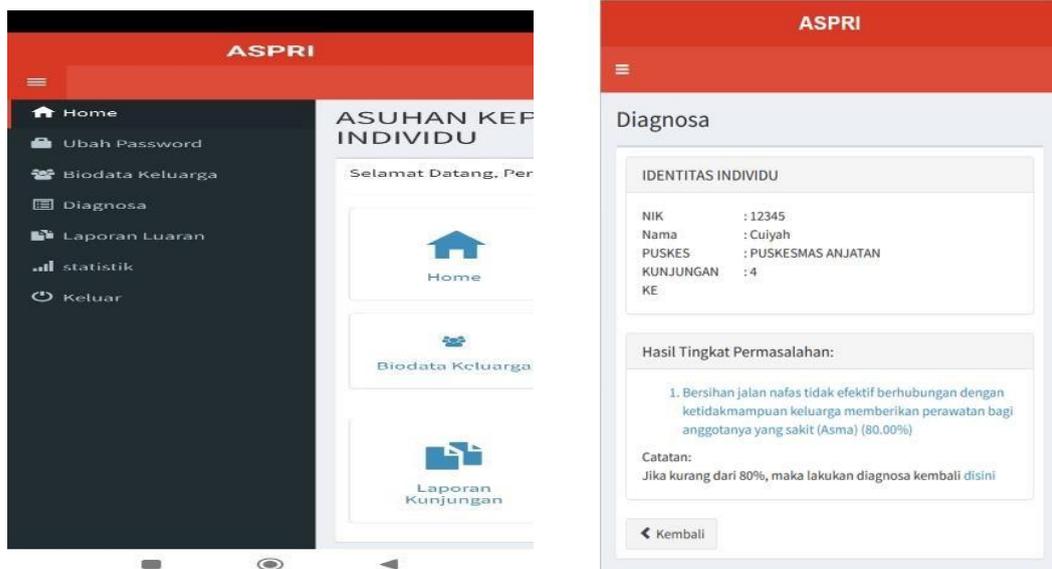
- Changes Name
- Changes title
- Changes the description
- Changes the address
- Changes the phone number
- Changes the Logo

Using this app is only to complete the form provided, then press the button to submit.

## Diagnosis

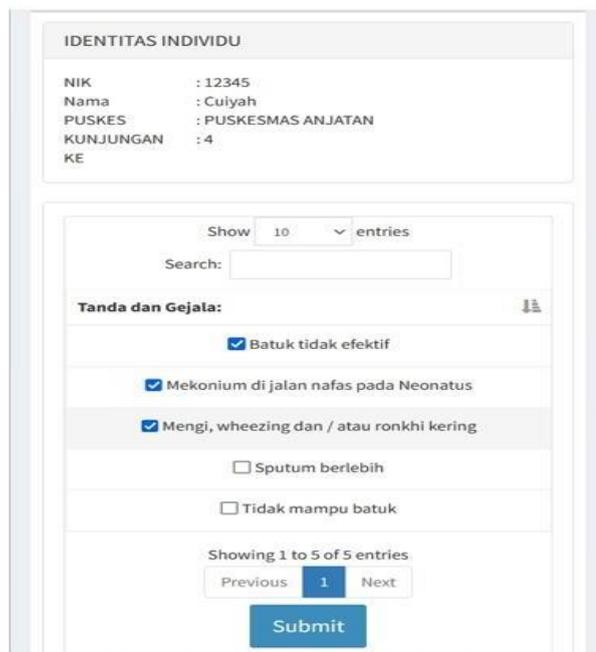
This diagnostic setting contains nursing diagnoses, to enter the diagnosis page

- 1) Click The Menu 
- 2) Click Diagnosis



Picture 5. Diagnose

- Enter Patient NIK
- Choose how many visits
- Click the Search button



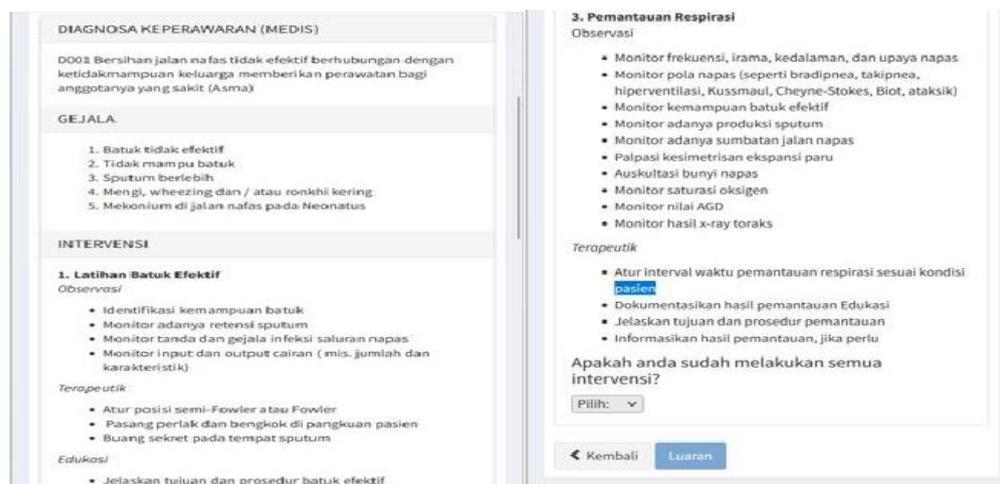
Picture 6. Signs and symptoms

- Type symptoms in the Search field
- Check the symptoms according to the patient's condition
- Click the Submit button



Picture 7. Nursing diagnoses

- If the selected symptom/tick has a problem rate of 80% then it is blue
- If nothing is 80% then click the Back button to re-diagnose, Click the blue text (80%)



Picture 8. Nursing Intervention

- Displays information: Nursing Diagnosis, Symptoms, and Interventions
- Select already, in the question section “Have you done all the interventions?”
- Click the Output button

**Report**



Picture 9. In app Report Form

**Exit**

Has the aim to lock the application, so that when you open it will ask to enter the username and password again. The method is as follows:

- 1) Click the menu 
- 2) Exit

(Tim Pokja SDKI DPP PPNI., 2018)

The Individual Nursing Care application has been completed, which is named the ASPRI (Individual Nursing Care) application, and has been socialized and trained to nurses who are the coordinators of the Public Health and Public Health implementing nurses in the Technical Guidance for Nursing Care Techniques in the form of Community Health Activities located in the Indramayu KOPSUKA hall, on Wednesday -Friday 27-29 July 2022.

All applications made by the Regional Apparatus Organization (OPD) to support the performance system must be registered with the regional apparatus information system, this is in accordance with Law number 19 of 2016 concerning amendments to Law number 11 of 2008 regarding information and electronic transactions. Then this application will be registered with the Communication and Information Office of Indramayu Regency by partners as users of this application.

The next stage is the need for socialization and training to all nurses who work at the Indramayu District Health Center as implementers in home visits to vulnerable families, so that this application can be used as needed. This socialization and training is intended so that

nurses implementing PERKESMAS can use this application as a tool in carrying out nursing care for individuals, thus helping nurses in documenting individual nursing care for patients who are in contact with the Puskesmas.

#### 4. CONCLUSION

The application for recording and reporting home visits for vulnerable families has been completed, which is called the ASPRI (Individual Nursing Care) application. This application is in the process of testing and preparation to be implemented by partners, namely the Indramayu District Health Office. The application for recording and reporting home visits to vulnerable families has been completed, named the ASPRI (Individual Nursing Care) application. Community Health Center which is partnered. ASPRI has also been trained to 98 nurses who are community health coordinators and community health implementing nurses who are present at the Askep Perkesmas BinteK at the Indramayu district health office and have been handed over to partners

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