



Implementation Of The "Smart Action" Website Of Respiratory Infection In Sanitation Clinic Activities At Community Health Center Sumbang 1 Banyumas District

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Abstract

Some obstacles that may be encountered in implementing sanitation clinics are the limited number of personnel from the Community Health Center to operate sanitation clinics that sanitation clinic activities experience problems in terms of managing data into useful health information. Therefore, sanitation clinic activities are carried out on environment-based diseases like respiratory tract infections. This study uses Research and Development (RD) to develop a manual sanitation for

environmental-based diseases, especially respiratory infections, based on the AKSI PINTAR website. Data processing system using the website consists of input, process and output. The input stage on the AKSI PINTAR website is on the examination menu and the question form that appears on the AKSI PINTAR (literally means smart action). The process stage includes the process of editing, coding and entering and has a form of AKSI PINTAR website and the output of the data includes risk factors for the incidence of respiratory infections, patient behavior and environment are processed into tables, bar charts, pie charts and pictures (photos). Officers can save and print processed data. Officers can input and process sanitation clinic data both during the inspection and the field inspection. In the implementation of data output, officers can output data in the form of tables of results of field inspections and inspections, bar and circle diagrams and photos of the results of visits that officers need in their reports.

Keywords: public health center: respiratory infection: smart action: website: sanitation clinic.

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Introduction

Central Java Province has a prevalence of respiratory tract infections above the national average, which is above 25.5%. From the 2013 Riskesdas data the prevalence of respiratory tract infections in province Central Java with a symptom diagnosis (DG) 26.6%, while with a health diagnosis (D) 15.7% (Santoso et al.,2020).

In Indonesia, every Community Health Center is obliged to provide environmental health services. A sanitation clinic is a form of environmental health service activity in the form of guidance, counseling and technical assistance from Community Health Center officers aimed at realizing a healthy environmental quality from physical, chemical, biological, and social aspects to prevent disease and / or health problems which is caused by environmental risk factors (Gunawan et al.,2018).

Some obstacles that may be encountered in implementing sanitation clinics are the limited number of personnel from the Community Health Center to operate sanitation clinics (Yuswanto et al.,2018). Existing information data on disease problems are only collected, not processed into information health which can be used for planning and implementing environmental health problem handlers (Triana & Rajiani, 2019). Fatimah et al.,(2021) emphasized that one of the efforts to solve the data processing problem is to implement a data-based processing system computer with language programming. The *AKSI PINTAR* website (Smart Sanitation Clinic Analysis) is a website that functions to assist environmental health service workers in processing



all environmental health service data (sanitation clinics) which includes environmental-based disease data into health information.

The *AKSI PINTAR* data processing system consists of several stages. Namely input, process and output. The input stage is the process of entering patient data in the form of patient biodata and a questionnaire containing the form factor risk of disease. The process stage includes the editing, coding and entering processes. On the *AKSI PINTAR* website, the data results include a description of the factors risk disease incidence, behavior and environment of the patient are processed into table, bar charts, pie charts and pictures (photos).

Based on the preliminary survey conducted at the Community Health Center, Sumbang 1, especially at the sanitation clinic, the activities of the sanitation clinic has experienced problems in terms of managing data into useful health information. The most environmental-based diseases that occur in the Community Health Center Sumbang 1 is respiratory tract infections with a total of 7350 cases in 2019 and 741 cases in February 2020. That's why researchers are motivated in conducting this research on how the website can enhance the efficiency in tracking and profiling patients for this disease.

Methods

The type of research used is Research and Development (RD), which is a research method used to produce or develop products and test the effectiveness of the product. In this research we test and describe the effectiveness of instrument manual sanitation clinics on environmental-based diseases: the respiratory tract infections based on the *AKSI PINTAR* website at the Community



Health Center Sumbang 1, Banyumas Regency, Central Java Province, Indonesia. The test includes the result of input, process and outputs.

Results and Discussion

To access the *AKSI PINTAR* (Smart Sanitation Clinic Analysis) website on the sanitation clinic officer's laptop or computer, the officer first types in the browser search page, namely <https://sumbang.aksi-pintar.com/>.

Implementation of input on *AKSI PINTAR* website has two parts, namely: *input data examination* and *field inspection data input*. Data input activities from sanitation clinic activities start from data examination consisting of old patient and new patient data. After examining the data, identification of environmental and behavioral problems was carried out by conducting patient interviews. The officer will fill in the suspected causes and suggestions for patients affected by the disease in accordance with the results of the interview to identify environmental and behavioral problems on the examination conclusion page.

After the examination form is filled in and saved, the examination history page will appear containing details of the examination questionnaire and details of the conclusion of the examination. Input data on field inspections of sanitation clinic activities are carried out outside the building of the Community Health Center. The field inspection question form is filled in all the form questions according to the inspection results by selecting or adding answers. Photographic data of the patient's environmental condition can be entered. Officers can attach a maximum of 5 photos or not add photos to field inspections.



Field inspection conclusions will emerge. The officer fills in the suspected cause of the patient being affected by the disease; the suggestions given are in accordance with the cause and the follow-up plan to be carried out by the officer. After the field inspection is complete, a field inspection review appears.

At the process stage, the data processing is carried out automatically on the *AKSI PINTAR* website. All sanitation clinic data that has been entered will be processed by the server language, namely PHP, which processes the MySQL database. Data is also stored on hosting. Hosting is a place to store data online (Musa et al., 2015).

The implementation of data output for sanitation clinics for respiratory infections using the *AKSI PINTAR* website is available in several menus including the patient data menu, the examination list menu, the number of cases list menu, the regional graph menu, and the dashboard. In the implementation of data processing for sanitation clinics using the *AKSI PINTAR* website, sanitation clinic staff only need laptops / notebooks / computers, cellphones to be used in data processing for sanitation clinics-field inspections and strong enough internet signals.

The advantage of the *AKSI PINTAR* website is that it can carry out sanitation clinic data processing from its input, process, and output appropriately. The implementation of data processing using this website does not require a long time, making it easier for officers to work. All inspection forms and report forms provided on the menu on the website are in accordance with the standard, namely Ministerial Decree No. 13 of 2015. Make it easier for officers to carry out field inspections without having to carry a sanitation clinic manual. This website can be used



through a laptop / computer / notebook or through the officer's cellphone. It also can make easier for sanitation clinic staff to find the required data. The form of reports or data processed on the *AKSI PINTAR* website can be selected by officers according to the officers' needs.

The weakness of the *AKSI PINTAR* website is that in practice it still has to be done online (connected to the internet network). So that the data processing still requires a strong enough internet signal. If the internet signal is weak or not good, the data processing will be quite hampered (slow process).

According to the sanitation clinic staff, they feel helped in the implementation of sanitation clinic activities, especially in data processing for sanitation clinics. Officers find it easy to find patient data for field visits because the data on the website is clear and neatly arranged. The form on the *AKSI PINTAR* website is also in accordance with Ministry Decree No. 13 of 2015, so that officers feel helped in making a sanitation clinic report. The obstacle in implementing sanitation clinics using the website is that they still have to use the internet network (WIFI).

On the *AKSI PINTAR* website, all inputted sanitation clinic data can be well documented without fear of data being lost or tucked away. The inputted data is stored online (hosting). That way all sanitation clinic data each year will be stored neatly. The results of monitoring and evaluation are used to measure the performance of Environmental Health Services at the Community Health Center which is also an indicator in the accreditation assessment and monitoring and evaluation of the Community Health Center.



The results of research conducted by Putri & Kurniasari (2019) with the proposed E-Service design at the Community Health Center provide an alternative solution problem in system registration. With this website, it can increase the effectiveness and efficiency in terms of service and time. Computerization can be a solution alternative from solving problems in processing registration data.

The finding is in line with the research conducted by Dewi et al., (2020) proving that Web-based Health Service Information System facilitates the process of recording patient identities at registration and stored in the database. Searching patient medical records by officers does not take a long time because they are already using the health care system facilitating the process of making patient's reports by officers, both daily reports as well as monthly.

Conclusion and Recommendation

The conclusion from the research above is that the *AKSI PINTAR* website is a useful website for data processing of sanitation clinics which is carried out online at the Community Health Center and in the field. Sanitation clinic data can be processed into health information quickly and easily, effectively and efficiently. Suggestions for further research are that the *AKSI PINTAR* website is expected to periodically process sanitation clinic data at Sumbang 1 Health Center and monitor the implementation of sanitation clinic activities so that environmental-based diseases can decrease.



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