DESIGN AND IMPLEMENTATION DIARRHEAL SURVEILANCE REPORT INFORMATION SYSTEM WITH WATERFALL METHOD IN HEALTH DEVELOPMENT OF JEMBER

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INTRODUCTION

Epidemiological surveillance is process of data collection analytical system to disease or health problems. Prevention efforts require a support program surveillance system in district or city, provincial and national (Departemen Kesehatan RI, 2003).

A preliminary survey that researchers, that the reporting process surveillance in health development of Jember is manually. Surveillance officers have to one by one monthly report data every puskesmas, so record the accuracy and completeness takes a long time.

Design of website helps in sending data diarrheal surveillance reporting to health development of Jember. Web-based data transmission are confidential, because the data is stored in the form of a database, the delivery process faster and accessed online at any time.

Based on description above, researchers do research with title "Design and Implementation Diarrheal Surveilance Report Information System with Waterfall Method in Health Development of Jember"**.**

METHOD

Types of research

Research is qualitative research. This study use structured programming design with waterfall method. The qualitative approach used data and information obtained subsequently organized and analyzed in order to get a description about the design of programs required.

Research Subject

Subjects is Headmaster of Disease Control and Environmental Health (P2KL) Health Development of Jember, and surveillance officers totaling 2 people.

RESULTS AND DISCUSSION

Identification Information Report System Requirements Surveillance Diarrhea

System Requirements Analysis conducted by interviews and observations directly in Head of Disease Control and Environmental Health (P2KL). Researchers compose a website into 4 parts and some parts that have submenu, that have been present as follows:

1. Dashboard

Dashboard page of the website containing items such as the overall graph health centers.

2. Data Entry

Data Entry menu has two (2) submenu, submenu data entry and view the data.

3. Data Analysis

Data Analysis menu contains data analysis of completeness and accuracy. Completeness and accuracy of data analysis based on the amount of the monthly report that has been entered each month.

4. Statistics

Statistics menu contains the variable selection is based on monthly reporting form and displayed in graphical form.

Website Design Software Report Surveillance Diarrhea

Software design researchers designed ourselves based on analysis requirements. Researchers design menu map, flowchart, conteks diagram, data flow diagram (DFD), entity relationship diagram (ERD) and database tables.

Website Implementation Report Surveillance Diarrhea

Implementation and testing researchers ourselves based on analysis requirements followed by focuss Group Discuss (FGD) to get final result.

Researchers implemented by an overview display the website. Explanation of website surveillance reporting diarrhea as follows:

1. Display Login

Figure 1. Display Login

Login page used for access to reporting information system surveilance diarrhea. The login page for users and admins have the same appearance. Display Entry Data

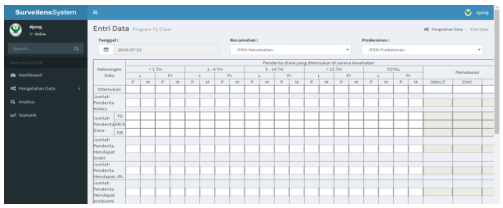

Figure 2. Display Entry Data

Display for entry data, data is retrieved from reporting forms of diarrhea (diarrhea P2) . Display entry data contains the components listed in accordance with the monthly reporting form P2 diarrhea.

2. Display View Data

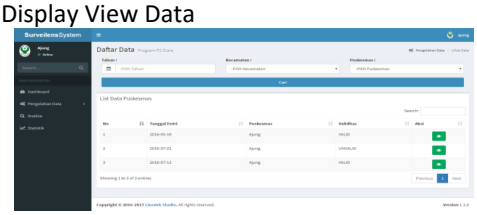

Figure 3. Display View Data

Views data on user pages, data has been loaded then be in check completeness by admin.

3. Display Edit Data

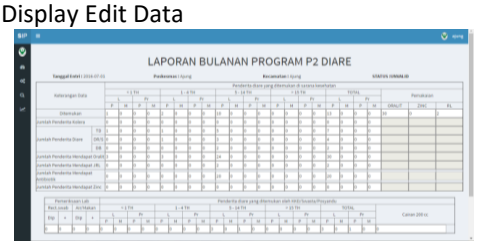

Figure 4. Display Edit Data

Data after entry can be edited by clicking the green button on the field of action in page view data, it will appear like the picture above. On the form contains setting for save data that is already edit.

4. Display Analysis Data

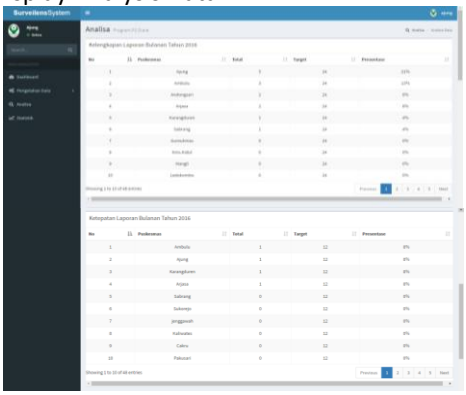

Figure 5. Display Analysis Data

Display for data analysis there two (2) analysis that is completeness and accuracy. Completeness is data that has been entered every month has been declared complete by admin, according to monthly form of diarrhea. The accuracy of data that has been entered is less than 10th of each month.

5. Display Statistic Data

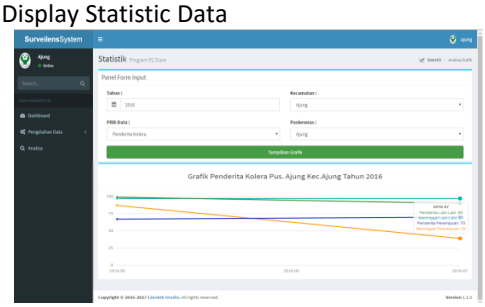

Figure 6. Display Statistic Data

Display to view data according to the monthly reporting form graphically.

Integration and Testing Diarrhea Surveillance Report Website

Integration and testing of its own design research website based on the study of implementation. The purpose of integration to find faults in the system and ensure the system is built in accordance with the expected results.

Based on testing on the login page, entry data, view data, edit data, analysis data, and statistical data can be inferred function on each page declared successful and integrated with each other.

CONCLUSION

Information system design diarrhea surveillance conducted in stages, that is needs analysis, software design, implementation, integration and test systems that produce output based program accessible websites offline or localhost. Expected to do a routine evaluation to planning decisions and programs of action can be developed to make stake holder.

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