

## **Feasibility of Implementing Web-Based Surveillance System for Risk Factors of NCDs At Posbindu (Community-Based) Level in Bantul District, Yogyakarta: An Implementation Research**

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*Background:* Non-Communicable Diseases (NCDs) in Indonesia increase each years. To control this problem, Ministry of Health (MoH) has strategy by controlling risk factors of NCDs with NCDs surveillance system. The aims is to provide accurate and systematic data and information continuously and monitor progress of risk factors which predict major disease as the basis data for public health decision-making. The system is conducted from community level which is called Posbindu NCDs. This strategy is using portal web-based as recording data. Posbindu is the lowest level to input data that integrated to database in MoH. Feasibility of the implementing web-based surveillance system for risk factors of NCD may contribute for the successful of this program as planned.

*Objective:* This study aim to describe the feasibility of implementing web-based surveillance system for risk factors of NCDs at Posbindu level by focus on assess acceptability, demand, implementation, and practicality.

*Method:* This study was an implementation research with qualitative approach by case study method design. The study site was in Bantul District of Yogyakarta. Subject was determined by purposive sampling method. Thirteen in-depth interviewed (7 cadres, 2 Head of PHC, 2 Programmer, 2 DHO), 1 FDG with 8 Programmers of PHC, 2 observation of cadre' demonstration using web, and document reviews were conducted. For negative case analysis, we interviewed three cadres who was not implemented web based yet.

*Results:* Among 67 Posbindu in Bantul District, only 4 Posbindu implemented web-based surveillance system. Basically, all cadres accept to use web-based but PHC thought that it was inappropriate for cadres due to most cadres was elderly and unfamiliar with technology. Moreover, this intervention showed low utilization. Implementation of web-based was lack of resources (cadres, facilities laptop and internet, budget), lack of monitoring and evaluation. It requires leadership engagement from stakeholders, and content of web need to be user friendly.

*Conclusions:* It is moderately feasible to implement web-based surveillance system at Posbindu level but it requires many improvements to address barrier factors such as capacity building (training), provide facilities, make offline form simpler, tight monitoring and evaluation.

*Keywords:* web-based, surveillance NCDs, Cadres/ CHW, Posbindu, feasibility, implementation research