

## Analysis of Capacity and Implementation of Early Warning Alert and Response System (EWARS)

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### ABSTRACT

**INTRODUCTION:** Padang and Payakumbuh City has implemented Early Warning Alert and Response System (EWARS) in the surveillance system of public health centers in recent years, but there was public health centers that were not in accordance with the indicators. The aim of the study was to determine the capacity and implementation of Early Warning Alert and Response System (EWARS). **METHODS:** The study was conducted from March to April 2018 by using a cross-sectional design. Data analysis was carried out by univariate, bivariate using chi-square test and t-test. **RESULTS:** There are correlation between age ( $p=0.004$ ), length of task ( $p=0.015$ ), training frequency ( $p<0.001$ ), double duty ( $p<0.001$ ) and incentive ( $p=0.037$ ) with EWARS data quality. The implementation of EWARS showed that the majority of public health center were not included data source from Private Clinic, 16,67% of respondents used the data processing application, data entry and disease case have done according to indicator, 86,67% have validation data and 13,33% unsuitable reporting indicator data. The data and analysis showed in graphic with descriptive analysis, feedback every week and evaluation from City Health Office. **DISCUSSION:** Lack of capacity such as human resources, and other equipment to be an obstacle for the implementation of EWARS, so the program implementation still needs improvement in terms of accuracy and completeness of the report. Health authorities need to pay attention to deficiencies contained in the capacity and monitor the implementation of the EWARS program regularly and make bulletins as feedback to the public health center.

**KEYWORDS:** EWARS, capacity, implementation

## Anaemia in Pregnancy: 5 Years Reviews in Interior Districts of Sabah

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### ABSTRACT

**INTRODUCTION:** Anaemia is one of the common hematological condition in pregnancy. Anaemia in pregnancy can be a mild condition and easily treated if caught early. It is often associated with other serious complications such as miscarriage, low birth weight, premature birth and maternal mortality. This has been a big challenge for antenatal care in Sabah which experienced highest percentage of antenatal mother with anaemia in Malaysia for the past years especially in interior districts. **METHODS:** Five years' data of antenatal mothers registered in public health clinic with anaemia at 36-week period of gestation for all four districts in interior division of Sabah reviewed from 2014-2018 and analysed retrospectively. **RESULTS:** The percentage of antenatal mothers with anaemia at 36-week period of gestation is continuously decreased for the past five years in all four districts, with a slight increase in year 2015. District of Nabawan shows major percentage drop in cases from 23.7% in 2014 to 8.7% in 2018; while District of Tambunan dropped from 18.3% to 5.7%. For district of Keningau and Tenom, both showed continuously decrease in trend with 11.8% to 8.8% and 8.8% to 7.0% respectively. Most cases contributed by beta-thalassemia carrier mothers, late booking mothers and lower income group mothers. **CONCLUSION:** Increasing awareness, strengthening the current approach and continuous long-term intervention involving multidisciplinary team are imperative in managing anaemia in pregnancy and improving antenatal mother health care.

**KEYWORDS:** anaemia, antenatal care, maternal health, Sabah