

ABSTRACT

EARLY WARNING SYSTEM ON DIARRHEA OUTBREAK THROUGH SURVEILLANCE EPIDEMIOLOGY IN THE DISTRICT OF BANJAR

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The District of Banjar is an endemic area of Diarrhea in South Kalimantan. Diarrhea of case in the District of Banjar increase from 7.671 up to 8.138 cases in the 1998 – 2001 years and increase again up to 11.880 case in the 2002 so that Annual inciden rate in the District of Banjar for 2002 years is 28.07. Every year in the District of Banjar always to happen diarrheal outbreak. Last year the number diarrheal outbreak is 280 with case fatality rate is 0.028. For the last three years the outbreak always bring about casualties. Based on this data, the study is aimed to develop an early warning system to detect the case in the early stage.

The first step in this study is the evaluation of surveillance and epidemiological system on diarrhea to identify the weak component in the system.

The next step is the analysis of surveillance data on diarrhea to find out the real condition and trend of the disease.

Sampling method using the total sampling with the number of sample as big as 20 Health Centre (HC) in the entire District of Banjar

The first result shows that 50% of Health Centres have poor surveillance system, 30% moderate and only 20 % have good surveillance system. Exact Fisher test shows the non significant difference in the surveillance activities between remote and non remote Health Centre ($P = 0.057$). Surveillance activities that not yet fully work are analysis of surveillance data. About 45% Health Centre did not provide graphs of monthly fluctuation of diarrhea; about 90% Health Centre did not provide maps of areas prone to diarrheal outbreak, as well as yearly raindrop data (only 10% of Health Centre related the cases to weather. About 70% Health Centre did not analyse cases according to person, place and time, and non of the related case with public activities.

The result of analysis of surveillance data on diarrhea shows that the number of toilets is low (47.46% have unsanitary facilities). Unsanitary water supply system is 62.35%. The 1998-2002 period graph of the fluctuation of cases to experience increase in the month of march to May and September to October. The level district in the District of Banjar there are several district to potential to happen of diarrhea outbreak. The Martapura district, Simpang Empat, Karang Intan and Aluh-Aluh is the sub district to potential diarrhea outbreak because the diarrhea case always to experience increase.

The conclusion of this study is the poor of surveillance system especially analysis of surveillance data so that the District of Banjar incapable to early warning diarrheal outbreak in the region it.

Key word : Early warning, surveillance system, diarrheal case