The effectiveness of the implementation of feeding centres for anaemic pregnant mothers among indigenous peoples in Gua Musang district, Kelantan

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ABSTRACT

Introduction: Anaemia during pregnancy is a significant problem globally. In Malaysia, between 19.3% to 57.4% pregnant women are found to be anaemic. Anaemia may cause premature birth complications and the risk of underweight babies. Poor nutrition is one of the risk factors for the occurrence of anaemia. The indigenous peoples ('Orang Asli') community is a group at high risk of anaemia due to food insecurity, especially sources of protein and iron. This study was conducted to identify the effectiveness of the implementation of the feeding centre for pregnant mothers with anaemia (PuSIMA) among pregnant Orang Asli mothers in the Gua Musang district. Materials and Methods: This uncontrolled experimental study was conducted at the Kuala Betis Indigenous Transit Centre, Gua Musang, Kelantan from January to August 2022 involving seven mothers. Pregnant Orang Asli mothers, who were diagnosed with iron deficiency anaemia (haemoglobin level <11g/dL) in the gestational week between 32 and 34 weeks after being referred to a medical officer. The community cooking demo allocation of RM100 per month was used to provide a menu of high protein and iron foods (2 servings of protein) at three main meals for two weeks and their haemoglobin level readings were repeated using the Full Blood Count (FBC) investigation method. Anaemia prophylactic and therapeutic regimens were provided, as prescribed by medical officers based on the latest guidelines. Results: The average haemoglobin level of pregnant mothers in this study was 10.2q/dL at enrolment and increased to 10.9q/dL at discharge, with an average duration of 9.3 days in the study. No excess weight gain was recorded, and the average weight was 61.1kg at enrolment and 61.2kg at discharge. Protein sources provide heme iron that is easily absorbed and does not depend on the presence of promoters and inhibitors in the diet. Conclusion: PuSIMA was found to have succeeded in increasing the food availability for pregnant Orang Asli mothers, especially from protein sources, thereby increasing their haemoglobin levels. More controlled experimental studies such as randomized controlled clinical trials need to be done to determine the effectiveness of this implementation in the future. Sufficient allocation to carry out this study should be given attention by various parties to help reduce the anaemia problem especially among the Orang Asli community.