

EXECUTIVE SUMMARY

This is the report of a baseline survey conducted for Micronutrient Initiative (MI) regarding maternal and child health intervention in East Java and East Nusa Tenggara Province and South Sulawesi Province as a comparison province. The result presented in this report was analysed based on the weighted data, and can be summarized as follows:

Background characteristics of respondents

Pregnant women: A total of 1,389 pregnant women were interviewed, 481 from East Java, 428 from East Nusa Tenggara, and 480 from South Sulawesi Province (comparison province). Characteristics of age was almost similar in three study sites. More than 80% of pregnant women aged between 20 years and 39 years. Education of pregnant woman showed similar pattern. However, the number of pregnant woman with no education in East Nusa Tenggara was slightly higher than in other two provinces. Regarding, household wealth index, a similar pattern was observed between East Java (intervention) and South Sulawesi (comparison district); however, an inverse pattern was observed in East Nusa Tenggara (intervention).

Recently Delivered Mothers: A total of 620 recently delivered mothers were interviewed, 202 from East Java, 218 from East Nusa Tenggara, 200 from South Sulawesi Province (comparison province). Similar pattern of age was shown between mothers in East Java, East Nusa Tenggara and South Sulawesi. Education pattern of mothers in East Java, East Nusa Tenggara and South Sulawesi was also similar. However, among mothers interviewed in this study, the proportion of mothers without any education in East Nusa Tenggara was slightly higher than in other provinces. A similar pattern of wealth index was found both groups, between East Java (intervention) and South Sulawesi (comparison district); yet a different pattern was found in East Nusa Tenggara (intervention).

Caregivers: A total of 1,576 caregivers were interviewed, 526 from East Java, 526 from East Nusa Tenggara and 524 from South Sulawesi Province (comparison province). Most of caregivers in this study were mother (more than 80%) of the children, followed by their grandmother.

Health workers: A total of 155 midwives were interviewed, 38 midwives in East Java, 35 in East Nusa Tenggara, and 42 in South Sulawesi. We also interviewed 12 nurses in East Java, nine in East Nusa Tenggara, and nine in South Sulawesi. The range age of health workers in East Java was 40-49 years old, in East Nusa Tenggara was 20-29 years old, and in South Sulawesi was 20-29 years old. Among those three provinces, South Sulawesi Province had the largest proportion of young health workers.

Cadres: A total of 152 cadres were interviewed, 50 cadres from each province. The average age of cadres in East Java was 40 years old, East Nusa Tenggara, was 41 years old, and in South Sulawesi was 38 years old.

Pregnant Women

The majority of pregnant woman in all provinces attended antenatal care (ANC). However, the proportion of ANC attendance in East Nusa Tenggara was lower than East Java; and the attendance in South Sulawesi was slightly lower than East Nusa Tenggara, as shown in the Figure 17.

Anaemia among pregnant mother: The prevalence of anaemia among pregnant women unweighted is about 30% in East Java and South Sulawesi, but about 44% in East Nusa Tenggara.

Margin of error for 95 confidence interval is about 5% for East Java and South Sulawesi, and about 7% for East Nusa Tenggara. The **weighted sample** show the anaemia prevalence is not much different, in East Java 31.3% (CI 25.3-38.0%), South Sulawesi 31.5% (CI 26.2-37.1%) and 44% in East Nusa Tenggara (CI 37.3 – 50.3%). Mean Haemoglobin pregnant mother in East Java is 11.5 g/dL (CI 11.3-11.7 g/dL), East Nusa Tenggara 10.9 g/dl (CI 10.7-11.1 g/dL) and South Sulawesi 11.7 g/dL (CI 11.3-12.0 g/dL). Pregnant women were considered comply with taking 80% of IFA tablets they received in South Sulawesi (60%), East Java (53.4%) and less than half of pregnant woman (45.3%) in East Nusa Tenggara.

Coverage of IFA tablets: Pregnant women who received IFA tablet in East Java (78%), East Nusa Tenggara (77%) and the lowest percentage in South Sulawesi (67%).

Parasites: The cases of pregnant women who ever had malaria during last pregnancy was only found in East Nusa Tenggara, 9 cases (3%), no cases found in two other provinces. Mostly diagnosed by midwives, only 1 of 4 pregnant women (25%) who ever had blood test for malaria and all taking malaria drugs during pregnancy.

Media exposure: This study found different patterns of media use. Electronic media such as radio was not the major sources of information anymore, 74%-92% respondents in three provinces reported never listened to the radio. However, there were 6%-12% reported radio as the source information of anaemia/IFA tablet; however more pregnant women listened to radio for its music programs. Almost all mothers in all provinces watched television yet in different frequency; about 53-89% of them watched TV almost every day and 24-42% mothers were exposed to information regarding anaemia and IFA tablet (from the television). Almost 40% of pregnant mothers accessed internet from their mobile phone.

Recently Delivered mother

Antenatal care: Majority of mothers in all districts attended antenatal care (ANC). However, the proportion in East Nusa Tenggara province was slightly lower (97%) compared to East Java (100%) and South Sulawesi (99%).

Knowledge of anaemia: In this study, mothers were asked if they have ever heard of anaemia. More mothers in East Java Province (80%) ever heard of anaemia than mothers in East Nusa Tenggara (71.5%); while the proportion in South Sulawesi was 76%. The knowledge regarding use of IFA tablet throughout pregnancy varied between provinces, i.e. 57% mothers in East Java, 62% mothers in East Nusa Tenggara, and 54% mothers in South Sulawesi.

IFA tablet received and consumed: More than 95% of mothers in East Java and 89% of mothers in East Nusa Tenggara reported that they had ever received IFA tablets during their last pregnancy, compared to South Sulawesi of more than 93%. The proportion of women receiving government IFA tablets IFA tablets, East Java 43%, East Nusa Tenggara 80% and South Sulawesi 74%. More than half of mothers (56%) reported that they consumed all of IFA tablets and 42% reported consumed only some of the tablets. Around 56% mothers in East Java and 59% mothers in East Nusa Tenggara, compared to 55% mothers in South Sulawesi reported that they consumed IFA tablet received. We found that the highest compliance (consumed 80% of tablet received) amongst mothers was in East Nusa Tenggara (72%), East Java (64%) and followed by South Sulawesi (55%).

Parasites: Some of mothers in East Nusa Tenggara reported that they suffered from malaria (7%) and some of them took malaria drugs during pregnancy, it higher compared to East java (1.3%), no cases found in South Sulawesi.

Caregivers

Knowledge about vitamin: Vitamin A supplement given to children in intervention provinces (East Java and East Nusa Tenggara) was slightly higher than the comparison province. The caregivers, who had ever heard of Vitamin A capsule in East Java and East Nusa Tenggara were more than 80%; whereas in South Sulawesi was 80%. More than 40% of caregivers in East Java, East Nusa Tenggara, and South Sulawesi had ever heard of the announcement of VAS last February 2016.

Coverage of Vitamin A: The percentage of children receiving vitamin A in the last round reported by caregivers in intervention provinces was almost similar to the proportion in the comparison province. Almost 70% of children in all provinces reported received VAS in the last round. The coverage VAS in the last round, in East Java 72%, East Nusa Tenggara 68% and South Sulawesi 69%. Data fully protected children almost similar a cross provinces, 41% in East Java, 42% in East Nusa Tenggara, and 42% in South Sulawesi.

Diarrhoea: More than half of caregivers in East Java and South Sulawesi knew diarrhoea as loose, watery stools for 3 times or more in a day. While in East Nusa Tenggara, 60% of them did not mention the frequency. Almost 80% of caregivers in the three provinces had ever seen or heard of ORS, but less than 20% of them had ever seen or heard about zinc tablet.

Prevalence of diarrhoea in the last 14 days in East Java was 11.1%, in East Nusa Tenggara was 7.1%, and in South Sulawesi was 6.2%. Mostly of the children only had one episode of diarrhoea in the last 14 days. Among those, the proportion of who had diarrhoea incidence in the last 24 hours from 4.5% in East Nusa Tenggara, 26% in in East Java, and 25% in East Nusa Tenggara. Proportion of diarrhoea incidence at the time of survey is 6% in East Java and East Nusa Tenggara, and 14% in South Sulawesi.

ORS and Zinc: ORS and Zinc are not a popular treatment for diarrhoea. Less than 36% of caregivers in the three provinces gave ORS as the first treatment of diarrhoea. Half of caregivers sought treatment outside their home for children with diarrhoea in East Java, it was only 40% for East Nusa Tenggara and 28% for South Sulawesi. More caregiver in South Sulawesi provided only ORS for children with diarrhoea (36%) than those in East Java (22%) and East Nusa Tenggara (28%). In general, only 2% of caregivers who reported had received both ORS and Zinc as diarrhoea treatment. The highest proportion was in East Java of almost 4%.

Health workers

All the health workers reported that they had heard about anaemia and they could mention at least one of anaemia symptoms and to identify at least one of the consequences of anaemia. Generally, health workers in the province of East Java and South Sulawesi can mention more of the symptoms of anaemia than East Nusa Tenggara. All health workers interviewed in this study reported that they had heard about IFA tablet and able to mention the benefit of IFA tablet. The most common benefit of taking IFA tablet mentioned is to prevent anaemia. It was reported in East Java (76%), East Nusa Tenggara (64%), and South Sulawesi (86%).

Most of health workers knew well the definition of diarrhoea. However, only few knew the signs and symptoms of diarrhoea correctly. Giving ORS alone was the most common treatment of diarrhoea mentioned by health workers in South Sulawesi (50%); while most health workers in East Java and East Nusa Tenggara mentioned both ORS and Zinc, along with other treatments for child with diarrhoea.

Knowledge of provision of Vitamin A supplementation. Almost all answered correctly VAS is aimed for children aged 6-11 months and 12-59 months. Regarding the benefits of VAS, most health workers answered that it protects children eyesight; (88% in East Java, 68% in East Nusa Tenggara and 73% in South Sulawesi). This was followed by a response from all provinces that it prevents night blindness.

Provision and supply of IFA Tablet: All health workers reported had ever provided IFA tablets to pregnant women. This was similar in all provinces. Regarding the supply, 36% health workers in East Java and 47% in South Sulawesi reported that they received the tablet irregularly from District Health Office, except for East Nusa Tenggara where the tablets were received on monthly basis (41%).

Monitoring of IFA Tablet: Majority of health workers (>80%) in all provinces reported that they actively checked whether mothers took IFA tablets. Most of health workers in all provinces check mothers' consumption of IFA tablets when they meet mothers in health facilities.

Cadres

Knowledge of anaemia: Overall, cadres from East Java had more knowledge than cadres from other provinces. They were able to mention more than one symptom of anaemia during pregnancy. Almost all cadres in East Nusa Tenggara Province stated that they had heard about IFA supplementation. Only few cadres gave correct answer regarding the benefits of IFA tablets. Cadres in East Java and South Sulawesi could mention more of the benefits of IFA Tablets than cadres in East Nusa Tenggara. The most common benefits of tablet IFA expressed by cadres were: it prevents excessive bleeding during delivery and prevents anaemia and low birth weight babies. Several cadres were able to mention at least one side effect of IFA tablets (44% in East Java, 36% in East Nusa Tenggara, and 48% in South Sulawesi). Mostly cadres could mention correctly the definition of diarrhoea, but only a few knew the signs and symptoms of diarrhoea correctly. Most cadres in East Java (81%) and South Sulawesi (70%) had more knowledge on ORS treatment for diarrhoea than cadres in East Nusa Tenggara (30%).