

MCN EVALUATION

Executive Summary

This executive summary presents findings from a final program evaluation conducted by the South East Asian Ministers of Education Organization (SEAMEO) Regional Center for Food & Nutrition (REFCON) between March - May, 2016. The evaluation was carried out as part of the Indonesian Ministry of Health efforts to improve maternal and child nutrition (MCN) during the “First 1,000 Days” among pregnant & lactating women (PLW) and children under two years in Timor Tengah Selatan (TTS) district, Nusa Tenggara Timur (NTT) Province, Indonesia.

The Indonesian Ministry of Health, with support from the World Food Program (WFP) and partners, identified TTS district, NTT province for the 2012 – 2015 MCN program. In support of the National Health Program, MCN program activities were integrated into provincial and district-level health systems as a response to the exceptionally high levels of household food insecurity and chronic undernutrition among young children in this setting¹. The MCN program provided specialized nutritious foods to all children aged 6 - 23 mo. and PLW through local health centers, called *Posyandus*. It also delivered comprehensive behaviour change communications (BCC) to promote infant & young child feeding (IYCF) practices and improve health-seeking behaviours. Finally, it included trainings to equip local staff and volunteers with the knowledge and skills for delivering health and nutrition messages to caregivers, as well as growth monitoring activities for children.

The objective of this study was to evaluate the program processes, behavioural outcomes, and nutritional impacts on beneficiaries enrolled in the MCN program from 2012 - 2015. Based on the findings, some recommendation are proposed.

A mixed methods evaluation was therefore conducted in March – April 2016, comprised of both quantitative and qualitative study arms. The quantitative arm included a cross-sectional nutritional survey that assessed program-, health- and nutrition-related indicators among caregivers and children aged 18 – 35 mo. This age group of children was beneficiaries of MCN program, related to the supplementation which they received as part of First 1,000 days of life program. The qualitative methods included in-depth interviews and focus groups that were conducted over two iterative phases of data collection among varied participant types, including both beneficiaries and stakeholders. Findings from both forms of data were triangulated in order to draw conclusions and make interpretations.

A total quantitative sample of 893 children aged 18 - 35 mo., from 34 enrolled MCN program villages and across 14 sub-districts, were surveyed. For comparison, 908 children of similar ages from 35 non-program sites were sampled. The socio-demographic characteristics of these two groups were largely similar. However, the socio-economic status of sampled MCN households was higher than that of non-program households. And compared to MCN program participants, more non-program respondents traveling far distances to health centers and participated in the Government Social Safety Net Programme. Findings should be considered in light of these differences between samples.

This evaluation found a lower prevalence of stunting among beneficiary children aged 18 – 35 mo. (67.9%) compared to those not in the program (74.8%). Among MCN program participants, stunting prevalence was higher among children aged 24 - 35 mo. (71.4%) than those 18 - 23 mo. (61.6%) ($p < 0.001$). Stunting prevalence was different between program area and age group, and between each group in the same area.

¹ Riset Kesehatan Dasar (Riskesdas 2013), Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI

Factors that may be important for interpretation of nutritional status indicators were also explored. Firstly, the socio-economic status of the MCN program and non-program samples was different. This difference may explain why more households were classified as food secure in the MCN program arm ($p < 0.001$). Also, stakeholder interviews indicated that MCN program sites may have been chosen at least partially due to their ease of access relative to non-program areas. MCN program sites were found in closer proximity to towns which may help explain higher socio-economic status and greater access to resources including foods important for healthy growth and development.

Access to care was a primary barrier reported by nearly all respondents. This salient challenge included difficult-to-access health centers, limited access to transportation, and paucity of health staff available at the community level. Almost half of all caregivers had to walk >1 hour to reach the nearest health center in both groups, yet a higher proportion (48.1%) in the non-program area reported having to do so regularly ($p = 0.017$). Despite these travel times, $>90\%$ of respondents in both groups reported making “regular visits to the Posyandu in the last 3 months.”

This study also shows that history of low birth weight, mother’s education and being 24-35 mo. old were consistently associated with different anthropometric indices. It is important to note that being a girl would lower the prevalence of stunting. Wasting or anemia was associated with the occurrence of disease, while factors related to household’s economic situation was associated with stunting, underweight or anemia.

Except for diarrhea, there were no differences of morbidity status found between groups when comparing the prevalence of fever, measles, difficulty breathing, and cough. Household observation data revealed improved sources of drinking water in MCN areas, despite higher diarrhea prevalence of 16.2% ($p = 0.005$).

Food rations fortified with micronutrients were provided to approximately 6,000 PLW and 11,500 children aged 6 - 23 mo during the program. They were “highly appreciated”, “well-liked”, and “easy to consume.” Coverage was high: 86.4% of PLW received fortified biscuits and 98.3% of children aged 6 – 23 mo. received fortified blend foods (MPASI) at least once. Delivery of the food rations using the local *Posyandu* system was a facilitating factor for high coverage and acceptability. However, 66.3% of caregivers who received food rations reported sharing them, due largely to normative food sharing practices in this cultural context, as well as high levels of household food insecurity. The fortified blended food for children was shared with siblings (52.7%) and the fortified biscuits for PLW were sometimes shared with other family members (13.6%). At posyandus’ level, program implementers felt pressure to also give food rations to all children, who came to the Posyandu, not just the intended beneficiaries.

For the infant and young child nutrition knowledge attitudes and practices, this evaluation found that food and nutrition outcomes were overall better among beneficiaries of the MCN program. The timely introduction of complementary foods was higher ($p < 0.001$) among beneficiaries (79.8% vs. 68.7%). And although one-fifth of beneficiaries reportedly introduced complementary foods to their children too early, this proportion was still 11% lower than that proportion not in the program ($p < 0.001$). Food availability and food access are frequently-reported challenging in this setting, as among the beneficiary children in MCN program area had higher proportions to meet minimal meal frequency, minimal diet diversity and minimal acceptable diet, with $p < 0.001$ each. However, minimum acceptable diet was 14.9% that was below the intended outcome, regardless of program participation.

Behavior change communications (BCC) were also assessed in this study and it was found that the BCC was overall highly accepted by both the beneficiaries receiving them and implementers providing them. Messages were well received because they were easily understood, although not personalized, and adapted to the local context. Interpersonal messaging was preferred to mass counseling sessions

and local language materials were suggested by beneficiaries for future programs. While the underlying concepts of the “First 1,000 Days” were generally clear to cadres² and mid-wives, they were less clear to caregivers who were interviewed.

Among the 340 *Posyandus* available, just 123 (32.6%) received trainings on health and nutrition – one of the core MCN program activities. The trainings were perceived as effectively delivering health and nutrition information. Implementers recommended providing occasional refresher trainings, additional training time, and more practical sessions throughout the MCN program.

Between 2012 - 2015, the MCN program covered 17 sub-districts of TTS district with program activities integrated into local health systems. A higher proportion of MCN program participants possessed a growth monitoring card (KMS) than those not in the program ($p < 0.001$). And >90% of MCN program caregivers visited a *Posyandu* in the previous 3 months. From 2013 - 2015, MCN program registration has continually increased among both children 6 – 23 mo. (2015: 92.8%) and pregnant and lactating women (2015: 99.2%) in coverage areas.

Overall, the MCN program was well accepted by both the local TTS beneficiary and stakeholder communities. Recommendations around food rations, BCC, and MCN programming in general were elicited during the evaluation.

Participants recommended that the food rations be continued, but with more reliable distribution and delivery systems, enhanced sensitization activities, and provisions to all young children (not just those 6 – 23 mo.) at the *Posyandu*-level. Health messaging in local languages, delivered through individual counselling was recommended for greater understanding and acceptance at the community level. Training staff to more effectively promote IYCF practices might have a wider influence if delivered to all *Posyandus*, as well as to key community influencers, such as religious leaders, husbands, and other household members who influence health and nutrition behaviors.

Stakeholders suggested better cost sharing and greater transparency among partners, as well as increased involvement of other sectors, such as agriculture, for more integrated programming. Increased community engagement, additional human resources, and sound planning were recommended by stakeholders for overcoming environmental and infrastructure-related challenges that may help ensure program sustainability in this context.

² Cadres are local community members who were selected by the community and are willing to work voluntarily. Directorate of Community Participation, Ministry of Health, Government of Indonesia (Zulkifli, 2003).