

Assessment of Health and Nutritional Status of Underprivileged Women and Children in Six Tsunami Affected Provinces

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Abstract

A survey study was conducted to assess health and nutritional status of underprivileged women and children in six tsunami affected provinces during September - November 2007. The assessment included a total of 7,401 children and 6,210 women selected from 87 villages under 22 sub-districts and was carried out by Phuket, Phangnga, Krabi, Trang, Satun and Ranong provincial health offices under the research protocol and supervision of the Department of Health.

Malnutrition among the studied children was higher than the national target with the average of 11.26 percent being malnourished. The underweight prevalence rates were 12.4 percent in Phuket, 17.88 percent in Phangnga, 12 percent in Ranong, 10.6 percent in Satun, 7.5 percent in Krabi, and 6.2 percent in Trang provinces.

The assessment also revealed that the percentage of low birth weight infants was high in Phangnga (12.7%) and Ranong (9.65%) despite good antenatal care coverage in both provinces. The percentage of household consumption of iodized salt was 89.4 percent higher than UNICEF-Multiple Indicators Cluster Survey (2005-06) data 60.3 percent.

Analysis of the data demonstrated that complete immunization coverage of children was 93 percent. The antenatal care coverage remained lower than the national target (90%) while skilled attendance at delivery achieved a higher coverage of over 90 percent.

About 90 percent of the assessed households had access to good quality water (either tap water or from protected wells and bottled water). The majority of the households had access to sanitation facilities with sanitary latrines. The greater percentage (> 50%) of the interviewed women knew about HIV prevention, availability of HIV testing, counseling and availability of antiviral for prevention from mother to child transmission (PMTCT).

Key words: health and nutritional assessment, underprivileged women and children, tsunami affected areas

Introduction

The tsunami on the 26th of December 2004 caused widespread devastation along 400 kilometers Andaman sea southern coastline, affecting 1.9 million people in six provinces (including 600,000 children)⁽¹⁾. The relief efforts by the Government, UNICEF and partners helped communities recover quickly. In 2006 the focus of the tsunami-assistance shifted from providing relief to longer-term rehabilitation efforts. The situation of children continued to improve during the course of the year. Family and community mechanisms that normally protect children are now considerably stronger benefiting some 150,000 children in the six affected provinces who were rendered more vulnerable immediately after the tsunami.

Data from the affected areas showed a positive trend in health and nutritional status of children, a sensitive indicator of the overall well-being of young children, a recently conducted household survey showed 9.3 per cent of children were being underweight⁽²⁾ confirming that continued follow up was needed.

Priorities set from provincial health offices were to closely monitor the nutritional status of young children as an indicator of the overall well-being of children and to ensure continued outreach services for the poorest and outlying communities who would otherwise missed out their rights to health services.

Nutritional status of children has been assessed under quarterly weighing program⁽³⁾. This ensured that signs of malnutrition were detected as early as possible so that corrective action could be taken before serious impairment of physical and mental development occurred⁽⁴⁾. Communication materials and counseling on supplementary feeding was provided to all families, especially to families of malnourished children during the weighing sessions. In all, 35,000 children were dewormed and received essential iron and vitamin supplements ridding them of intestinal parasites that caused anemia and malnutrition and boosted

up their immunity against diseases.⁽⁵⁾

Department of health and UNICEF supported the delivery of an integrated package of health and nutrition services for those most vulnerable communities that could not be met by local government health budgets. This action, basic health services improved for the most vulnerable women and children, especially those living in remote areas, on islands, in Muslim communities and for migrant communities ensuring that pregnant women and sick children in the most remote communities were visited at least once a month. Campaigns also boosted attendances to antenatal and nutritional care among pregnant women, significantly reducing the risk of nutritional deficiency and underdevelopment of the unborn foetus⁽⁶⁾.

Assessment objectives

- to provide an update of health and nutrition situation of vulnerable children and women in six tsunami affected provinces
- to provide data for provincial, district and sub-district health authorities and local administrative bodies for improvement of the health of children and mothers
- to allow health offices and local administrative bodies to monitor changes in maternal and child health indicators (prenatal care, breast-feeding, malnutrition, immunization coverage and infant health)
- to use data for priority setting, planning, and policy development to support community efforts to assure health of women, children and their families
- to inform and educate the public and families about maternal and child health issues

Methodology

The assessment was conducted in 87 villages under 22 sub-districts in Phuket, Phangnga, Krabi, Trang, Satun and Ranong provinces during September to November 2007. The studied samples included

women and children who were selected based on provincial health offices information that they were living in remote areas with low income and considered at risk of inadequate health care services. A total of 7,401 children and 6,210 mothers and 1,191 child care givers participated in this survey covered about 90 percent of children (0-72 months old) and their mothers at the selected locations. The data collecting was conducted by using a structured questionnaire modified from the screening tool for ranking area at risk of vitamin A deficiency in Thailand⁽⁷⁾ and from the guideline for assessment of healthy child area.⁽⁸⁾ All interviewers were trained for one day on clarity of questionnaire and data collection process by the researchers. The provincial health officers monitored data collection process in all locations for consistency and completeness.

Data Analysis

Descriptive statistics were employed in data analysis. The data of each province was interpreted and analyzed separately to reflect actual health and nutrition situation of the underprivileged women and children of each province.

Results

The underweight prevalence rates in six provinces varied from 6.2 percent to 17.88 percent according to the reference of weight, height, and nutritional status indicators for Thai population of ages 1 day - 19 years 1999.⁽⁹⁾ There were other groups of children who felled under moderate underweight category and exposed to a potential risk of malnutrition. High percentages of the underweight indicated that the underprivileged women and children were at risk of access to nutritional care services. Even they had access to food but their parents or care givers were not aware of right quantity and quality of food necessary for normal growth of their children. Underweight children's

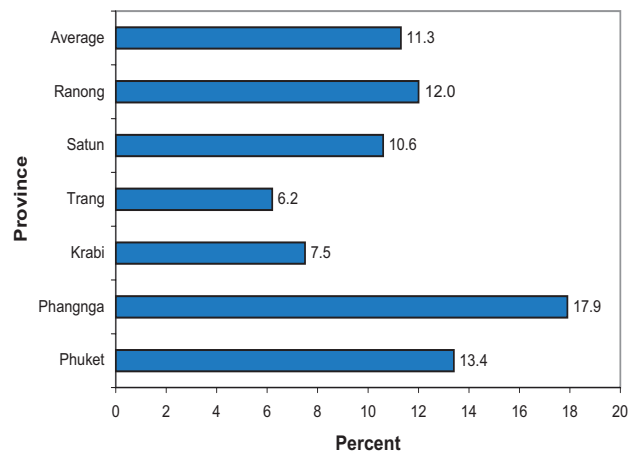


Figure 1 Underweight prevalence rates among children 0-72 months old by province

parents were not aware that their children were not gaining normal weight and most of their children were not taken to health centers for nutritional care. The assessment reported high percentage of underweight children in Phuket, Phangnga and Ranong provinces. Children in the following locations were found with high percentage of under nutrition:

Phuket Province: Mueang district

Phangnga Province: Thai Mueang district

Ranong Province: Mueang district

Underweight prevalence rate in provinces

The average prevalence rate of underweight among children 0-72 months old in six tsunami provinces was 11.3 percent, 17.9 percent in Phangnga and the lowest, 6.20 percent in Trang (Fig. 1).

Household consumption of iodized salt

The data from six provinces confirmed that percentage of household consumption of iodized salt was 89.4 percent. The household consumption Krabi was 100 percent, and Ranong was 82.2 percent (Fig. 2).

Complete immunization coverage of children

The assessment demonstrated that complete immunization coverage of children of the vulnerable

population groups in six provinces varied from 83 percent to 100 percent with an average of 93 percent (Fig. 3).

Infants with low birth weight

The rate of low birth weight infants in six provinces was 7.5 percent. The lowest rate was 2.9 percent in Krabi and the highest of 12.7 percent in Phangnga (Fig. 4).

Antenatal care and skilled attendance at delivery by province

Antenatal care coverage varied from 80.9 percent to 96.7 percent. The highest was in Ranong.

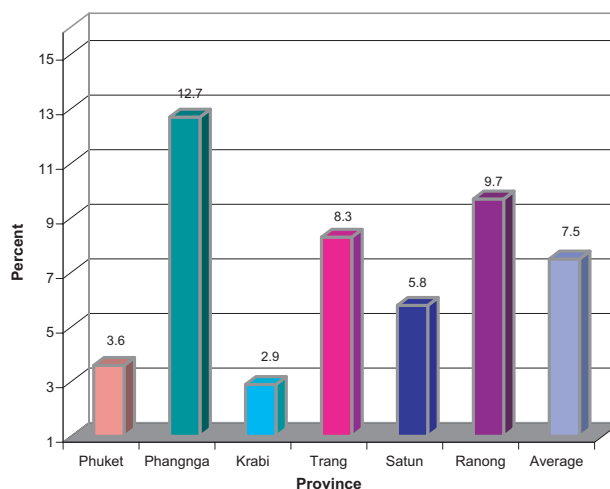


Figure 4 Rates of low birth weight infants by province

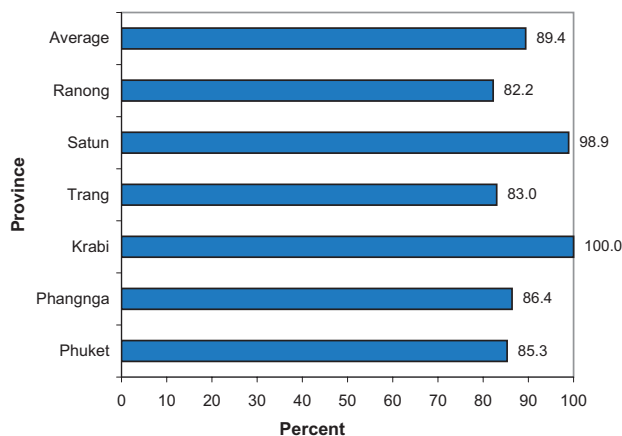


Figure 2 Iodized salt consumption by household

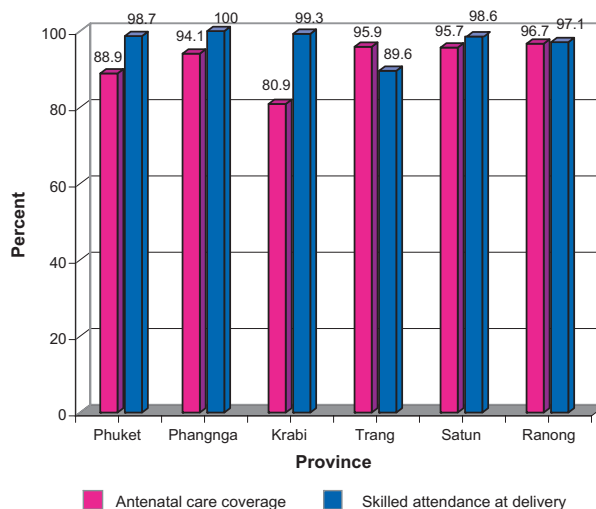


Figure 5 Antenatal care coverage and skilled attendance at delivery in six provinces

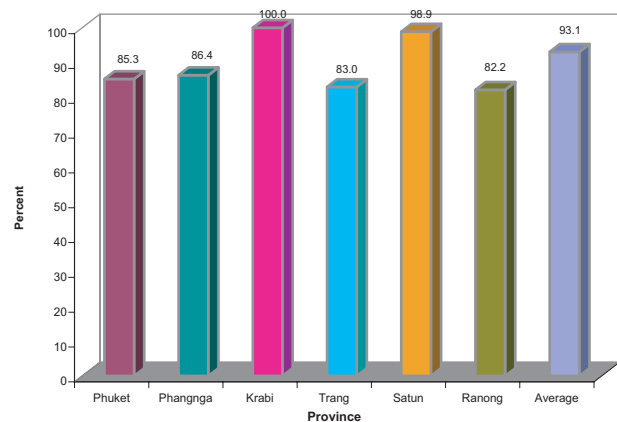


Figure 3 Complete immunization coverage of children by province

While skill attendance at delivery varied from 97.1 percent to 100 percent. The highest was in Phangnga.

Discussions

The assessment was carried out from September 2007 to November 2007. A total of 7,401 children and 6,210 women were included for assessment of health and nutritional status of underprivileged children and women. Children and women from 87 vil-

lages under 22 sub-districts from six tsunami affected provinces were selected based on specific groups, location, economic status, and health situation.

Malnutrition among children was quite high with an average of 11.26 percent being malnourished. It was higher than UNICEF health and nutrition report of 2006⁽⁵⁾. The highest percentage of malnourished children (37.36%) was found in crowded urban communities of Phuket province while 27.0 percent were found in Mogan/Muslim communities of Phangnga province. The assessment indicated that there were considerable number of children who were at risk of potential malnutrition.

It was found that feeding practices of children were poor. The poor feeding habits predisposed children to malnutrition due to their craving for food both in terms of quality and quantity.

Household consumption of iodized salt was 89.4 percent which was very high compared to data from the Multiple Indicator Cluster Survey (MICS) by National Statistic Organization 2006 recorded at an average of 60.3 percent⁽²⁾.

It was better than the result from a recent survey in Phangnga and Satun in 2007 showing the coverage of iodized salt consumption of only 51.4 percent⁽¹⁰⁾.

The high coverage rate of complete immunization of children was achieved through intensive national campaigns, good record keepings, and by initiating out reach programs at community level. The national coverage was 89.2 percent (MICS)⁽²⁾.

The analysis also revealed that percentage of low birth weight infants was high in Phangnga province (12.7%) and Ranong province (9.65%) despite high antenatal care coverage in those provinces. The data in both provinces showed higher percentage of low birth weight infants than the Ministry of Public Health target which is 7 percent.⁽¹¹⁾ The main reasons for low birth weight were multiple pregnancies, teenage pregnancy, poor pregnancy nutrition, inadequate antena-

tal care and pregnancy complications. In some islands of Ranong province pregnant women had inadequate access to regular antenatal care services due to lack of health facility as well as travel restriction for the mobile medical team during rainy season. In Phangnga percentage of low birth weight was high in Thung Maprao sub-district particularly in one village it was 16.6 percent. This condition needs attention of health staffs.

Antenatal care and skilled attendance at delivery coverage was above 90 percent, except for Krabi and Phuket Provinces. The MICS survey showed national level of antenatal care coverage was 97.8 percent, and skilled attendance at delivery was 97.3 percent⁽²⁾.

About 90 percent of the assessed households had access to good quality of drinking water, (either tap water or from protected wells and bottled water). Lack of basic sanitation services and lack of awareness for disposal waste could cause diseases by fecal - oral pathogen.⁽⁷⁾ The majority of the households had access to improved sanitation facilities with sanitary latrines. The greater (>50%) percentage of the interviewed women knew about HIV prevention, availability of HIV testing, counseling and availability of antiretroviral for prevention from mother to child transmission (PMTCT).

The overall public health care system seems to be good with properly functioning health facilities in the district and sub-district level with adequately trained health staffs; hence health centers are able to provide all basic and essential services to children and women. The assessment also shows the coverage of immunization against childhood diseases is reasonably high in all provinces

Conclusion

The findings suggest that malnutrition among children 0-72 months old shows an increasing trend in three provinces which requires special attention of

the communities as well as health officials to establish community nutrition project for children in all provinces otherwise the situation would require substantial resources in the future. The results of this study have been communicated to provincial health offices and local administrative bodies, Department of Local Administration for participation with health centers and communities to improve health situation of underprivileged children and women in their localities.

Acknowledgements

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บทคัดย่อ การประเมินภาวะสุขภาพและภาวะโภชนาการในกลุ่มผู้หญิงและเด็กที่ด้อยโอกาสในพื้นที่ 6 จังหวัดที่ได้รับผลกระทบจากคลื่นยักษ์สึนามิ

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การประเมินภาวะสุขภาพและภาวะโภชนาการในกลุ่มผู้หญิงและเด็กที่ด้อยโอกาสในพื้นที่ 6 จังหวัดที่ได้รับผลกระทบจากคลื่นยักษ์สึนามิ ได้ดำเนินการ ระหว่าง กันยายน - พฤศจิกายน 2550 การสำรวจครั้งนี้ได้ประเมินเด็ก 7,401 คน และผู้หญิง 6,210 คน จาก 87 หมู่บ้านใน 22 ตำบล โดยสำนักงานสาธารณสุขจังหวัดภูเก็ต พังงา กระบี่ ตรัง สตูล และระนอง ภายใต้ระเบียบวิธีวิจัยและการให้คำปรึกษาจากกรมอนามัยพบว่า ความชุกของภาวะทุพโภชนาการในเด็กสูงกว่าเป้าหมายของประเทศ โดยมีค่าเฉลี่ยที่ร้อยละ 11.26 คือ ร้อยละ 12.4 ที่ภูเก็ต ร้อยละ 17.88 ที่พังงา ร้อยละ 12 ที่ระนอง ร้อยละ 10.6 ที่สตูล ร้อยละ 7.5 ที่กระบี่ และร้อยละ 6.2 ที่ตรัง ความชุกของทารกแรกเกิดน้ำหนักตัวน้อยกว่า 2,500 กรัม พบร้อยละ 12.7 ที่พังงา และร้อยละ 9.65 ที่ระนอง ซึ่งเป็นอัตราที่ค่อนข้างสูง ถึงแม้ว่าจะมีความครอบคลุมของการฝากครรภ์ในอัตราที่สูงก็ตาม ความครอบคลุมของการบริโภคเกลือเสริมไอโอดีนในภาพรวมทั้ง 6 จังหวัด อยู่ที่ร้อยละ 89.4 ซึ่งสูงกว่าข้อมูลการสำรวจภาวะสุขภาพโดยใช้ดัชนีชี้วัดหลากหลายตัวขององค์การยูนิเซฟ (2548-2549) ซึ่งเท่ากับร้อยละ 60.3 ความครอบคลุมของการให้ภูมิคุ้มกันในเด็กพบว่า ในภาพรวมครอบคลุมร้อยละ 93 การฝากครรภ์พบว่าน้อยกว่าเป้าหมายระดับชาติ ซึ่งได้กำหนดไว้ที่ร้อยละ 90 ในขณะที่การคลอดในสถานพยาบาลมีความครอบคลุมสูงขึ้น คือมากกว่าร้อยละ 90 ประมาณร้อยละ 90 ของครัวเรือน ตัวอย่างสามารถเข้าถึงน้ำสะอาด เช่น น้ำประปา น้ำจากบ่อที่สะอาด และน้ำดื่มบรรจุขวด ส่วนใหญ่ของครัวเรือนที่ศึกษาสามารถเข้าถึงการสุขาภิบาลที่ดี มีส่วนที่ถูกละเลยมากกว่าร้อยละ 50 ของผู้หญิงที่ทำการสัมภาษณ์ พบว่ามีความรู้ในเรื่องต่าง ๆ ที่เกี่ยวกับโรคเอดส์ เช่น การป้องกัน การตรวจสอบ การให้คำปรึกษา และการป้องกันการติดเชื้อจากแม่สู่ลูก

คำสำคัญ: การประเมินภาวะสุขภาพ และภาวะโภชนาการ, ผู้หญิงและเด็กที่ด้อยโอกาส, พื้นที่ที่ได้รับผลกระทบจากคลื่นยักษ์สึนามิ