MRC POLICY BRIEF

The health facility-based nutrition programme does not address malnutrition effectively

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Building a Healthy Nation through Research

Growth monitoring (GM) is a key activity in nutrition promotion programmes in the battle against malnutrition. It is a key strategy in the Integrated Nutrition Programme (INP) to facilitate detection and targeting of nutritionally at-risk groups for early intervention[1]. The INP comprises health facility and community-based components, yet the responsibility of GM and targeting largely rests with the nursing staff employed at primary health care (PHC) facilities. Until now, little consideration has been given to community-based GM and nutrition surveillance, although poor GM at PHC facilities is well-documented in South African literature[1-6]. It is therefore not surprising that malnutrition often goes undetected despite improved protocols and increased funds for nutrition[1,5,6].

GM Practices at PHC Facilities and the Detection and Management of Malnutrition

National studies done in 1994 and 1999 revealed an underweight prevalence rate of 10% for South African children (6-71-months and 1-9 years)[7,8]. However, studies done at selected PHC facilities in 2001, revealed underweight prevalence rates of 19% and 21% for children aged 0-72 months[6,9]. Underweight figures that exceed the national prevalence rate should prompt further investigation and action. Since this does not generally happen, many malnourished children are deprived from being targeted for interventions such as food supplementation through the health facility-based nutrition programme.

For GM to be effective, mothers are required to visit PHC facilities at regular intervals. It has been suggested that children's growth be monitored 5 times in the first year, 4 times in the second year and thereafter 3 times a year[10]. Children with a low birth weight (less than 2500 gram), underweight children and those whose growth are faltering, require weekly monitoring until 'catch-up' growth occurs, irrespective of their age[10]. It has, however, been reported that preschool children's visits to PHC facilities are generally erratic[3,5]. In Langebaan (near Saldanha on the West Coast) monthly attendance rates for the entire preschool population varied between 12-26%. Since approximately 75% of visits comprise children ≤12months, it demonstrates that PHC facilities do not effectively reach older children at the suggested intervals[5]. This has serious implications for GM and targeting of at-risk groups. It was found that more than 80% of targeted undernourished children received food supplements for less than 3 consecutive months[5]. The intervals of supplement distribution among those who received it twice or more, were too long as they varied between 1-10 months[5]. Similar investigations in the Cape Metropolitan and Southern Cape regions showed that almost one-third of underweight children stayed on food supplements for more than one year with limited improvement and poor compliance[11-13].

The inability of PHC facilities to detect and target nutritionally at-risk groups effectively is reflected in different studies[5,6,11]. A study of 67 children diagnosed with growth faltering and/or underweight over a 14-month period at a PHC facility in Delft, revealed that only 13 (19.4%) received food supplements[6]. In Bishop Lavis, it was found that 80% of preschool children attending a malnutrition clinic had weights within the normal percentile range prior to the onset of malnutrition[11]. This negative shift in child nutritional status demonstrates the inability of the PHC system to effectively detect and target at-risk children of becoming malnourished.

Why Malnutrition is not Effectively Addressed

Newly introduced strategies such as free health care, provision of chronic care together with the inclusion of the INP as an essential part of primary health care, created new challenges to the nursing staff[1]. This resulted in an upsurge in public demand for curative care which impacts negatively on preventive strategies such as GM and promotion. The epidemic proportions of tuberculosis and HIV/AIDS infections, which debilitate people's nutritional status, stimulated a search for improved management and treatment plans, further limiting nutrition programmes from receiving the required priority. Although targeting and management of nutritionally at-risk groups are specified in nutrition protocols[1,10], it was found that

insufficient support and training of nurses in administering these protocols[6] hampered their effective implementation at PHC facilities. From the studies, it appears that lack of community-based GM systems and low priority to preventive care and nutrition in general, largely contribute to the poor functioning of the health facility-based nutrition programme and subsequently, the control of malnutrition.

Is There a Solution?

To combat malnutrition in South Africa, it is essential that the training of PHC nurses be strengthened in administering nutrition protocols, improving focus on preventive care and community participation. It is even more important that key activities which are mainly considered the responsibility of PHC nurses, are equally distributed and directed to both health facility and community-based components. In order to facilitate behavioural changes and community participation, mothers should be educated to report at PHC facilities with their preschool children at regular intervals for GM and promotion and not only when children are sick or require treatment or immunisation. In this way, growth irregularities can be detected and addressed when they occur. Since the potential of GM and promotion in the prevention of under-nutrition and enhancement of child caring practices has been demonstrated, more consideration should be given to community-based GM models[4,5,14].

A community-based approach that introduced a structured system of 4-monthly GM in an urban area with the support of the community and health authorities, improved child attendance for GM by more than 70%[5]. A similar model with no existing health infrastructure in rural KwaZulu/Natal, demonstrated positive outcomes in terms of GM, health and nutritional status of preschool children[14]. These community-based models developed by the Nutritional Intervention Research Unit of the Medical Research Council hold great promise in addressing the shortcomings of health facility-based GM and targeting of at-risk groups.

How do we Introduce Community-based GM Models?

Introducing community-based GM models requires the political will from professionals and policymakers to identify and afford members of the community the opportunity to be trained to participate in aspects of health, nutrition and social development. A step-by-step introduction is required to:

- identify communities where the prevalence of child malnutrition is high or exceeds national prevalence rates;
- collaborate with communities and health authorities within a 'clinic' catchment area to identify people interested in participating in health/social development;
- train these people in GM and crucial aspects of nutrition and health care;
- establish a support structure and a mutual feedback system between community and health facilities where these models are implemented;
- identify a person as collaborator/ mentor between the community and facility-based components, who also takes responsibility for monitoring, supervision, guidance and training.

Although it is relatively simple to establish community-based growth monitoring systems, one needs to be aware of urban and rural challenges that might affect the sustainability of such models. Since the need for these models is the greatest in disadvantaged communities, it provides an ideal opportunity for skills development and job creation. It is therefore recommended that community members are carefully selected and remunerated on a services rendered basis. The question of remuneration should be the responsibility of the directorates involved in the planning and implementation of nutrition programmes.

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