

# CHAPTER 9

## GENERAL RECOMMENDATIONS

### FRAMEWORK FOR MAKING RECOMMENDATIONS

Initially, the prime objective of this study was to assess the anthropometric, vitamin A and iron status in children 6-71 months old in South Africa. The main recommendations in this report are, therefore, primarily concerned with the improvement of the vitamin A and iron status of South Africa's children.

The assessment of iodine status was not contemplated at first, as an extensive review by SAVACG of the available evidence did not warrant the inclusion of a biochemical iodine assessment; the latter is usually done on urine specimens, and it would have, therefore, increased the costs, time and staff requirements of the study considerably, and disproportionately to the anticipated results. However, after discussions with UNICEF, it was mutually agreed to include a clinical assessment for iodine deficiency, namely visible goitre. This occurs usually after the age of 6 years, the optimum age for a population-based assessment being 12 years of age, and, even then, it is a relatively subjective assessment, except in obvious enlargement. The recommendations in terms of iodine status have, therefore, been made with these limitations in mind.

Added to the prime objectives was the assessment of the immunisation coverage status of these children, as it is an important predictor of micronutrient status. Furthermore, socioeconomic status, although itself a known and important independent predictor of micronutrient status, was measured mostly with a view to allowing better targeting of possible interventions. Although the report makes recommendations of a general nature regarding nutrition, immunisation and community development, these recommendations flow from their impact on the reduction of the prevalence of vitamin A and iron deficiency, and they may not be complete in terms of reducing undernutrition, lack of immunisation or poverty and deprivation. A detailed discussion, for example, of the mechanisms for rural economic development, an essential ingredient of sustainable elimination of undernutrition, falls well outside the scope of this study. Nevertheless, in general terms, such recommendations are made, using both the findings from the present study and some plausible solutions suggested in other policy documents.

In general, the process of making recommendations consisted of the following steps: Firstly, for each specific component of the study "action points" were established, i.e. results beyond which intervention was deemed necessary. Secondly, all possible interventions used worldwide were discussed. Thirdly, given the study results, the experience of SAVACG and data on health services, the interventions that seemed to be most efficacious and implementable in South Africa were selected. It is these recommendations that are contained in this report.

The recommendations specific to each component of this study are contained within the appropriate chapters dealing with these components. The purpose of this chapter is to make recommendations that are applicable to more than one component, and to make recommendations on the general results of the study (Chapter 3), general discussion

(Chapter 8) and on other incidental findings. A summary of all recommendations has been included in the executive summary to this report.

## **GENERAL RECOMMENDATIONS**

### **9.1 Recommendations Regarding The Process Of This Study**

9.1.1 The sampling methodology employed in a survey of this nature is a very intensive procedure both in terms of expertise and time.

Since it is recognised that there is currently no quick method to obtain a national probability sample of children, every effort should be made in future health surveys to share sampling resources with other organisations conducting national health surveys. An example of such an organisation is the Central Statistical Service which conducts annually the October household survey. Given that the current emphasis of governmental health services is correctly placed on the improvement of child health, and assuming that efforts to improve child health are to be evaluated, SAVACG recommends that the Department should investigate the feasibility of establishing and maintaining a national valid sampling frame for children. The Department could achieve this goal in collaboration with appropriate research institutions and universities in the country.

9.1.2 This study has demonstrated that a multi-institutional and multidisciplinary effort can lead to greatly improved information on health, health problems, and solutions to these problems. The dynamics of academic, provincial and local health services are, however, such that their human and financial resources are largely focussed on the region in which they are located or for which they have health service responsibility. As previously mentioned, this particular study was made possible through an initiation grant from a private sector company. In terms of health-related research, it is the Department and the Medical Research Council that have a national mandate.

SAVACG recommends that both the Department and the Medical Research Council, with or without the assistance of the private sector, develop appropriate mechanisms to initiate multi-institutional and multisectoral research allowing South Africa to better develop its own health research capacity through national cooperation.

9.1.3 .Although a full cost analysis of this study has not yet been completed, it is quite clear that the estimated costs of R 1 500 000 fall well outside the budgetary capacity of academic and research institutions. Yet, comparatively speaking, the costs of the study, in relation to the potential savings for the health budget by implementing some of the proposed recommendations, notably vitamin A supplementation, is small.

To enable adequate research to be undertaken into major health problems, and to achieve timely and appropriate solutions to these problems, budgets for research of this magnitude need to be made available. It is recommended that the Department at national, regional and local level, as well as the Medical Research Council

should develop strategies, appropriately assisted with adequate funding, to respond to health research problems of major national, regional or local importance in relatively short periods of time.

## **9.2 Recommendations Of A General Nature**

9.2.1 Socioeconomic upliftment is considered essential to sustainable reduction of vitamin A deficiency, iron deficiency, and undernutrition in general. A detailed discussion of this subject falls outside the scope of this report. Nevertheless, it is important to note that these particular deficiencies, because of their intimate link to socioeconomic status, may be used as medium-term indicators of the success of the national health services.

The prevalence of vitamin A deficiency, iron deficiency, and anthropometric status of children under the age of five years should be used as indicators of the success of national and regional health programmes and should be incorporated in the national Health Information System. SAVACG recommends that follow-up studies similar to the current study be done within the next three years to measure progress towards improvement of the nutritional status of children.

9.2.2 In general, nutritional and micronutrient status was poorer in rural areas, informal settlements, and in children whose mother had a low level of formal education. It is these children who will benefit most from recommendations made in the specific chapters of this report. However, many of the short-term recommendations relating to the reduction of vitamin A and iron deficiency, and to the reduction of undernutrition are related to access to primary health care services. Specifically, if vitamin A supplementation is implemented as part of the improvement of immunisation coverage and the "Well-Baby-Clinics", as recommended, then the vitamin A supplementation programme is more likely to reach those in greatest need.

Improvement of immunisation coverage of the under-five population is, therefore, an essential component of a national strategy to reduce the prevalence of micronutrient deficiencies, directly through provision of short-term supplements and indirectly through the reduction of vaccine-preventable diseases. A programme designed to improve national immunisation service coverage and "Well-Baby-Clinics" needs to be planned and implemented immediately, if recommendations concerning supplementation of micronutrients are to be effective. This is particularly relevant for rural areas.

9.2.3 Closely linked to recommendation 9.2.2. was the finding that for all indicators the three most seriously affected provinces were the Northern Province, the Eastern Cape and the Northern Cape. Although budgetary re-allocations will ease the task of these provinces to increase health service coverage in their areas, further assistance may be required in terms of expertise to ensure the capability to respond to the findings of this report.

It is recommended, therefore, that the Department should assess the need for expert assistance to these three provinces and, when assistance is required,

strategies should be developed to make such expertise available to these provinces.

9.2.4 Direct nutritional support, other than megadose vitamin A supplementation and selectively dispensed iron supplements, is a topic of great controversy both nationally and internationally. On the basis of the findings of this study, SAVACG discussed the strategies that should be followed to reduce general undernutrition and to achieve sustainable reduction of micronutrient deficiencies and malnutrition in South Africa. Although the specific recommendations are listed in the appropriate chapters, in the broadest of terms the members of SAVACG :

- Agreed on the need for food supplements to be given to acutely and severely malnourished children.
- Agreed on the need for long-term structural changes to reduce malnutrition, including community development and nutritional education.
- Disagreed on the need to provide food supplements to children in general, if funding for such supplementation would detract from community development efforts.

However, SAVACG did agree and did recommend unanimously, that should the Department continue with food supplementation of children, such supplementation should be given to young children, i.e. children up to the age of five years, or even only up to two years, rather than to children of school going age.

### **9.3 Recommendations On Incidental Findings**

9.3.1 The only major incidental finding to which this report wishes to draw attention, is the possible wide access to television sets, even in rural areas. Although this study did not establish what proportion of children or caretakers of children has access to a television, nor what time of the day are peak viewing times, this finding may be important for educating the nation on health matters.

It is recommended that a more specific study concerning the access to television by South Africa's children and their caretakers should be conducted, and a strategy for the optimal use of television for health education and promotion in both rural and urban populations should be developed.

### **9.4 Recommendations Concerning The Implementation Of Interventions Suggested In This Report**

9.4.1 Implementation, in part or in total, of the proposed recommendations is the principal responsibility of the national, provincial and local health departments. While the report and its recommendations provide clear guidance regarding the necessary plan of action, the essence of successful implementation is crucially dependent on the coverage of the child population with preventive services and the management of such services.

It is recommended that both programme coverage and programme management should be addressed specifically in terms of structural requirements (horizontal versus vertical implementation; where to locate responsibility for implementation and evaluation) and in terms of programme management training requirements.

- 9.4.2 Monitoring of the implementation of the programme is both crucial and essential. Firstly, because the assessment of the achievement of programme objectives is a core component of good management practice, and secondly because the possible implementation of vitamin A supplementation may lead to side-effects.

It is, therefore, recommended that a multifaceted evaluation programme should be defined and activated concurrently with the implementation of the recommendations of this report.

- 9.4.3 Should it be decided to implement the recommendation to provide children under the age of five years with vitamin A megadose supplements, then it is essential to re-evaluate this decision within three years. Given that vitamin A megadose supplementation may lead to overdosing, any improvement in vitamin A status with more sustainable solutions, such as food fortification, should be evaluated with the aim of discontinuing the megadose supplementation programme.

For this reason, it is recommended that a repeat survey of the plasma vitamin A concentration in children under the age of five years should be conducted at the end of the third year following the implementation of vitamin A megadose supplementation.

- 9.4.4 To achieve a sustainable solution for the reduction of vitamin A deficiency and deficiencies of other micronutrients, it is essential to develop a comprehensive strategy that will address such deficiencies in the medium-term, i.e. until such time that socioeconomic upliftment can achieve sustained reduction. For a medium-term solution to be effective, several different aspects of adequate micronutrient intake need to be addressed at a national level.

It is, therefore, recommended that soon after a decision is made to implement the proposed immediate interventions, strategies should concurrently be developed to:

- Increase consumer awareness of adequate micronutrient intake.
- Increase awareness of the importance of immunisation.
- Increase awareness of the importance of breastfeeding.
- Improve health worker training in respect of stunting, micronutrients, breastfeeding and immunisation.
- Evaluate, and adapt as necessary, the currently dispensed micronutrient supplement in health care facilities.
- Regulate or legislate for food fortification programmes.

Finally, the limitations of continuously adding new interventions to the child health primary health care service is fully realised and acknowledged. However, such services should be sufficiently flexible to accommodate carefully evaluated major developments in the field of child health and nutrition, such as that of the consequences of vitamin A deficiency. It is also acknowledged that the short- and medium-term proposed recommendations can be considered as "quick fixes", which they are; long-term sustainable solutions must await the redistribution of resources and socioeconomic upliftment.