



POLICY GUIDELINES FOR GROWTH MONITORING AND PROMOTION

1. INTRODUCTION

Nutritional status is one of the major determinants of normal physical and mental growth. The National Food Consumption Survey (NFCS) of 1999 showed that at least 20.4% (RSA: 21.6%) of children between the ages of 1 and 9 years old in Gauteng are stunted (i.e. Low height for age – 2 standard deviation from the norm). Children between the ages of 1- 3 years were most affected (Gauteng: 26.2%; RSA: 25.5%). It also found that 8.8% of children in the 1-9 years age group were underweight for age in Gauteng. (RSA: 10.3%). Wasting (Low weight for height) was found to be relatively uncommon in Gauteng (Gauteng: 1.2%; RSA: 3.7%).

Malnutrition, either directly or indirectly, contributes to more than half of all under-5 deaths globally and is an important contributor to childhood morbidity. It has multiple causes including lack of food, common and preventable infections, inadequate care and unsafe water. In turn, malnutrition itself also exacerbates the symptoms of preventable illnesses. Strategies and interventions to improve the nutritional status of women and children must prioritise interventions that tackle the major health challenges posed by malnutrition.

2. BACKGROUND

Nutritional surveillance has been poorly developed in South Africa. The objective of growth monitoring is to detect early growth faltering so that health workers can intervene before the child becomes malnourished.

Growth Monitoring and Promotion is the regular measurement, recording and interpretation of the child's growth over a period of time with the purpose of promoting child health, development and quality of life. It provides information, which can quickly be responded to. It helps in identifying disease early and provides opportunities to introduce interventions. Growth Monitoring and Promotion is an integral part of primary health care.

3. OBJECTIVES OF POLICY

The primary objective of the policy is to promote optimal growth and development of young children and to ensure early detection of growth faltering in children under 5 years of age.

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This can be achieved by:

- a) Promoting the use of the Road-to-Health Chart (RtHC) by:
 - i) To encourage parents and caregivers to bring the card during all interactions with the health service
 - ii) Increasing caregivers understanding of the value of the RtHC, and
 - iii) Improving health professional's knowledge, attitudes and skills related to the use of the RtHC.
- b) Improving the capacity of health clinics/centres to offer this service by ensuring that:
 - i) Basic equipment, such as weighing scales, is available and functional at all clinics
 - ii) Health professionals dedicate an appropriate amount of time to this activity
 - iii) Clinic and regional (sub-district) managers are knowledgeable about the programme, and support its successful implementation
 - iv) Measures to manage children with growth faltering, such as food supplements, are available
- c) Reinforcing public education and information about the benefits of breast - feeding and the need for proper child feeding with complementary foods, together with firmer linkages to income support and child care programmes within the community for those families with undernourished children who need such support.
- d) Monitoring the delivery and effectiveness of the programme supporting growth monitoring and promotion.
- e) Ensuring that appropriate and adequate resources, including personnel and fiscal, are allocated to this activity.

4. TARGET GROUP

The programme is aimed specifically at infants and young children aged less than 60 months.

5. ANTHROPOMETRIC MEASUREMENTS

Anthropometric indices provide an approximate reflection of nutritional status. The indicators used most often are body weight and height, in relation to age. The measurements vary with age and degree of nutrition, and as a result, are particularly useful in circumstances where chronic imbalances of protein and energy intake are likely. The commonly used anthropometric indices to assess nutritional status of children are weight for age, weight for height and height for age, and head circumference.

The weight for age index is used to assess undernutrition, including protein energy malnutrition, and over-nutrition. Its limitation when utilising it as an indicator for protein energy malnutrition, is that it does not take into account height differences. This may result in healthy children who are genetically shorter falling below the normal reference range for weight for age. The height for age indices is used to assess chronic undernutrition in children. Impaired height gain is called stunting and is reflection of both genetic influences and socio-economic circumstances surrounding the child. Low weight for height index is a measure of acute undernutrition or wasting.

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5.1 Growth monitoring schedule

The programme is based on the premise that the majority of infants (>80%) and most young children will be seen and assessed at points within communities or at clinics on a regular basis.

- Weighing of children should occur at all visits to a health clinic/centre, whether related to well baby care or to sick visits.
- Young children (under 5 years) can be expected to be weighed on at least 6 occasions related to their immunisation visits (at 6, 10, 14 weeks of life and at 9, 18 and 60 months of age).
- Routine growth monitoring and promotion are also recommended at three-monthly intervals from 3 months to 2 years of age, and at six-monthly intervals thereafter, until the fifth year of life. This will require 10 additional visits to a health centre by each child between birth and 5 years of age.
- At-risk children (as defined later) should be monitored more frequently (as often as monthly) and targeted specifically when the need arises
- Children with growth faltering will be monitored at 2-4 weekly intervals until they have recovered and are following their expected growth curve.

6. GROWTH FALTERING

A full nutritional history, medical history, physical examination including anthropometric measurements, and laboratory tests (where indicated) should be undertaken as the first step in assessing children at-risk.

At risk infants and children include:

- Those with a history of a recent serious illness
- Preterm and Low birth weight (< 2.5kg) infants.
- Non-breastfed infants
- Infants from multiple or unplanned pregnancies
- Babies born to teenage mothers without supportive structures
- Infants in single-parent families
- Children living in families with erratic or no financial support
- Children exposed to emotional deprivation or neglect
- Children with physical or mental disability.

Definition of growth faltering:

- a) No change in weight (failure to gain weight) or a significant decrease in weight between consecutive growth monitoring or other visits (with at least a 4-week interval between weighing)
A significant decrease in weight gain is defined as:
 - i) Infants; 0-4 months: weight gain of less than 500g per month
 - ii) Infants 4-6 months: weight gain less than 250g per month
 - iii) Children 6 months to 5 years – failure to gain weight or falling weights for 3 consecutive months, or the nurse can use her discretion depending on the adverse circumstances whilst referral to the relevant level/sector is considered.
- b) Children who have no growth record, but are less than 60% of expected weight for age, will automatically be regarded as having growth faltering

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7. RECORDING

7.1 The Road To Health Chart (RtHC)

All measurements need to be recorded on the Road to Health Chart (RtHC). The aim of the RtHC is to have an accurate home-based record (patient-held record) of a child's health and development, to promote the relationship between health workers and the parent(s) / caregiver of the child and to improve the identification of children needing extra care. The RtHC is often the only ongoing link between health workers and parents / caregivers.

The following steps need to be taken for all children:

- The RtHC should be issued to all babies at birth, and its purpose and interpretation should be explained to the mother in simple terms. This is a tool to promote the well being of the child, and for this reason the mother is a partner and not merely a messenger for carrying the card
- All relevant parent/baby's information should be filled in before discharge from the Midwifery Obstetrical Unit or hospital by the health worker.
- At the six week clinic visit, the chart should be checked for completeness and all outstanding data filled in.
- Mothers will be encouraged to always bring the RtHC when visiting the doctor or the clinic.
- Health professionals should specifically request the RtHC at all (well baby and sick child) patient encounters.
- Charting (plotting) of weights will routinely be done. This will be followed by a discussion with the caregiver about the child's growth status and nutritional counselling.

7.2 Plotting on the Road to Health Card

Accurate plotting of the weight with dots joined by clear lines, allows both the health worker and the mother to see the rate of growth of the child. It is important that the mother/caregiver understand the implication of the direction of the growth curve because she is primarily responsible together with the health worker for taking any necessary action. If the weight gain is shown to be satisfactory, it is very important to commend the mother and, and if necessary advice her as how to maintain good progress. Inadequate weight gain may be due to inadequate food, illness or inadequate care or stimulation.

Weight monitoring provides valuable information, allowing early recognition of poor nutrition or presence of some illness. The underlying causes must be sought out and any necessary action taken. Unless there is accurate weighing, plotting and interpretation of the findings followed by any necessary intervention and action, the process is largely a waste of time.

See Annexure 1 for 'Road to Health Chart: Guidelines for Health Workers' for explanations on how to complete the RtHC.

8. INTERVENTIONS

The Growth Monitoring and Promotion programme offers two main interventions:

- a) Promotion of optimal growth of all children.

This includes activities supporting:

- i) Breastfeeding, and particularly exclusive breast feeding for the first six months of life;

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- ii) Counselling and support for optimal feeding of infants and young children
 - iii) Micronutrient supplementation (vitamin A, iron)
 - iv) Regular deworming.
- b) Management and Support for children who are showing signs of growth failure
- i) Identification of possible underlying disease, e.g. HIV or cardiac disease
 - ii) Nutritional assessment
 - Accurate general history taking, including feeding of the child and complete physical examination.
 - iii) Nutritional counselling
 - Encourage breast-feeding for 4-6 months, from birth and to continue breastfeeding with adequate complementary foods for two years and beyond.
 - Discourage artificial feeding for infants under the age of 4 months.
 - Encourage the intake of iron and energy foods for all toddlers. *
 - Frequent mixed feeding at least 5 times a day for older children.
 - Cup and spoon feeding is more convenient and hygienic than bottle-feeding.
 - Minor dietary modification may be necessary depending on circumstances and culture.
 - iv) Access to the Supplementary Feeding Scheme, once a full investigation into the presence of any disease, feeding practices, home circumstances, socio-economic status and caring status has been undertaken and possible remedial actions implemented.
 - v) Referral to social welfare services, to enable access to child social support grants
 - vi) Early referral to hospitals for children failing to respond to the above interventions

9. REPORTING AND MONITORING

ROUTINE MONITORING OF GMP

Monitoring is important to provide Regional Health and Programme Managers with information regarding the implementation of the programme, achievements and areas that require adjustments.

Child health and Supplementary Feeding Scheme data elements that are included in the existing Essential Data Set will be utilised to monitor aspects of the programme. These elements are:

Child Health

- Children under 5 years weighed
- Children under 5 years underweight for age
- Children under 5 years not gaining weight
- Children under 5 years severely malnourished

Supplementary Feeding Scheme

- Breast milk supplements to infants under 6 months of age

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- Breast milk supplements to infants above 6 months but less than 1 year old
- Supplements to children 1 – 3 years old
- Supplements to children 3 – 5 years old

The Regional HIS Units monthly will collate this data, as part of their routine work, and submit it to the central office where the citywide report will be compiled.

The programme will also be monitored through the Quarterly Child Health In-Depth Review aspect of the Clinic Supervisors Manual that is routinely conducted. This will monitor the quality of the recording on the RtHC by clinician's through random record reviews.

References

1. Child Health for All, A Manual for Southern Africa, Kibel M A and Wagstaff L A, 3rd Edition, Oxford University Press.
2. Training Modules for Growth Monitoring and Promotion, Directorates Nutrition and Child & Youth Health, National Department of Health.