

WHO-EM/NUT/245/E

Planning for effective communication strategies to improve national nutrition programmes



**World Health
Organization**

Regional Office for the Eastern Mediterranean

Planning for effective communication strategies to improve national nutrition programmes



**World Health
Organization**

Regional Office for the Eastern Mediterranean

WHO Library Cataloguing in Publication Data

WHO. Regional Office for the Eastern Mediterranean

Planning for effective communication strategies to improve national nutrition programmes / WHO. Regional Office for the Eastern Mediterranean

P.

WHO-EM/NUT/245/E

1. Nutrition Policy 2. National Health Programmes 3. Communication 4. Malnutrition, Child
5. Health Planning I. Title II Regional Office for the Eastern Mediterranean

(NLM Classification: QU 145)

Acknowledgements

Planning for effective communication strategies to improve national nutrition programmes has been prepared by the World Health Organization (WHO) Regional Office for the Eastern Mediterranean. The project was conceptualized and coordinated by Kunal Bagchi and the modules were developed by Samar El Feky. Additional technical input towards the development of the modules was provided by Lilas Tomeh and Leila Cheikh. The final draft of the modules was subsequently reviewed at a regional consultation by Aisha Al-Romaihi, Sabah Al-Bahlani, Malek Batal, Behnoush Mohammadpour-Ahramjani, Shoubo Rasheed, Abdul Halim Joukhadar, Sasha Bootsma and Yvette Bivigou.

Funding for the project was provided by the International Micronutrient Malnutrition Prevention and Control Program (IMMPaCt) of the Centers for Disease Control and Prevention (CDC), Atlanta, USA, as part of the WHO/CDC Cooperative Agreement. The support of Ibrahim Parvanta towards the realization of this project is gratefully acknowledged.

© World Health Organization 2007

All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

Publications of the World Health Organization can be obtained from Distribution and Sales, World Health Organization, Regional Office for the Eastern Mediterranean, PO Box 7608, Nasr City, Cairo 11371, Egypt (tel: +202 2670 2535, fax: +202 2670 2492; email: DSA@emro.who.int). Requests for permission to reproduce WHO EMRO publications, in part or in whole, or to translate them – whether for sale or for noncommercial distribution – should be addressed to the Regional Adviser, Health and Biomedical Information, at the above address (fax: +202 2276 5400; email HBI@emro.who.int).

Contents

Acknowledgements	2
Foreword	5
Introduction	7
Module 1	9
1 Health communication in nutrition	11
2 Building background information on a community	15
3 Planning a nutrition communication strategy	19
Module 2	23
1 Identifying and describing a nutrition problem	25
2 Analysing a nutrition problem	35
Module 3	47
1 Identifying and segmenting target audiences	49
2 Setting goals and objectives	63
3 Developing and pretesting communication materials	71
Module 4	81
1 Planning for programme monitoring and evaluation	83
2 Tools of research	97
Module 5	105
1 Advocacy	107
2 Social marketing	117
Module 6 Case studies	123
Case study 1: Increasing the calcium intake of schoolchildren in Beirut, Lebanon	125
Case study 2: Reducing anaemia among children under 2 years of age in the Islamic Republic of Iran	131
Case study 3: Oman's maternal and child health care communication plan	141
References	151
Annex 1: List of verbs	153

In the Name of God, the Compassionate, the Merciful

Foreword

Planning for effective communication strategies to improve national nutrition programmes is based on the communication training module *CDCynergy for micronutrient deficiencies*, developed by the Centers for Disease Control and Prevention (CDC), Atlanta, USA. *CDCynergy* is a systematic health communication planning module that focuses on micronutrient malnutrition and addresses the three main micronutrient deficiencies of iron, vitamin A and iodine. The *CDCynergy* training module was piloted at a regional workshop in 2002 in the Eastern Mediterranean Region. Since its introduction, one subregional and several national level training workshops have been organized. While these training workshops demonstrated the importance of effective communication in nutrition programmes, experiences also pointed to the need for the development of a more compact training programme encompassing all aspects of nutrition including micronutrient malnutrition, with general adherence to the *CDCynergy* model.

The training modules were developed with the aim of familiarizing senior and middle-level national health educators and nutrition programme managers with the broad conceptual framework needed to plan effective communication packages for a wide variety of nutrition programmes. The modules cover the whole spectrum of planning a nutrition communication programme: identifying and describing a nutrition problem; identifying, segmenting and profiling target audiences; setting goals and objectives for communication strategies; and developing and pre-testing communication materials. The modules also provide methods for the evaluation and monitoring of new and existing national nutrition communication programmes. Information and guidance on identifying and approaching appropriate stakeholders and partners is also provided for planners to explore all possibilities for cooperation and partnership. Many of the Member States in the Eastern Mediterranean Region share similar nutrition habits, behaviours and problems. Case studies and examples of prevalent nutrition problems in the Region are presented to improve understanding of the issues through an exchange of experiences.

The training modules are a practical tool that can be used by trainers with diverse backgrounds and particularly by those working at field level, to train all those involved in educating the community about health and nutrition. Efforts have been made to ensure the user-friendliness of the modules' contents and the ability to adapt the materials to provide guidance and productive direction in a variety of different contexts.



Dr Hussein A Gezairy, MD, FRCS
Regional Director

Introduction

The aim of this training course is to improve and strengthen national nutrition communication strategies through an introduction and explanation of the main concepts involved in nutrition communication planning. The course aims to familiarize those working in the field of nutrition communication with the broad conceptual framework for producing nutrition communication plans and provides methods for the evaluation and monitoring of new and existing national nutrition communication programmes.

The WHO Regional Office for the Eastern Mediterranean identified a need for training in the Region to help achieve understanding of the basic issues in nutrition communication and of the basic steps that are needed in order to plan a nutrition communication strategy. Nutrition communication strategies are dependent on understanding the nutritional background of communities, identifying the nutrition problems and analysing the direct and indirect causes of these problems. Once the problems and their causes have been identified, health communicators must then identify and segment their target audiences, set goals and objectives for their communication strategy, develop and pretest nutrition communication materials, advocate for nutrition issues, apply social marketing principles to achieve desired changes in people's health and diet-related behaviour and plan for the evaluation of programmes to ensure that any necessary modifications or refinements are made. These modules explain the most important aspects of nutrition communication and present case studies and examples from the Region to highlight the issues and to improve understanding through an exchange of experience as many countries in the Region share similar nutritional habits and behaviours and experience similar nutrition problems. Micronutrient deficiencies, anaemia, diabetes mellitus (type 2) and obesity are all prevalent problems in the Region.

In order to provide an overview of nutrition problems in the Region, countries can be classified into four groups. In Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates there is a lack of nutrition education and clear nutrition policies, goals and targets. These countries contain high levels of over-nutrition and obesity resulting in dietary risk factors for chronic diseases. There are also levels of moderate under-nutrition and micronutrient deficiencies among certain population subgroups. Among the population of these countries there is a very high intake of energy-dense foods, such as fats, sugar and refined carbohydrates and low consumption of fruit and

vegetables. There is also aggressive commercial marketing of processed and fast food, breast milk substitutes and carbonated drinks.

In Egypt, Islamic Republic of Iran, Iraq, Jordan, Lebanon, Libyan Arab Jamahiriya, Morocco, Palestine, Syrian Arab Republic and Tunisia, there is a lack of clear nutrition policies, goals and targets and uncoordinated nutrition programmes. There are moderate levels of overweight and obese populations and dietary risk factors for chronic diseases. There are also moderate levels of under-nutrition and widespread micronutrient deficiencies among certain population subgroups. There is a very high intake of fats, sugar and refined carbohydrates and low consumption of fruit and vegetables.

In Pakistan, there is widespread, low-grade poverty and insufficient income levels. There is a lack of clear nutrition policies, goals and targets, and inadequate institutional capacity and trained human resources. Under-nutrition, including both acute and chronic child and maternal malnutrition is prevalent among specific population groups, in addition to emerging patterns of over-nutrition among the affluent urban. Large segments of the population have an inadequate dietary intake.

Afghanistan, Djibouti, Sudan and Yemen are all countries which are experiencing complex emergencies and humanitarian crisis. These countries experience overall poor health and environmental conditions. There is ongoing disruption to national development programmes due to continuing civil conflict and insecurity resulting in a lack of institutional capacity and trained human resources. Severe child and maternal under-nutrition and widespread micronutrient deficiencies are common, and the highest infant and maternal mortality rates in the Region are recorded among this group of countries.

Contents

This manual consists of six modules. The content of the six modules is as follows.

- Module 1 presents an overview of health communication in nutrition and provides a definition of the meaning and scope of health communication and the role of health communication in disease prevention and control. It also discusses data sources which can be accessed in order to build background information on a community's nutrition issues and problems prior to planning a nutrition communication strategy.
- Module 2 presents an overview of planning a nutrition communication strategy and discusses the importance of effective planning. It highlights the steps involved in developing a nutrition communication strategy and explains how to identify, describe and analyse a nutrition problem.
- Module 3 explains how to identify, segment and profile target audiences and how to write a creative brief. It also provides information on how to set goals and objectives for a nutrition communication strategy and how to develop and pretest communication materials.
- Module 4 explains how to plan effectively for programme monitoring and evaluation and provides information on various methods of research.
- Module 5 explains the importance of advocacy and examines the principles of social marketing.
- Module 6 presents three case studies of nutrition communication strategies in the Region.

Module 1

Chapter 1

Health communication in nutrition

Chapter 2

Building background information on a community

Chapter 3

Planning a nutrition communication strategy

Chapter 1

Health communication in nutrition

Summary

This chapter provides a definition of, and explains the scope of, health education and communication. It describes the role of health communication in disease prevention and control by explaining what health communication can and cannot achieve. It also explains how, by combining health communication with other interventions, the role of health communication can be strengthened and greater progress towards desired outcomes can be achieved.

Learning objectives

By the end of this chapter you will be able to explain the:

- importance of health education and health communication;
- role of health communication in disease prevention and control;
- need for nutrition communication.

Health communication

Health communication is the art and technique of informing, influencing and motivating individual, institutional and public audiences on important health issues through the delivery of messages and strategies based on consumer research aimed at promoting the health of individuals and communities. The scope of health communication includes health care, disease prevention, health promotion and health care policy, and its aim is to improve the quality of life and health of individuals within communities through public health education.

The role of health communication

Successful health communication programmes involve more than the production of messages and materials. They rely on research-based strategies to shape communication materials and to determine the channels through which they are delivered to the target audience. Being aware of what health communication can and cannot achieve is crucial in order to effectively communicate health messages. Health communication is a tool for promoting and improving health, but is also a tool for encouraging changes to health care services, technology and regulations or policy which are also often necessary to fully address a public health problem. Health communication can:

- increase an intended audience's knowledge and awareness of a health problem and its solution;
- influence people's attitudes;
- influence people's perceptions of their ability to undertake certain behaviour;
- teach people skills to improve their health, such as demonstrating the preparation of healthy meals or the correct way to handle a baby while breastfeeding;
- encourage behavioural change;
- increase demand and support for health services;
- reinforce knowledge, attitudes and behaviours, as most health behaviour must be practised over a period of time in order to be beneficial;
- advocate for changes in health care services, technology and regulations or policy to improve a health issue, such as advocating for the fortification of flour or the distribution of healthy low-cost meals in schools;
- strengthen organizational relationships through collaboration and partnership during the planning and implementation of a health communication programme.

Health communication cannot maintain sustained behavioural change, as sustained behavioural change relies on a complex mix of motivation and the ability to continue performing the behaviour, it also relies on the ability to perceive the rewards for doing so. Addressing these factors requires an ongoing multifaceted communication strategy, and in addition, often requires changes to medical services or policy. Health communication cannot overcome barriers such as a lack of availability or accessibility to services. For instance, if producing fortified flour is too costly or the technology to produce it is lacking, these barriers need to be addressed before a health communication intervention can produce an effect. Finally, health communication cannot compensate for poor-quality services or treatment. If an individual experiences a long wait or an unsatisfactory interaction with a health care provider, communication alone is unlikely to encourage them to regularly seek health care services again.

Plans for creating sustained behavioural change need to rely on not only health communication, but on other interventions and strategies. Health communication can be used as a main intervention

or can support other interventions, such as health policy and enforcement, health engineering strategies or health-related community service interventions.

Health policy and enforcement

A health policy is a regulatory, legislative or organizational ruling that supports improvements to the public's health, for instance, allowing working mothers to leave their place of employment two hours early to facilitate and encourage breastfeeding. Combining health communication with health policy can be in the form of advocacy for a new policy or in increasing awareness or knowledge of a new health policy.

Health engineering strategy

A health engineering strategy is designed to change the structure or types of services or systems of care to improve the delivery of public-health services, for instance, the fortification of flour or the production of low-fat or skimmed milk. Combining health communication with health engineering can be in the form of advocacy for changing the structure and types of services or systems of care or through increasing people's awareness or knowledge of a new product and encouraging their motivation to use it.

Health-related community service intervention

A health-related community service intervention is a service, test or treatment to improve health, such as the use of mass haemoglobin analysis to detect anaemia, supplying iron tablets to pregnant women attending maternal and child health care centres or providing health care services to people in remote areas via mobile clinics. Combining health communication with health-related community services can be in the form of advocacy for new services, tests or treatments to improve health or through increasing people's awareness and knowledge of existing services or motivating people to encourage their use of services. An example of this would be encouraging pregnant women to access antenatal care services in maternal and child health care centres.

The need for nutrition communication

Nutrition communication provides nutrition information and also raises awareness of the various factors that can affect nutrition-related behaviour such as a lack of resources, the barriers to, and the benefits of adopting new behaviour, the level of social support provided or the acknowledgement of the need to acquire new skills. Nutrition communication uses a variety of methods to help people to understand their own situations and to voluntarily choose an action that will improve their health. There are four steps that need to be taken in order to bring about behavioural change and failure to perform these steps will not lead to the desired changes in behaviour. These steps involve identifying and raising awareness of a nutrition problem, creating motivation to improve a situation, teaching skills to bring about behavioural change and providing a supportive environment in which behavioural change can be sustained (Table 1).

The longer a problem has existed the more it will have become established and difficult to solve. Many conditions of poor nutrition are so common in developing countries that they are not even recognized as abnormal by people in the community. These conditions include mild and moderate malnutrition, anaemia, low birth weight, intestinal parasites and obesity. Raising awareness among individuals and communities of nutrition problems and high-risk conditions is the first step in encouraging people's increased use of health care services. People in the community need to be given the confidence and the skills to feel that they can take action to make a difference to their

Table 1. Four steps to encourage behavioural change

Steps	Health problems and solutions
Identify the problem	Obesity among adolescents.
Create motivation to improve the situation	Increase awareness of the hazards and sequelae of obesity among this age group.
Teach skills in order to encourage behavioural change	Teach skills, such as the correct preparation of healthy and appetizing meals, to mothers and adolescents.
Provide a supportive environment	Ensure the availability of healthy meals both at home and in schools and public eating places.

families' nutritional status and health, and many people are unsure of how to improve the health and nutrition of their families without seeking this assistance.

In many communities, issues such as a lack of hygiene, clean water and food shortages compound nutrition problems and nutrition communicators need to be aware of and understand these problems. There are also beliefs about food and dietary habits, particularly in regard to the feeding of children and pregnant or lactating women that may be based on inaccurate dietary information and certain practices which may actually be detrimental to the health of individuals. Nutrition communicators need to be able to respect people's beliefs and culture and to gain the trust and respect of communities in order to be able to provide people with advice and information on good health and nutrition practices. It is also the duty of health communicators to identify individuals and groups who have special nutritional needs and/or health care needs and to convey appropriate health messages to them.

Evaluation relevance

In order to identify and to learn more about nutrition problems in a community, it is useful to consider the following points.

- It is necessary to build background information on the community you are working with. This involves understanding why people hold particular attitudes or beliefs, follow particular traditions and have certain fears.
- It is necessary to define and to be able to describe nutrition problems in a community and to identify the groups who are most affected.
- It is necessary to consider which foods are important to people by assessing people's perceived and actual needs and by identifying the nutrition problems which are most prevalent.
- Nutrition problems need to be analysed by determining the direct and indirect causes of problems. There is often a combination of, or a chain of, causes rather than a single cause. These may include factors such as habits and attitudes, food pricing, marketing, poverty or spoilage.
- In trying to solve specific nutrition problems it is imperative that potential obstacles are identified as some nutrition communication programmes fail as potential obstacles are not identified early enough.
- Prioritization of nutrition problems needs to be decided in collaboration with the community and according to the goals of your organization and other organizations and the positive impact an intervention is likely to have on people's health.

Chapter 2

Building background information on a community

Summary

This chapter highlights the importance of understanding the community you are working with in order to develop an informed understanding of nutrition issues which may be affecting them. Understanding the community and compiling relevant background information on the most important issues is essential in the planning, implementation and evaluation of a nutrition communication strategy.

Learning objectives

By the end of this chapter you will be able to explain the:

- importance of determining a community's nutritional needs;
- key issues for consideration when compiling information on a community.

Determining a community's nutritional needs

In order to address a community's nutrition problems it is necessary to identify what are the actual, and what are the perceived, needs of the community regarding nutrition. People's perception of what they need may not always be the same as their actual needs, but a successful programme for improving the nutritional status of a community must address both people's perceived and actual nutritional needs while accurately identifying nutrition problems. Collecting detailed and accurate information on a community will assist in selecting the most appropriate ways of dealing with a problem, and during this process, opportunities for cooperation and collaboration with other organizations should always be explored.

A successful programme must assess the extent of a nutrition problem in terms of how many people are affected by it and how serious or dangerous the problem is. Morbidity and mortality rates are useful in determining this. Only when all information is collected are the priorities for a nutrition programme able to be determined. Information collected both before and after implementation of a nutrition communication programme is also able to show the impact that a nutrition communication programme has made.

The following key issues should be considered when compiling information on a community, although the following does not necessarily represent a complete list.

Geography and physical environment

Climate, altitude, pollution, transport and physical infrastructure may not necessarily be directly linked to nutritional status but may be affecting it. The climate of a region will have a bearing on the type of crops that are grown, altitude may affect blood oxygenation (a potential cause of anaemia), and a lack of safe water and sewage disposal facilities may lead to a higher prevalence of parasitic infections, all of which can create and contribute to nutrition problems.

Economic status

The economic status of a family is an important factor in determining their nutritional status. A family's economic status can often be determined by the occupations of the people within the family. If people are uncomfortable discussing their economic status, visual clues such as people's furniture or clothes can be used.

Education

Education is also an important factor affecting nutrition and the level of nutrition awareness among a community. It is important to be aware of the educational level of your target audience in tailoring nutrition messages to them. The educational level of a community can be determined by the number and standard of schools in the community, the number of students and the male-to-female ratio of students.

Working mothers

In communities where women work it is important to determine whether women are able to take their children to work and whether they are able to breastfeed during the day. If the children are at home it is necessary to determine who looks after them, and at what time of day or periods of the year mothers have more or less time to look after their children.

Food availability

Seasonal variations in the availability of work, food and water are common in some communities. Often different seasons are associated with disease epidemics such as diarrhoea, malaria or measles.

Information about the kind and amount of food available in a community according to seasonal variation is essential in the consideration of a nutrition problem.

Food subsidies

It is necessary to determine which foods in a community are subsidized, to what extent they are subsidized, what the pattern of distribution of subsidized food is and if there are food sellers selling subsidized food in local or neighbouring markets.

Distribution of free meals in schools or workplaces

Some schools and workplaces offer free meals during the day. If this is the case, it is necessary to determine which kinds and amount of food are offered, how the food is stored and how hygienic the food preparation facilities are.

Food consumption and dietary habits

Food consumption and dietary habits relate to what and how much food people eat, the method of preparation and how often food is prepared and for how long it is stored. This requires knowledge of how many meals are eaten each day, whether children are given snacks and what kinds of snacks, whether special foods are prepared for children, or whether they eat the same food as the rest of the family. You also need to establish who within the family eats what, who is served first, and whether children are fed separately or eat at the same time as the rest of the family, as these factors influence how much nourishment a young child receives. There are other behaviours and habits which affect nutrition and which may lead to nutrition problems, such as drinking tea after meals and serving snacks and sweets between meals.

Methods of food preparation

Methods of food preparation differ from one area to another and so it is important when building background information on a community to determine the community's preferred methods of cooking, the types of vegetables, meat and fish which are served and the type of oil, butter, salt or milk (goat or cows) that is used.

Community leaders

When an effort is made to change the dietary habits of people the exercise will be made considerably easier if the nutrition messages are acceptable to the community. If a community leader is convinced that a health message is good for the community, and gives approval and support, members of the community will be more receptive to that message. Similarly, if a schoolteacher reinforces the benefits of good nutritional practices to pupils, your efforts will produce better results. Formal leaders in the community include local religious leaders, schoolteachers, local doctors and nurses, businessmen and heads of small industries, heads of women's institutions, members of local nongovernmental organizations and local political leaders.

Informal leaders include people who do not hold any formal position in the community but who are influential and respected, such as traditional birth attendants (TBAs) and midwives. These people should be involved in communicating information on nutrition to the public as their support will be instrumental in influencing the community. Governmental agencies and departments, private organizations and nongovernmental organizations are also useful in communicating nutrition information to the public.

Media access and exposure

The extent to which a community has access to, and is exposed to, certain mass media channels is

important in determining a community's media habits and preferences, and media channels should always be exploited to communicate health and nutrition information to the public.

Health information

Morbidity and mortality rates, and the causes of morbidity and mortality, are indicators of the relationship between nutrition and prevalent patterns of disease. Determining the community's accessibility to health care services, both modern and traditional, is also important as this information will have relevance for your communication strategy.

How to collect information

There are three main methods of collecting information on people, groups or communities, these include: observation, interviewing and reviewing records and documents.

Observation

Observation involves the collection of information through watching and listening. Decide in advance what you want to observe and how you will observe. For example, visiting a local market will enable you to find out which food is available locally and at what price and this information may be able to help you to identify the possible causes of a nutrition problem.

Interviewing

Interviewing involves questions and answers and is a way of gathering information through communication between a person who wants information (the interviewer) and people who can supply the information (the interviewees). Good communication skills are crucial when interviewing people. If a person does not feel comfortable or does not trust you, he or she may not talk freely and may give you false information. Always ensure that the person knows who you are and why you want to talk to him or her. An interview must be planned carefully and you must have a clear idea before the interview of the information that you wish to obtain.

There are four types of questions which can be asked during an interview.

- A simple, direct question does not allow an opportunity for discussion. For example: Does your village need a new market? The answer will be "Yes" or "No".
- A leading question leads a person to give only one answer. These types of question are dangerous to use in interviews as interviewees will almost always agree with the question statement and rarely reveal their true opinion. For example: Don't you feel that our village needs a new market?
- A forced choice question gives an interviewee the choice of only two answers although they may hold a completely different opinion. For example: Should our village have a new market this year or next year?
- Open-ended questions allow people to answer freely. It is important to listen carefully in order that people will be encouraged to express their views fully.

Reviewing records and documents

Reviewing records and documents will give you a clearer idea about health and nutrition problems. Study previous years' records in order to determine if the level of prevalence of a disease or problem has been increasing or decreasing.

Chapter 3

Planning a nutrition communication strategy

Summary

This chapter illustrates the importance of effective planning in nutrition communication strategies and lists the necessary steps for effective planning.

Learning objectives

By the end of this chapter you will be able to explain the:

- importance of effective planning in nutrition communication strategies;
- steps involved in planning an effective nutrition communication strategy.

The importance of planning

The effective planning of a nutrition communication programme will help you to:

- better understand the nutrition problem you are addressing;
- set priorities;
- promote the role of nutrition communication as an effective intervention in solving a nutrition problem;
- assign responsibilities (who will do what, when and how?);
- assist in evaluating progress towards the desired outcomes;
- secure resources and funds;
- conduct activities within a given time frame;
- save time and resources and avoid the duplication of work.

Planning steps

The process of planning a nutrition communication strategy involves the six steps shown in Figure 1. During the planning phase it is necessary to determine which resources are available and to acquire funding. Responsibilities need to be assigned (who will do what, when and how?), and an internal communication plan between stakeholders and partners needs to be developed which establishes when, where and how they will meet and contact each other. A timeline needs to be drafted for your plan and should address the following questions.

- What activities are needed (for example, selecting methods, securing resources, conducting research)?
- When does each activity begin and end, and when should an activity be repeated?
- What time frame is most appropriate for your nutrition communication strategy?
- When is it expected that selected activities identified in your timeline will be accomplished?
- When will the outcomes and/or products you create, that result from your programme objectives, be due?
- Is there a sequential order to the activities listed in the budget? Are there certain activities that must be undertaken before other activities?

A budget should be set at the beginning as it is based on your goals and objectives. You can develop a complete, workable budget by ensuring that it fulfils the following objectives. A budget should:

- include detailed descriptions of the work and list the activities requiring funds;
- project the costs of activities for the programme's duration;
- allow for miscellaneous or unexpected expenses;
- include all items required by the funding source;
- include all items paid for by other sources and list volunteer and in-kind services to be provided;
- include details of all non-personnel costs.

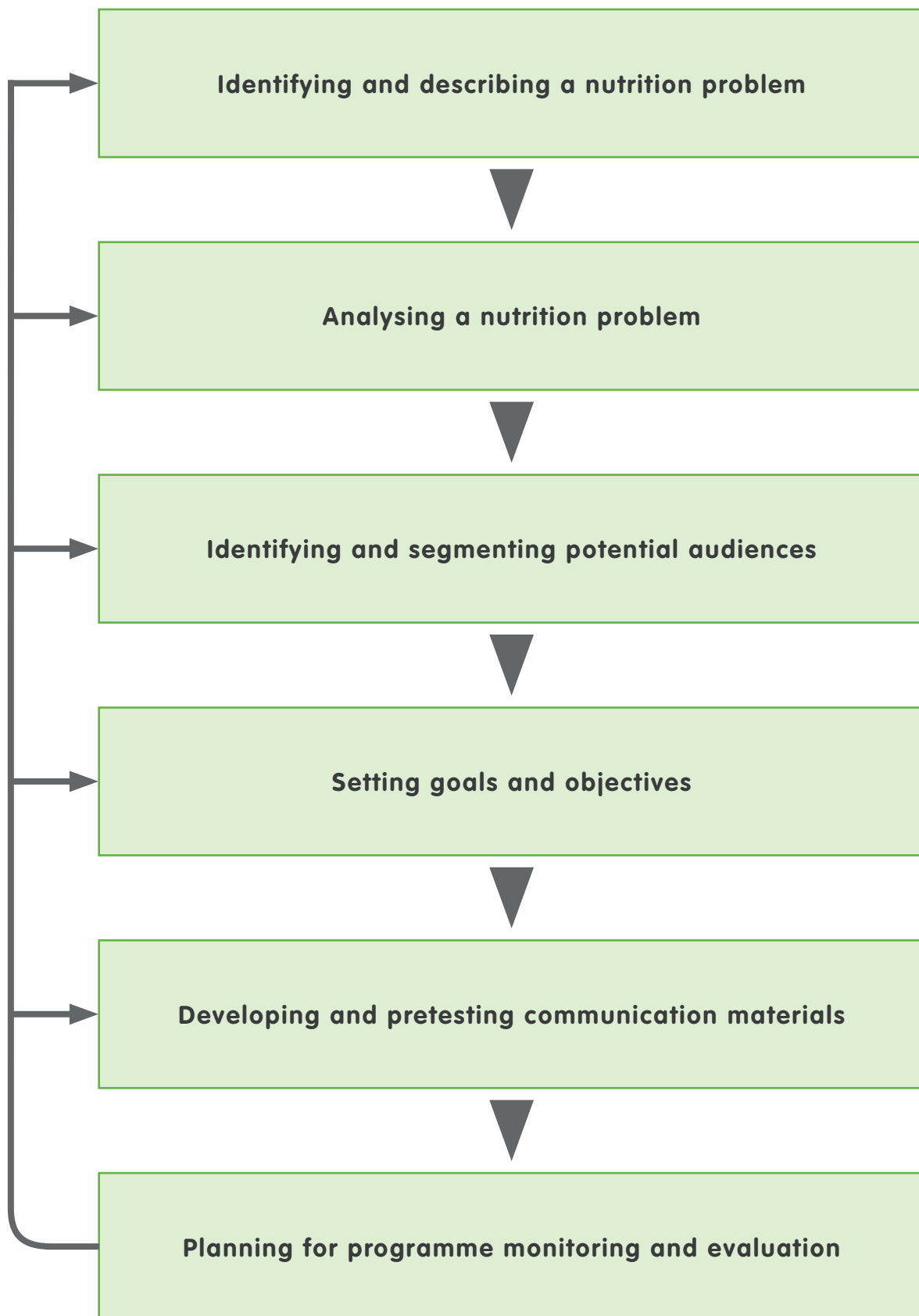


Figure 1. The planning steps of a nutrition communication programme

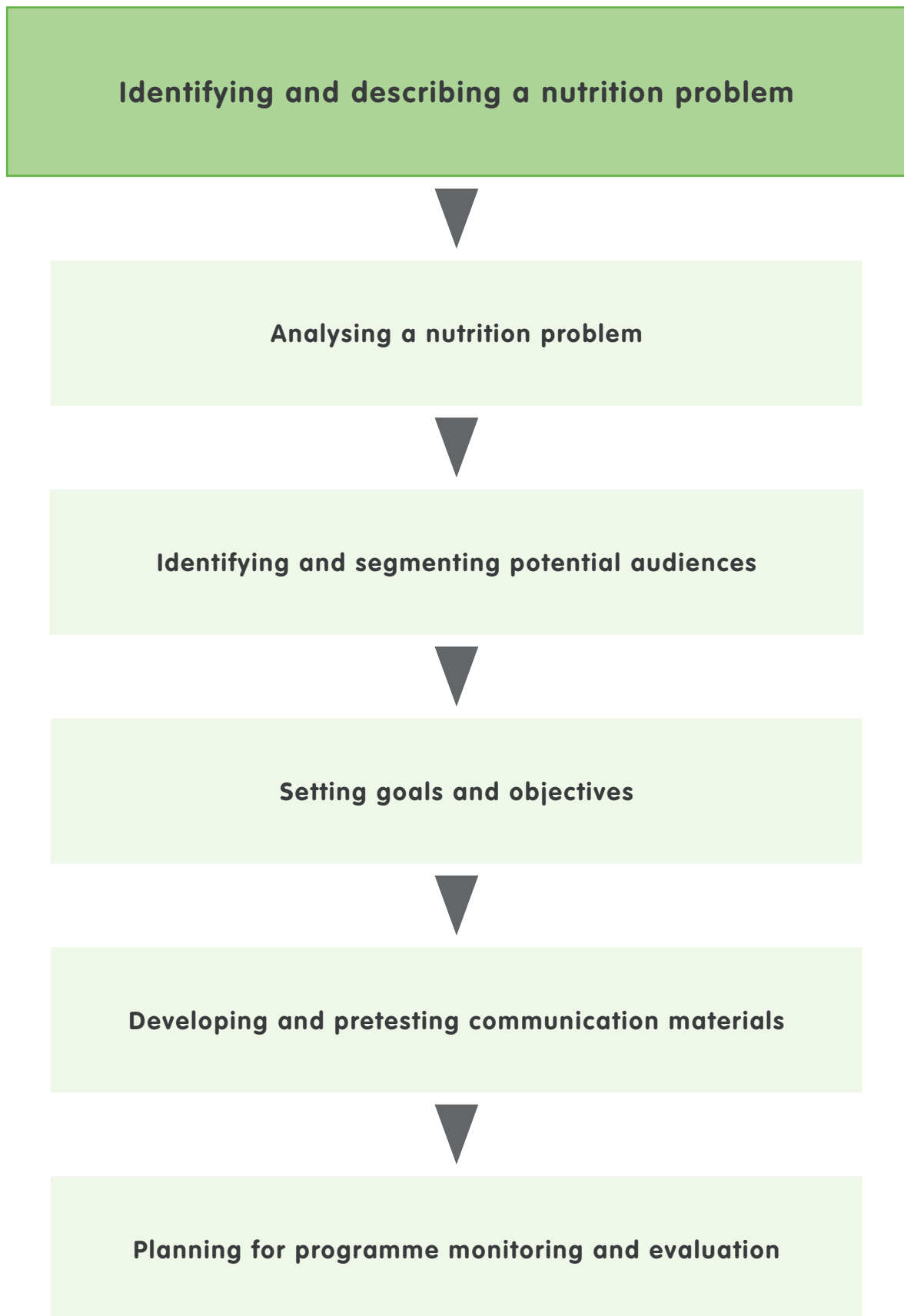
Module 2

Chapter 1

Identifying and describing a nutrition problem

Chapter 2

Analysing a nutrition problem



Chapter 1

Identifying and describing a nutrition problem

Summary

This chapter discusses how to identify a nutrition problem and highlights the need to write a brief problem statement describing the problem. It provides information on relevant data sources that can be consulted, and on how to conduct secondary and primary research. It identifies appropriate stakeholders and partners who can be included in the planning and implementation phases of your programme and discusses subgroups within a population affected by a problem.

Learning objectives

By the end of this chapter you will be able to:

- identify and describe a nutrition problem;
- identify which data sources are useful to consult;
- explain the differences between primary and secondary research;
- identify appropriate stakeholders and partners who can be included in the planning and implementation phases of your strategy;
- explain the meaning of subgroup and subproblem.



Figure 2. Steps involved in identifying and describing a nutrition problem

Identifying a nutrition problem

The first step in planning a nutrition communication strategy is to identify and be able to describe a nutrition problem and to write a problem statement regarding the problem. The first step in any effective problem-solving process is one of the most important and so it is important to take the time to develop a critical definition and to let this definition and the subsequent analysis (see Module 2, Chapter 2) guide you through the process. Figure 2 shows the steps involved in defining and describing a nutrition problem.

The problem needs to always be defined in terms of conditions and not solutions. If the problem is defined in terms of possible solutions, the door is closed to other possibly more effective solutions. For example, the statement ‘women suffer from obesity in our community’ leaves open the opportunity for more potential solutions to the problem than the statement ‘women must do exercise in order to overcome obesity’, or ‘women must eat a low-fat diet in order to reduce obesity’.

Defining a nutritional health problem

A nutritional health problem can be defined as a problem when there is a difference between the actual nutritional health status of a population, as reflected in health status indicators, and the desired nutritional health status. Once a nutritional health problem has been identified it is necessary to determine what the desired nutritional status is, what the actual nutritional status is and what may occur if the problem is not addressed.

The following is a list of basic questions that need to be asked in order to build a background on a nutrition problem to be addressed. Answering these questions can provide a clearer understanding of why a problem is occurring.

1. What is the nutrition problem?
2. Who is affected by it?
3. How many people are affected by it?
4. In what ways are people affected by the problem?
5. How is the nutrition problem viewed by different groups? Are people aware that the problem could affect them?
6. How common is the problem?
7. How severe is the problem?
8. What general health, environmental or social conditions are connected to the problem?
9. Where does the problem exist geographically?
10. From available information is the problem increasing, decreasing or has it reached a plateau?
11. Which factors, such as time, are related to the problem? When was the problem first identified or when did it become significant? Is it a new or an old problem?
12. Is the nutrition problem affected by seasonal variations in availability of work, or access to food or water?

The following data sources are useful in accessing information and can be consulted in order to gain information about a community's health and nutritional status.

- vital records;
- hospital records;
- records from other agencies and the community;
- data registries;
- surveillance systems;
- survey results;
- local and population-specific statistics;
- national surveys;
- accident reports;
- health policies;
- reports from various ministries;
- potential partners who are aware of the problem;
- newspapers;
- primary care records;
- special studies;
- information from epidemiologists;
- reports from studies;
- agencies, institutions and organizations who are aware of the problem.

In gathering data it is also important to look at health status indicators, such as morbidity and mortality rates and the causes of death, illness, injury and disability and the rates of access to, and availability of, preventive and curative health care services.

Stakeholders and partners

When planning and implementing a nutrition communication strategy it is also important to explore all possibilities for cooperation and partnership and to identify and approach appropriate stakeholders and partners who can be included in the process as they can often provide invaluable assistance. If other organizations are already addressing a particular nutrition problem, they can be contacted in order to discuss what has already been learned about the problem, what information or advice can be offered to assist in planning and which other interventions or activities may be needed. It is also important to consider other resources which are available to support your communication programme, such as human resources, additional facilities, funds or administrative assistance. The following are examples of relevant stakeholders and partners.

- Government ministries can add credibility, support research and provide access to information and funding.
- Universities may be able to provide graduate students to help conduct low-cost research and provide additional expertise and computer support to conduct statistical analyses.
- Community-based organizations and nongovernmental organizations can provide access to opinion-leaders and may have intimate knowledge of the target community and be able to provide connections to key people and working networks.
- Media gatekeepers can provide visibility, access to communication channels, and can present a perspective on how messages may appear in the media and be able to translate scientific information into effective communications.
- Business leaders and private industries can provide financial contributions, access to distribution and dissemination channels and provide assistance with budget planning and add corporate credibility.
- Public officials can provide access to policy-making channels and encourage public support for a programme.
- Community leaders can provide expertise and contact with the target audience.

In gathering data it is also important to refer to health status indicators, examples of which are:

- mortality rates;
- morbidity rates;
- causes of death, illness, injury and disabilities, including:
 - genetic, biological and cognitive factors;
 - psychomotor factors (e.g. lack of skills needed to engage in health-enhancing behaviour);
 - psychological factors (e.g. mood or personality disorders);
 - behavioural factors (e.g. sedentary lifestyles or unhealthy diets);
 - social factors (e.g. lack of social support);
 - environmental factors (e.g. pollution or poor soil);
 - health-relevant events (e.g. unintended pregnancies);
- rate of access to and availability of preventive and curative health care services.

Table 2 shows questions which should be asked in relation to a nutrition problem. In this case, the problem being identified is anaemia among women of childbearing age and adolescent females. In order to obtain answers to these questions it may be necessary to conduct research using existing data or to conduct your own primary research.

Reviewing available data (secondary research)

Reviewing available data involves secondary research which relies on secondary sources. Information already existing on nutrition and nutrition problems can be found in:

- policy documents;
- national surveys;
- reports from studies;
- information from epidemiologists;
- reports from various ministries;
- materials produced by foundations, associations, agencies, institutions and organizations who are aware of the problem.

Collecting new data (primary research)

It may be the case that not enough details are known on a nutrition problem to develop an effective nutrition communication strategy. While it may be possible to define the problem and who is affected, information on that population may be lacking or may not be very recent. At this point, it may be necessary to collect new data by conducting either quantitative or qualitative research before beginning to plan a nutrition communication strategy.

Quantitative research is conducted through surveys or through referencing vital statistics data. The process of collecting data can provide important information that allows you to estimate what percentage of a population is aware of a nutrition issue, or what percentage of a population thinks or behaves in a certain way. These data provide a valuable baseline for tracking changes which result from your nutrition communication intervention and also provide important information for determining priorities. Identifying which groups of people lack health awareness, or which groups are most likely to behave in a particular way, provides important information about which segments of the target

Table 2. Questions identifying the problem of anaemia among women of childbearing age and adolescent females

Questions	Answers
What is the nutrition problem to be addressed?	Anaemia.
Who is affected by it?	Women of childbearing age and adolescent females.
How many people are affected by it?	(The number or percentage of affected females in this age group).
In what ways are people affected by the problem?	Most women in this age group are affected by iron deficiency anaemia due to a lack of iron or blood loss, or both.
How is the problem viewed by different groups? Are people aware that the nutrition problem could affect them?	Most people view iron deficiency anaemia as a common problem among adolescent females and women of childbearing age as a result of blood loss during menstruation. It is also viewed as common among pregnant and lactating women as a result of losses in iron.
How common is the problem?	It is routinely detected during the checking of haemoglobin levels during antenatal care visits and during routine haemoglobin examinations in schools.
How severe is the problem?	The problem has very serious sequelae for pregnant and lactating women. It can cause menorrhagia among adolescent females which can affect general health and lead to further decreases in haemoglobin levels.
What general health, environmental or social conditions are connected to the problem?	Poor dietary habits. Lack of, or poor, antenatal care services. Poverty. Low levels of education and awareness.
In which areas does the problem exist specifically?	In area (X) where there are poor dietary habits and particular behaviour related to nutritional behaviour, particularly among pregnant and lactating women. In remote areas where there is a lack of health care services.
Which trends have been identified in relation to the problem? Is the problem increasing, decreasing or has it reached a plateau?	—
When did the problem first occur, or when did it become significant? Is this a new problem or an old one?	—
At what time of the year is the problem more or less prevalent?	(There is increased prevalence of the problem at certain times of the year when vegetables and fruits, which are rich in iron, are unavailable).

population are most in need of an intervention. However, quantitative data will not generally reveal the reason why individuals think or act in the way that they do, only the percentage of people who do. In addition, as information is available only in response to the specific questions asked, unexpected factors or influences may not always be identified by the interviewer or researcher.

Qualitative research, on the other hand, can provide an explanation of why individuals think or act in the way that they do. Qualitative research includes focus group discussions, open-ended questions or in-depth interviews. These methods can provide information about why a target population behave in the way they do, or provide information on the target audience's perception of nutrition issues which they view as related or important to them or what a particular nutrition issue signifies to the target audience.

Although qualitative research can help to identify and to explore issues, due to the small number of respondents, the findings cannot be generalized to the population as a whole. Other stakeholders with expertise in this area can be approached for assistance in collecting data. For more information on the differences between quantitative and qualitative methods of research see Module 4 Chapter 2.

Contacting other organizations

If you are aware that other organizations are already addressing a nutrition problem you may want to contact them to discuss:

- what they have learned or observed about the problem;
- what information or advice they may be able to offer to assist you in planning your strategy;
- what other activities are needed to complete the work that they have begun;
- what further opportunities are available for possible cooperation or for establishing potential partnerships.

Identifying stakeholders and partners

When planning and implementing a nutrition communication strategy, it is also important to explore all possibilities for cooperation and partnership and so it is necessary to identify and approach appropriate stakeholders and partners who can be included in the process as they can provide invaluable assistance. It is important to consider all resources that are available to support your communication plan, such as human resources, additional facilities, funds or administrative assistance. The following are examples of relevant stakeholders and partners.

- Government ministries can add credibility, support research and provide access to information and funding.
- Universities may be able to provide graduate students to help conduct low-cost research, and provide additional expertise and computer support to conduct statistical analyses.
- Community-based organizations and nongovernmental organizations can provide opinion-leaders and may have intimate knowledge of the target community, and be able to provide connections to key people and working networks.
- Media gatekeepers can provide visibility, access to communication channels, present a perspective on how messages may appear in the media and be able to translate scientific information into high-impact communications.
- Business leaders and private industries can provide financial contributions, access to distribution

and dissemination channels and provide assistance with budget planning and add corporate credibility.

- Public officials can provide access to policy-making channels and encourage respect and public support for your programme.
- Community leaders can provide expertise and contact with a target audience.

Identifying subgroups

Subgroups refer to populations within the general population who are most affected, or at the highest risk for experiencing a particular nutrition problem. A subgroup must be large enough and different enough from other members of the target population to be considered a subgroup. For instance, if you are addressing the problem of anaemia, your target population may be women of reproductive age and adolescent females. This group can then be further divided into the subgroups of pregnant women, lactating mothers and adolescent females. When dividing your target population into subgroups it is important that health care providers and decision-makers are approached for advocacy purposes in order that they convey the correct information to these groups. Target populations can be divided into subgroups based on:

- demographics (age, gender, race, education, income);
- geography (residence, location of work);
- belief systems (attitudes, opinions, intentions, beliefs, values, cultural characteristics);
- how people are affected by seasonal variation.

Describing subproblems

Table 3 shows how information can be collected on the problem of iron deficiency anaemia among two different subgroups in an affected population.

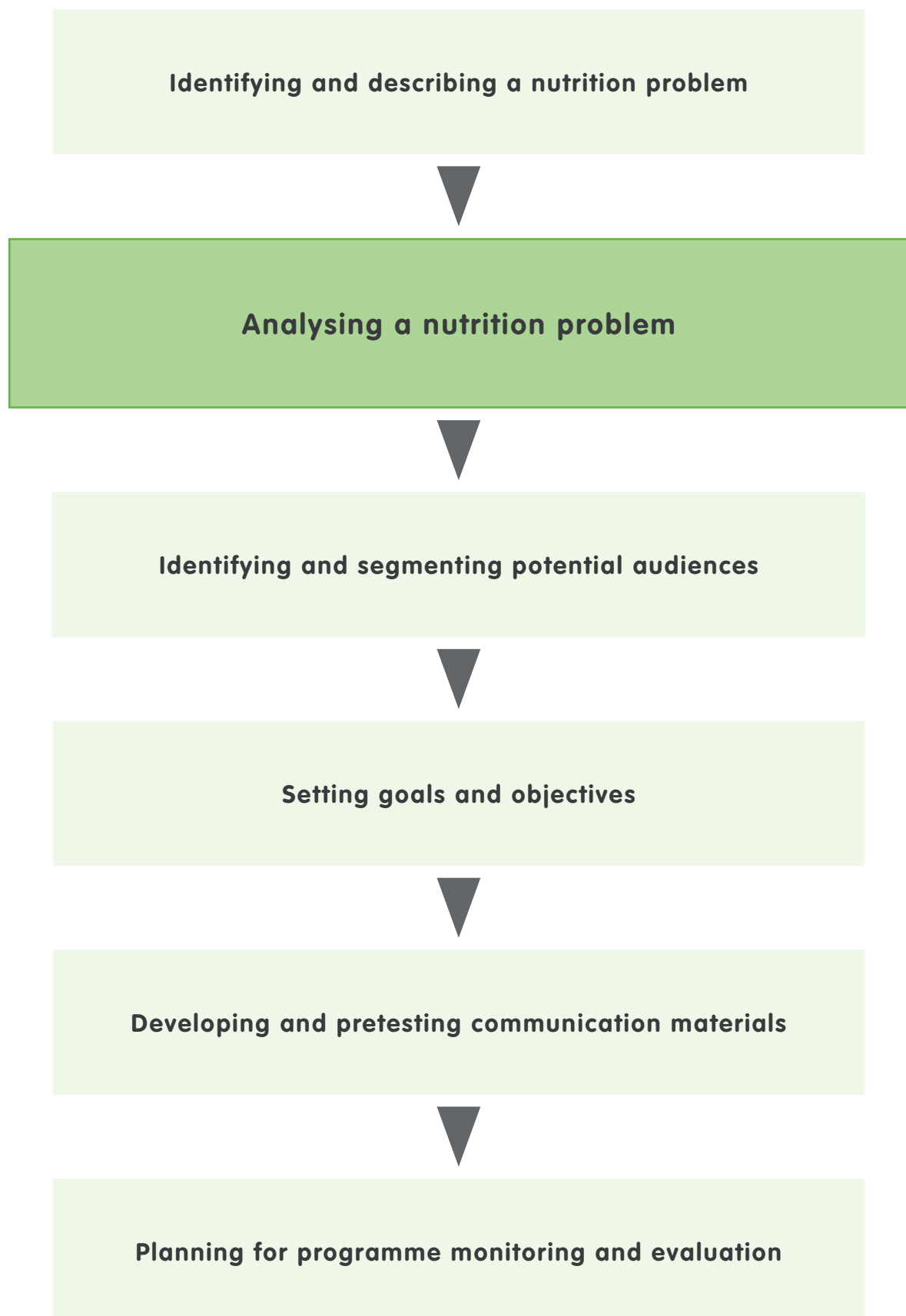
Evaluation relevance

Stakeholders need to know if an intervention is having an impact on the nutrition problem being addressed. The research you conduct at this stage will include data to help evaluators understand the nature of a nutrition problem and can be used as an indicator of the baseline status of the problem that can be used later on in the evaluation.

When identifying appropriate stakeholders and partners, an evaluator can be chosen to be part of your team. An evaluator on the planning team will be able to suggest the types of data that may be needed for evaluation and strategies for gathering these data at appropriate stages in the planning process. It should also be noted though that all individuals on the team are evaluation stakeholders.

Table 3. Questions addressing iron deficiency anaemia among two different subgroups in an affected population

Questions	Subgroup 1	Subgroup 2
Who is affected by iron deficiency anaemia?	Female adolescents.	Children between the ages of 5 and 10 years.
How are members of each subgroup affected?	Low iron intake. Blood loss during menstruation.	Low iron intake. Parasitic infestations.
What general health, environmental or social conditions are connected to the problem?	Lack of awareness. Poor dietary habits. Poverty. Lack of, or poor, health care services.	Lack of awareness. Unhygienic environment. Poverty. Lack of, or poor, health care services.
How common is the problem?	(The percentage of people affected by the problem.)	(The percentage of people affected by the problem.)
How severe is the problem?	Detected by the level of haemoglobin.	Detected by the level of haemoglobin. Detected through the results of stool analysis.
Where does the problem exist geographically?	Area (X).	Area (X).
When did the subproblem start?	(Date or period).	(Date or period).
Are the resources of your organization adequate enough to address the subproblem for each subgroup?	(Determined by the results of a SWOT analysis, see Module 2, Chapter 2).	(Determined by the results of a SWOT analysis, see Module 2, Chapter 2).
Are there other groups or organizations that are interested and available to address the subproblems?	(Ministry of Education.)	(Ministry of Education, UNICEF.)



Chapter 2

Analysing a nutrition problem

Summary

This chapter focuses on how to analyse a nutrition problem and determine its direct and indirect causes, and how to determine if these causes are behavioural, environmental or social, etc. It examines relevant factors in understanding health behaviour and explains the process of behavioural change. It also examines how to prioritize and select different subproblems and discusses the importance of undertaking a SWOT analysis.

Learning objectives

By the end of this chapter you will be able to:

- analyse a nutrition problem;
- determine the direct and indirect causes of a nutrition problem;
- explain the importance of understanding health behaviour;
- prioritize and select subproblems;
- undertake a SWOT analysis.



Figure 3. Steps involved in analysing a nutrition problem

Analysing a nutrition problem

Analysing a nutrition problem requires careful consideration of the issue before deciding upon a solution. It firstly involves looking at the possible causes of a problem and then identifying potential solutions and interventions to address the problem. A thorough analysis is essential for establishing effective long-term solutions, and at this stage, is worth taking the time to do (Figure 3).

Each nutrition problem has a cause and the problem is a symptom of this underlying cause. As a first step in dealing with a problem it is necessary to determine which barriers exist to dealing with the problem and which resources are available to address it, and then to determine the most effective interventions to deal with the problem. Remember that analysing a community's nutrition problem(s) can be difficult. When determining reasons and underlying causes, it may be the case that there is more than one underlying cause and often more than one solution.

Identifying direct and indirect causes

Direct causes

A direct cause of a nutrition problem is a behavioural, biological or psychological factor that is the immediate cause. For example, people suffer from micronutrient deficiencies because they do not eat nutrient-rich foods.

Indirect causes

An indirect, or root cause, of a nutrition problem is a social, environmental or political factor that has an effect on its direct cause. For example, the basic causes of a nutrition problem may be poverty or a lack of awareness of health problems.

The direct and indirect causes of nutrition problems can be identified using the 'But why?' technique. This technique requires asking questions to find out what is the cause at each stage of a problem. Each time you ask a question and an answer is given, a follow-up 'but why?' should be asked. The technique involves writing a problem statement, such as 'Pregnant women in certain areas suffer from iron deficiency anaemia', and then asking 'but why?' to identify the possible causes of this problem. The answer may be because women do not take iron supplements, and again ask, 'but why?' Women may be unaware of the hazards of anaemia during pregnancy and of the importance of taking their iron supplements (ask 'but why?'). In identifying the reasons for women's lack of awareness regarding a problem you may determine that it results from the fact that this information has not been provided by health care providers in maternal and child health centres during women's visits to these centres. If this is the case, a possible intervention to solve the problem may be a communication strategy aimed at both a primary and secondary audience.

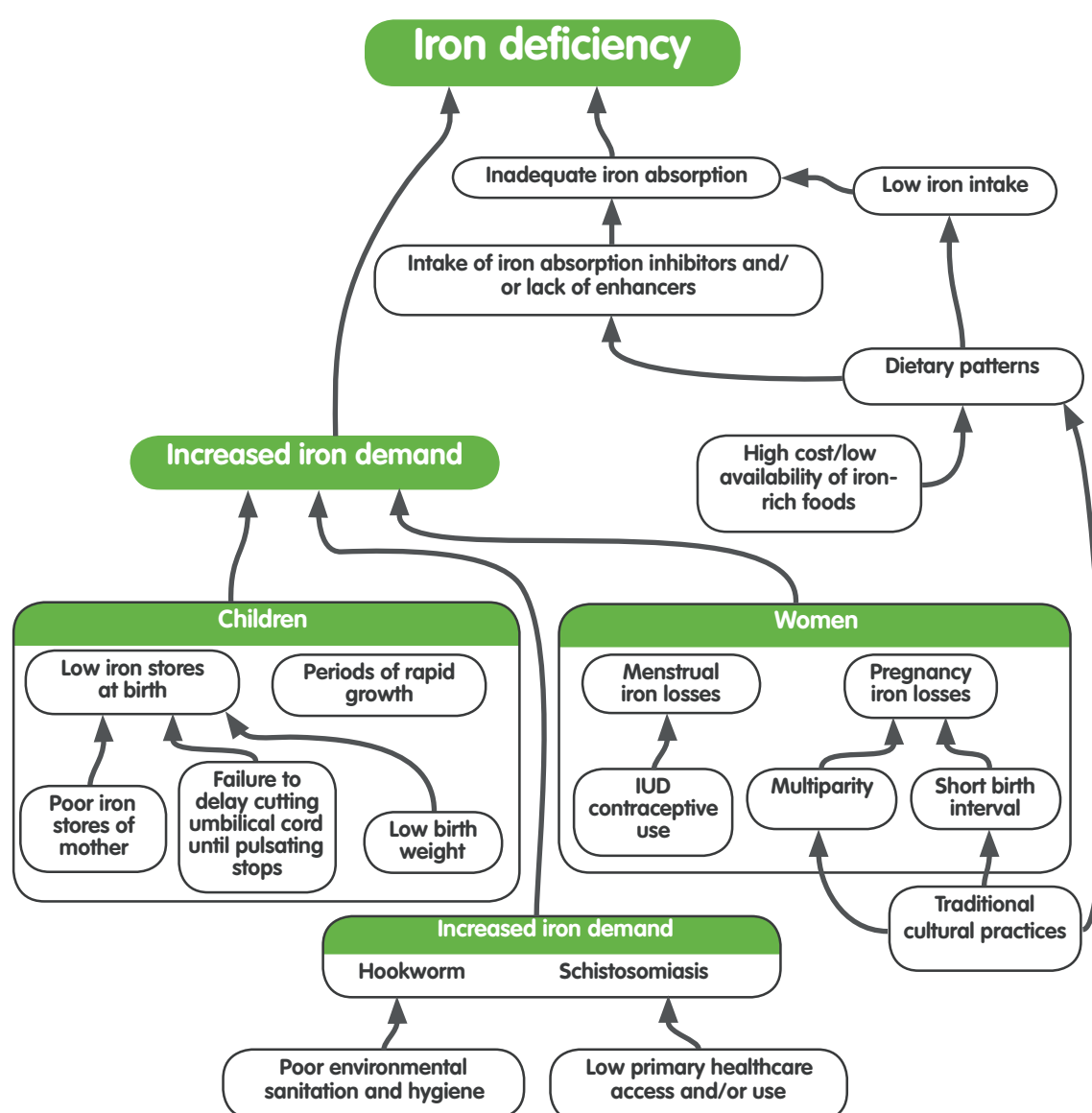
Primary audiences are those you want to affect in some way to make a decision or to undertake a change in behaviour. Secondary audiences include people who are in a position to directly influence the decision or actions of the primary audience or those who are in a position to do something to assist in bringing about the desired change among the primary intended audience.

Developing an etiology chart

Another method of analysing a nutrition problem is to prepare a list of causes and to develop an etiology chart. In order to prepare a list of causes, the following questions need to be asked.

- Does the health problem have a biological source?
- What behavioural factors add to the problem?
- What environmental factors add to the problem?
- What policies or lack of policies add to the problem?
- What barriers to health or healthy behaviour exist?
- Which resources are lacking?

An etiology chart is a visual representation of the relationship between direct and indirect causes of a problem. Charting the causes of a nutrition problem can help to determine the most appropriate subgroup to which to target the focus of your effort and resources. For an example of an etiology chart see Figure 4.



Source: Iron deficiency programme advisory service (IDPAS); International nutrition foundation (INF), 1999.

Figure 4. An example of an etiology chart

Understanding health behaviour

To better understand the direct and indirect causes of a health problem, it is necessary to understand why people behave in the way that they do by gaining a clearer understanding of their behaviour. Behaviour is the way that people act in their day-to-day lives, and the way in which they conduct their lives and respond to the people and environment around them. Behaviour is often grounded in a person's social and cultural networks and rooted in the individual choices which people make. Behaviour is shaped in childhood and children grow up to be aware of the appropriate ways to socialize within their families and communities, and within society as a whole.

People's behaviour has a great impact on their health, and being able to positively control and change people's behaviour can prevent death, illness and disability and promote well-being. Although educating people about what they need to do in order to be healthy is important, solely providing information is not enough to bring about changes in health-related behaviour. There are several determinants that influence the way that people behave, and these can be divided into predisposing, enabling and reinforcing factors (Figure 5).

Predisposing factors

Predisposing factors are factors that can support or be a barrier to behaviour, including knowledge, beliefs, attitudes and values. These factors are usually ingrained in an individual's religion, culture or experience. Beliefs, for example, strongly influence people's behaviour and communities often have their own belief systems. If health workers understand a community well, they can exploit this understanding to bring about positive changes in the community's behaviour.

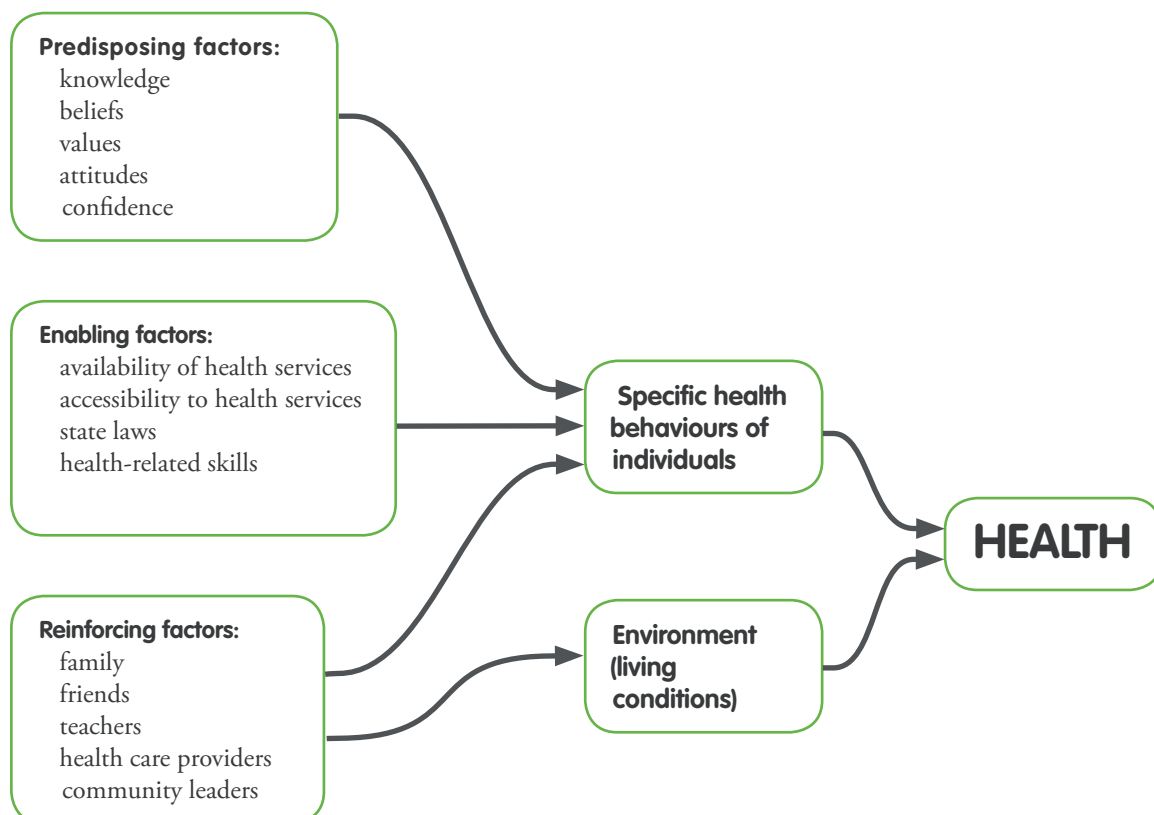


Figure 5. Determinants of health behaviour

Beliefs and attitudes are not always based in religion and are often cultural. One common belief is that a woman should not eat too much during pregnancy in case the fetus grows too large resulting in complications in delivery and possibly necessitating the need for a caesarean section delivery. Mistaken beliefs such as these have a negative impact on the health of women and infants and may lead to negative health outcomes, such as premature birth, low birth weight and a whole range of other problems.

Enabling factors

Enabling factors are skills, resources or barriers that can facilitate or hinder behavioural change. They not only include factors, such as the availability of, or accessibility to, health services, or the existence of laws and regulations, but also the need to teach new skills in order to facilitate behavioural change. For example, an individual with diabetes needs to learn not only about the appropriate foods to eat and to avoid but also how to prepare those foods, how to monitor their own blood sugar and how to take insulin.

Resources, such as money, time and the availability of, or accessibility to, health care facilities strongly influence health behaviour. For instance, if a mother of several children has been encouraged to take her youngest children to the clinic every month to be weighed, she may be discouraged from doing so if long waits at the clinic prevent her from returning home in time to prepare food for her other children when they return home from school. In this respect, time is affecting the mother's behaviour. The health care centre is an important resource, but it may not be useful if it is too crowded.

Laws, regulations and government policies may also facilitate or prevent behavioural change. A policy that bans smoking in the workplace may lead smokers to change their behaviour by smoking less during working hours, or by taking more breaks in work in order to smoke outside, or may lead them to stop smoking.

Reinforcing factors

Reinforcing factors reinforce positive health behaviour. When an individual, who is diabetic, follows the correct diet and their blood sugar is controlled, doctors should encourage them to continue with their behaviour to reinforce its positive value.

All behaviour can be explained by the influence of these three factors. For example, a woman may visit a health care clinic because she believes she is pregnant (predisposing factor). She attends a clinic free-of-charge near her home (enabling factor), where the physician compliments her for coming to the clinic early in her pregnancy and encourages her to come regularly for antenatal check-ups (reinforcing factor). Understanding the relationship between these three factors and their influence on behaviour is important for planners who are trying to promote positive behavioural change. Within health education, it is vital to be able to identify the actions that cause a problem or that increase a person's risk of illness.

Changing health behaviour

People's behaviour changes according to different circumstances and for a variety of reasons. In all communities there are many types of behaviour that promote health, prevent illness and assist in the cure and rehabilitation of individuals. Positive health behaviour needs to be identified and encouraged as the positive reinforcement of this behaviour and the resulting positive health outcomes encourage people to continue with the healthy behaviour. It is not always enough, however, to tell people to change their behaviour and to provide them with logical reasons for doing so, as this alone is usually insufficient to promote sustained behavioural change.

The process of behavioural change

People rarely adopt a new behaviour after being urged to do so just once, behavioural change requires a process which people must necessarily go through in order to bring about behavioural change. This

process can only be facilitated when the target audience has the knowledge they need in order to change their behaviour, are persuaded by the message, make the decision to change their behaviour, execute the new behaviour and incorporate the new behaviour into their lifestyle and promote it to others. The stages of behavioural change are explained below.

- An individual is able to understand and recall a health message and thus is made aware of the information and skills needed to change his/her behaviour (knowledge).
- An individual has a favourable attitude toward the desired behaviour and approves of the health message (persuasion).
- An individual decides to practise the desired behaviour (decision).
- An individual acquires the information, product or skills necessary to practise the behaviour, adopts the behaviour and practises the behaviour regularly (execution).
- An individual recognizes the advantages of the changed behaviour and integrates the new behaviour into his/her everyday life and promotes the behaviour to others (confirmation).

These five aspects of behavioural change should be considered as five stages rather than as a linear process; some people may not experience every stage of the process and some people may experience all stages, but not in this order.

The following example provides an explanation of how the process of behavioural change may be encouraged. A man has just had a heart attack and is recovering in hospital. His physician knows that he smokes cigarettes and tells him that he must stop or else he may have another heart attack (knowledge). Due to the physician's suggestion, the man quits smoking. He stops buying cigarettes and removes all the ashtrays in his house. He may even try to perform other activities in order to keep himself busy so that he is not tempted to smoke (execution). He soon begins to notice that he feels healthier and is not out of breath when he climbs stairs or walks a short distance (persuasion). He decides to continue to avoid smoking (decision). He is glad he decided not to smoke and has now started to encourage his brother to quit too (confirmation).

Bringing about behavioural change is a complex process and is often not so clear-cut. People change their behaviour at different rates, some people return to their old behaviour once or even more often as evinced by the numerous times a person may try to quit smoking. People are also more likely to adopt positive health behaviours if their behavioural change has positive consequences, is compatible with the person's lifestyle, is culturally acceptable and takes place in a supportive environment that encourages the new behaviour.

Approaches to changing behaviour

There are various approaches that can influence behavioural change. Choosing the best approach to changing health behaviour and the channels through which to encourage this change is part of the planning process. Having a solid understanding of the target audience and the information that needs to be conveyed in order to bring about behavioural change determines the best approaches for inducing positive behavioural change. Some aspects of this process include: dissemination, education, persuasion, dialogue, entertainment and compliance.

- Dissemination increases awareness by providing information to those who are open to adopting the desired behaviour.
- Education promotes learning, comprehension and the acquisition of skills needed to adopt the new behaviour among those who are motivated to learn.
- Persuasion promotes acceptance of new health beliefs, values and behaviours through rational argument and emotional appeals from credible sources.

- Dialogue promotes mutual understanding and agreement through interpersonal and group discussions, shared experiences, counselling and the creation of social networks.
- Entertainment promotes enjoyment, emotional stimulation and excitement by exposing an audience to a message through music, drama, dance, comedy, art or another entertainment medium.
- Compliance enhances adherence through positive or negative sanctions, threats or incentives using laws and regulations without necessarily changing people's attitudes.

Not all people who are exposed to a health message will understand it, not all who understand it will agree with it, and not all who agree with it will change their behaviour accordingly. In fact, often only a small proportion of the people exposed to a message at any one time go on to practise the new behaviour.

It is important to consider that there are many reasons for people's behaviour and individuals may behave in similar ways but for different reasons, as the following example shows. Three mothers may all give fruit to their children but when asked why, they give different answers. The first mother believes that if her children eat fruit they will be healthier. The second mother cites the reason that as her mother-in-law lives with her and gave her husband fruit when he was young, she feels it is important that she gives fruit to her children. The third mother may prefer to buy fruit for her children as it costs less than sweets and other snacks.

With an awareness of the possible reasons for certain behaviour, it will be possible to suggest appropriate changes and to develop different communication messages to support desired changes. Now that the possible causes of each subproblem have been identified they need to be prioritized as it is not practical to conduct interventions for all of them at the same time.

Prioritizing and selecting subproblems

It is necessary to identify the most significant subproblems that require a communication intervention. This process involves considering behaviours, biology and the social and physical environment in a review of any subproblems. The following steps should be followed in identifying the most significant subproblems.

- Create a short list of the most important subproblems.
- Identify a list of criteria for setting priorities (see Table 4).
- Use an objective scoring system to prioritize subproblems.
- Determine how many subproblems your organization can address.
- Determine how significantly a change in the subproblem will affect the main nutrition problem. To make this assessment the following issues should be considered: How direct is the link between the subproblem and the main nutrition problem? How common is the subproblem? How serious is the subproblem? Is it necessary for the subproblem to be changed to affect the main nutrition problem.

Table 4 can be used to assist in deciding which subproblem you want to address if the community is experiencing several subproblems at the same time. By answering each question, you will gain a clearer understanding of the issues involved in addressing a problem, and this information will assist in selecting the subproblem you wish to address.

Table 4. Prioritizing subproblems

	Subproblem 1	Subproblem 2
How frequently does the subproblem occur?		
How many people are affected?		
For how long are they affected?		
How severe is the effect?		
How important do group members perceive the subproblem to be?		
How important is the subproblem perceived to be by others in the community?		
What is the effectiveness of related interventions?		
Are there any negative impacts (lost output)?		
How likely is it that by solving the subproblem you can solve or significantly improve the main nutrition problem?		
What is the current access to the required service?		

Undertaking a SWOT analysis

After prioritizing and choosing the subproblem(s) to be addressed through a nutrition communication programme, it is necessary to consider the factors or variables which may affect the direction of your programme by undertaking a SWOT (strengths, weaknesses, opportunities and threats) analysis (Figure 6). A SWOT analysis is a situation analysis which identifies the internal strengths and weaknesses and the external opportunities which can be exploited by your organization, and the external factors which may threaten a programme.

The purpose of a SWOT analysis is to assess the positive factors that will support an intervention and the potential obstacles that may threaten the success of it. It is also important to remember that the more stakeholders who are involved in preparing the SWOT analysis, the more valuable the analysis will be.

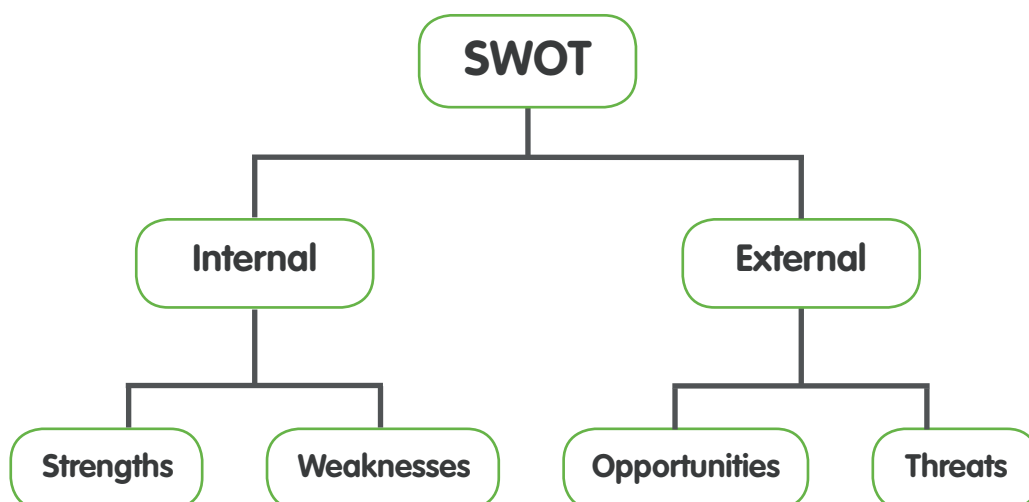


Figure 6. SWOT analysis

Why a SWOT analysis is necessary

A SWOT analysis is necessary to determine your organization's ability to address a nutrition problem and to make decisions regarding the most effective interventions to implement and deal with a problem. It identifies an organization's strengths and weaknesses and enables you to set priorities and to adjust and refine plans at the outset and during the course of a programme as new opportunities and potential threats to a programme arise.

Internal strengths and weaknesses

Internal factors that affect your organization's strengths and weaknesses include the availability of human and technical resources and services, the time available to address a problem, the budget and your organization's level of knowledge of the problem. Other internal factors include past experiences of similar activities conducted by your organization and whether they were successful and the reasons for success or failure.

External opportunities and threats

External factors are represented by the work of other organizations and agencies who address similar nutrition problems and by gaps that could perhaps be addressed by your organization, the opportunity for partnerships and the possible need for leadership by your organization. There are also economic factors that may affect an intervention at local, national or international level, and considerations of funding. Other external factors include legislation which may support your intervention, political support or resistance, and in terms of competition, it is necessary to consider contradictory messages that may appear in the media and commercial advertising.

How to undertake a SWOT analysis

In undertaking a SWOT analysis it is necessary to ask the following questions.

1. What knowledge is available to improve a nutrition problem and are you able to obtain this information? Is it necessary to conduct further research to obtain the information?
2. Is the technology that you need available? (i.e. the technology to produce fortified flour, iodized salt or skimmed milk.)

3. Are the necessary human, technical and financial resources available to address a problem?
4. What work has already been undertaken to address the problem and who is doing that work? Is there an opportunity for partnership between your organization and other organizations?
5. Is there political support or resistance to addressing a problem?

It is necessary to list all the issues that can influence a nutrition communication programme by assessing the internal and external factors or variables that have been identified by the SWOT analysis. You can use a SWOT worksheet to record factors or variables that may affect a programme. Tables 5 and 6 show a SWOT analysis of an organization's internal strengths and weaknesses in conducting a nutrition communication strategy targeting adolescents in order to encourage them to eat healthy food rather than fast food.

Table 5. SWOT analysis to identify an organization's internal strengths and weaknesses

Internal	Strengths	Weaknesses
Does your organization have the necessary human resources (staff, researchers, experts, trained people, volunteers)?	There are enough trained health educators and nutritionists. There are volunteers working in the field.	—
Are there technical resources available (equipment, technology, computers)?	—	There are limited technical resources for the planning phase and for work.
Are there services available? (If the purpose of a nutrition communication intervention is to increase utilization of a service to improve the nutritional status of adolescents, the recommended service must be available and accessible.)	—	There is limited transportation to reach adolescents in their preferred settings.
Is there enough time allocated to address a nutrition problem?	—	There is limited time available as more than one programme is being conducted.
Is there an available budget or other sources of funding?	There are funds available for the programme.	—
Is there a sufficient level of knowledge relating to a nutrition problem and its solution.	There is collaboration between health educators and nutritionists to enhance the level of knowledge.	—
Are there past experiences of any similar activities undertaken by your organization? Were these successful or not? List reasons for these successes or failures.	—	There is limited experience as there have been no similar previous activities conducted.

Table 6. SWOT analysis to identify external opportunities and threats

External	Opportunities	Threats
Does work undertaken by other organizations and agencies address the same nutrition problem? Are there gaps that could be addressed by your organization? Is there a need for leadership by your agency? Is there an opportunity to develop partnerships?	There is an opportunity for partnership with the Ministry of Education to facilitate reaching the target group, in addition to the possibility of training schoolteachers to deliver the message.	—
Are there economic factors that may affect your intervention? Are these local, national or international?	—	The price of fast food is cheaper than healthy food options and is attractive to this age group.
What are external sources of funding?	There are funding agents interested in addressing this nutrition problem.	—
Is there legislation that may support or hinder your intervention?	There is legislation offering subsidized food to support the programme.	—
Is there political support or resistance relating to the nutrition problem?	There is political support to improve adolescent health.	There is competition from the private sector in the form of fast food industries and restaurants.
Do you need to consider contradictory messages that may appear in advertising?	—	There are contradictory health messages presented in the form of attractive TV and media campaigns of fast food brands and restaurants.

Evaluation relevance

Nutrition interventions are undertaken to address nutrition problems and evaluators need to know what are the causes of these problems in order to determine if: (1) the intervention is effectively targeting the problem or not; and if (2) interventions are having an impact on the direct and indirect causes of a problem. A SWOT analysis is an evaluation that assesses an organization's strengths and weaknesses and identifies opportunities and potential threats to an organization's ability to implement a programme. Data from SWOT analyses are used to help nutrition communication planners make informed decisions about the most effective interventions to address a nutrition problem.

Module 3

Chapter 1

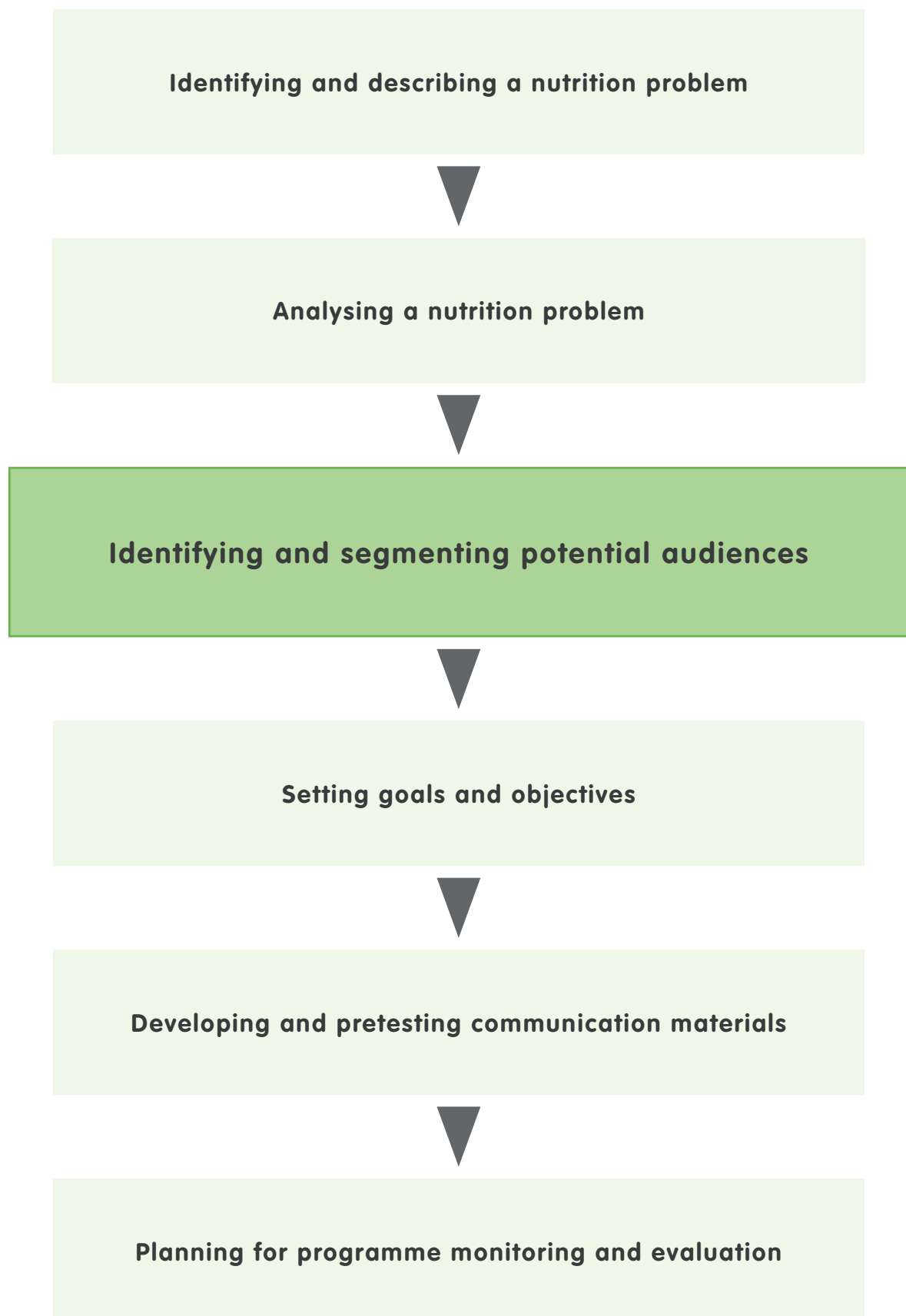
Identifying and segmenting potential audiences

Chapter 2

Setting goals and objectives

Chapter 3

Developing and pretesting communication materials



Chapter 1

Identifying and segmenting target audiences

Summary

This chapter focuses on how to identify and segment target populations and how to reach these populations through a nutrition communication programme. It discusses the importance of identifying communication variables, including the most appropriate settings, channels and materials through which to convey a health message, and the importance of pitching the tone and appeal of a message in order to effectively convey the message to a target audience.

Learning objectives

By the end of this chapter you will be able to:

- identify and segment target populations and audiences;
- identify primary, secondary and tertiary audiences;
- explain the relevance of communication input variables;
- write an audience profile;
- write a creative brief.



Figure 7. Steps involved in identifying and segmenting target audiences

Targeting a message

Communicating nutrition information to the public is a two-way process through which nutrition communicators communicate a health message to the public, but also work with, and listen carefully to, their audience. Nutrition communication materials, such as posters, pamphlets, flyers, oral presentations, videos and media presentations, will be unable to effectively communicate health messages to the public if they are prepared without the feedback and input of an intended audience. Messages must be tailored and the correct channels chosen through which to reach audiences in the most effective way to ensure that target audiences are able to translate a message into the desired action. Meaning is not transmitted through the materials alone, and messages will mean little to the listener, reader or viewer without their input as it is crucial in determining the audience's needs to ensure that a message is being communicated effectively.

Successfully transmitting health information requires an understanding of the nutrition information being conveyed and an understanding of the audience's knowledge, opinions and attitudes, which takes into account cultural factors and the preferred nutrition information formats of the audience. The audience needs to be fully confident that the information they receive is accurate and relevant to them and it needs to engage them in an effective decision-making process that encourages them to adopt the desired behavioural change. The process of identifying and segmenting audiences and understanding their characteristics can be time-consuming but is essential for communicating effective health and nutrition information to the public (Figure 7).

Identifying target populations

Identifying target populations in a nutrition communication strategy is based on the results of a definition and an analysis of the nutrition problem that is being addressed. This process involves determining which groups are most affected by the problem, and which groups are most at risk, and by examining the factors that contribute to the problem.

Targeted populations, in a nutrition communication strategy, are those groups of people who are affected by a nutrition problem. They are often defined very broadly. For example, the target population of people affected by anaemia is women between the ages of 15 and 47 years. The target audience is identified from among this broad population group and are defined more narrowly and specifically, based on characteristics such as attitudes, demographics, geographical location or patterns of behaviour. For example, women between the ages of 15 and 47 years can be subdivided into married or unmarried, pregnant or lactating, and within these groups, can be further subdivided into educated or illiterate, working or unemployed or high or low income.

Segmenting target populations

Audience segmentation is the process of dividing target populations into relatively homogenous groups for the purpose of communicating desired nutrition information. The members of these audience segments must be similar enough to each other, and different enough from other groups, to be segmented according to criteria relating to a nutrition problem.

There are practical reasons for performing audience segmentation, it is the basis for communication planning, it helps to develop the content of the message to be communicated and the relevant materials for communicating this message. It also helps to identify the most effective channels to reach each group, as there will be differences between groups in their access to information, their

sources of information and their learning preferences. It also determines the extent to which a message must be reinforced and repeated.

A target population can be segmented into specific groups by behavioural, cultural, demographic, physical or psychographic characteristics. Behavioural characteristics relate to nutritional health-related activities or choices, behavioural intentions, specific behaviours, skills, the degree of readiness to adopt certain behaviour, information-seeking behaviour and the level of exposure to the media. Cultural characteristics relate to religion, familial structure or lifestyle factors, such as the requirement for particular foods or specific nutritional habits. Demographic characteristics are based on occupation, economic status, level of education or marital status. Physical characteristics are based on sex, age, the level of risk for poor nutritional health, medical conditions, disorders or illnesses or genetic factors. Psychographic characteristics relate to attitudes, opinions, beliefs, values and self-efficacy.

Selecting target audiences

Once target audience segments have been identified, particular segments can be isolated with whom you intend to communicate. As previously explained, primary audiences are those you want to affect in some way to make a desired decision or to undertake a change in behaviour. Secondary audiences include people in a position to directly influence the decision or actions of the primary audience, or those who can do something to assist in bringing about the desired change in the primary intended audience. Tertiary audiences are the farthest away from individuals making decisions about individual nutritional health activities or policies, but who can still play an important role in shaping social norms or professional values.

To communicate, for example, the benefits of breastfeeding, primary, secondary and tertiary audiences could be identified as follows: the primary audience would comprise lactating mothers; the secondary audience may be the husbands, mothers and mothers-in-law of lactating women who have a direct influence on them; and the tertiary audience may comprise health care professionals, religious leaders and community leaders who can advocate for the importance of breastfeeding and support your message to encourage the practice (Figure 8). In another campaign the secondary audience may be the mothers and mothers-in-law of lactating women and husbands may be the tertiary audience.

Secondary and tertiary audiences are important because a primary audience is more likely to be exposed to, and accept the message from, a familiar source rather than from someone who is unknown to them. Accordingly, using secondary and tertiary audiences to convey a message to a primary audience can be a very efficient and effective method of health communication (Figure 9). Table 7 provides a checklist of questions to ask in order to be able to segment a target audience.

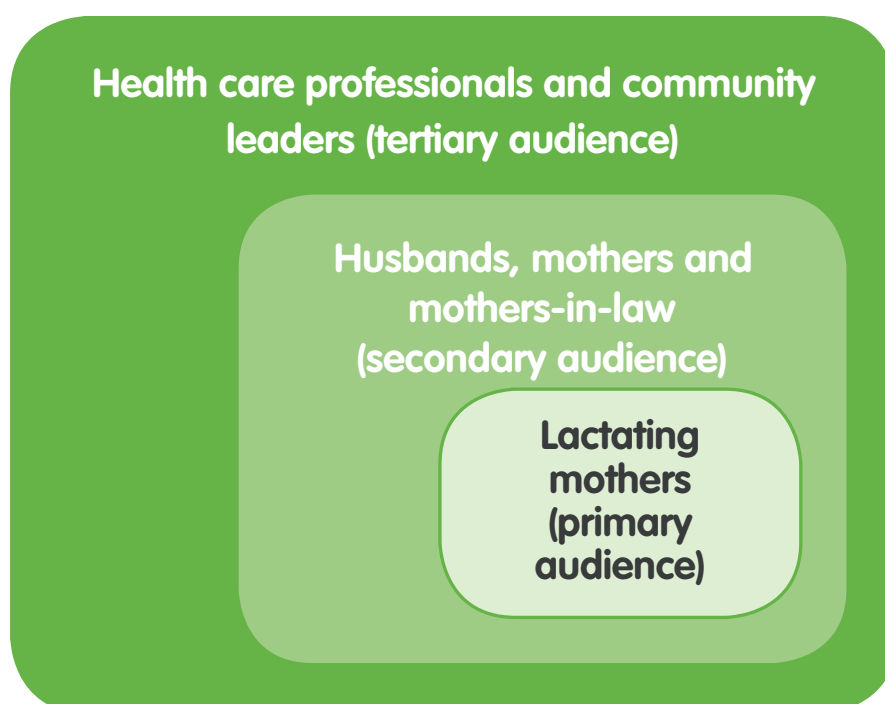


Figure 8. Primary, secondary and tertiary audiences

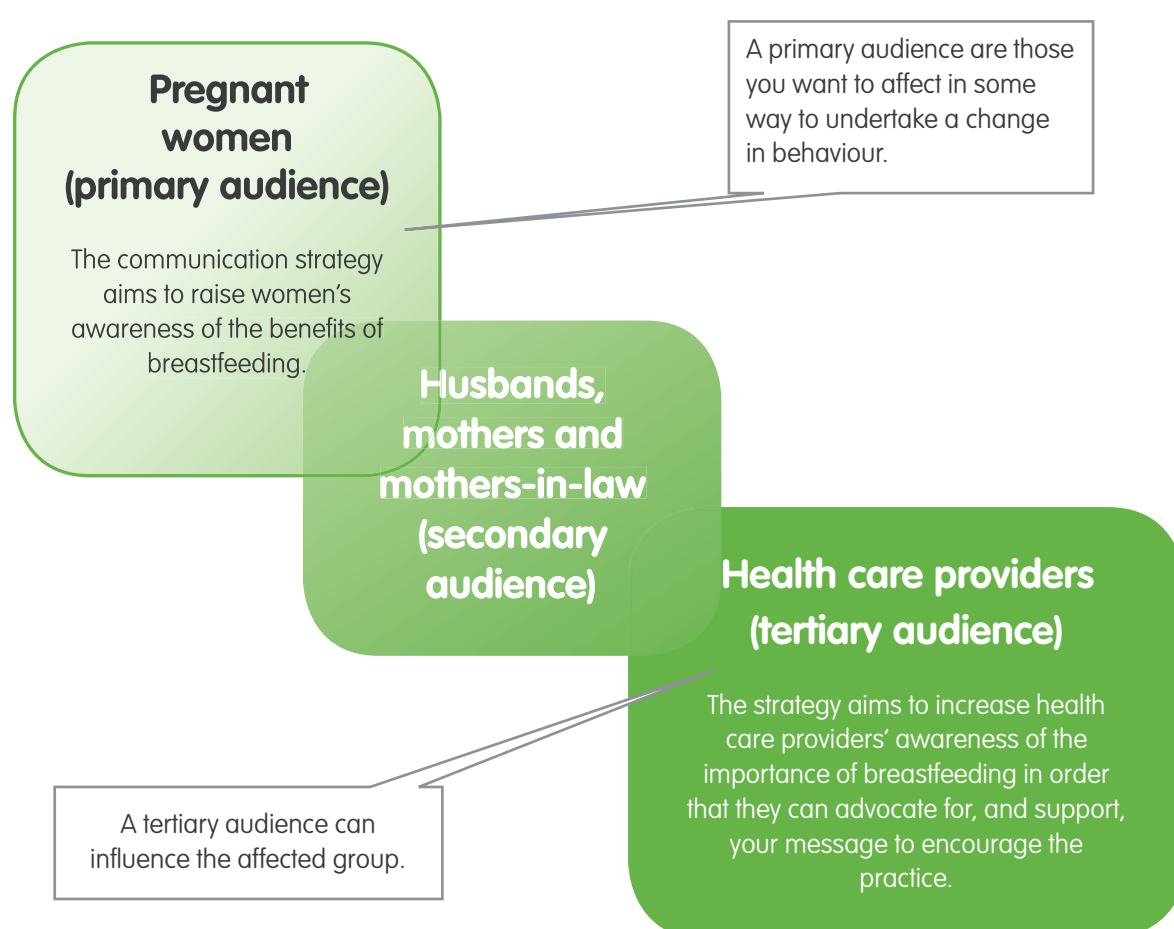


Figure 9. Influencing a primary audience

Table 7. Segmenting target audiences

Questions	Considerations
What behavioural change is the target audience able to adopt and how willing is this group to adopt the behaviour?	Sometimes an intended audience is unable to adopt behavioural change or cannot adopt it easily until a policy change is instituted or a new or improved product is developed. If a programme cannot provide the necessary policy or technological changes it may be necessary for a different audience to be targeted. For instance, if a communication strategy aims to increase utilization of fortified flour, it is necessary to ensure that high-quality fortified flour is being produced and is available for use in the home, in the workplace and in local restaurants and food outlets.
Will the nutrition communication objective aimed at this intended audience adequately contribute to attaining your nutrition communication programme's goal?	It is important to choose an audience segment or segments large enough that changes in their behaviour will accomplish the overall goal.
To what extent would members of this segment benefit from your nutrition communication programme?	Some segments may already engage in the desired behaviour or may be close to it, for example, if an audience segment are eating four servings of fruit and vegetables a day, and the desired behaviour is for them to eat five, this segment is likely to benefit from the nutrition communication programme as their behaviour is close to your desired goal.
Does the target segment have the necessary resources or facilities available to them in order to adopt the desired behaviour?	For instance, if an aim of a programme is to increase the level of physical exercise, it is important that facilities are available to a target audience, such as pedestrians walkways, parks or gym facilities.
If you are targeting secondary or tertiary audiences, to what extent do these audiences influence the primary intended audience?	For instance, if you wish to encourage breastfeeding, it is necessary to determine the level of influence of husbands, mothers and mothers-in-law as the secondary audience on the primary audience of lactating mothers.

Conducting formative research

Researching the most effective and efficient ways to reach an intended audience initially requires identifying the settings to which your audience are most likely to be receptive and responsive to your message. The next step requires identifying the channels through which to convey a message and the activities that can be used to convey it. You can determine this by obtaining information through conducting formative research using primary and secondary sources (see Module 4, Chapter 2). During the course of formative research, communication input variables need to be determined. Communication variables include: sources of information, settings in which information is delivered, the types of activities (channels) through which to deliver messages, the types of materials used to deliver messages, receiver characteristics and message qualities (Table 8).

Table 8. Communication input variables

Formative research	Input options	Sample segmentation questions
Sources of information	Government officials, peers, physicians, counsellors, nurses, scientists, news broadcasters, parents, teachers, religious leaders and politicians.	From where do you get your nutritional health messages? Who do you trust to provide you with reliable nutritional health messages?
Settings in which information is delivered	Home, school, workplace, health care setting (in the local health care provider's office or clinic), retail business, community event, religious places (mosque, church), malls, library, in the car, on the bus or train.	In which settings would you be most likely to listen to this type of message? (e.g. the grocery store is the best setting for a message to increase fruit and vegetable consumption as the audiences are likely to be receptive to and able to act upon the message). At what time of the day do you listen to the radio or watch television? Where/when do you get most of your nutritional health information? Where do you prefer receiving health information? Where/when do you have the time to listen to this type of message?
Types of activities (channels)	Interpersonal, groups, organizational and community, mass media, distributing corporate giveaways, holding events (providing public speaking training, interviewing tips and distributing media kits), placing displays on public transportation, placing inserts in shopping bags or messages on shopping bags, showing a display board with health-related messages, giving a cooking demonstration.	What kinds of activities do you like to engage in during your spare time? Do you attend lectures? Do you read shopping bags or paycheck inserts? Do you read message boards? Do you watch music videos? Do you attend health-related classes or seminars?
Types of materials	Pamphlets, leaflets, posters, press kits, billboards, movies, letters to editors, magazine articles or advertisements, web pages, paycheck inserts, bookmarks and comic books.	What is your preferred medium for receiving nutritional health information? (Reading, television, radio, Internet or personal communication?) From which sources do you generally receive nutritional health information? Friends, health care providers, television, radio, billboards, pamphlets, newspapers, magazines, paycheck inserts.
Receiver characteristics	<i>Internal factors:</i> attitudes, knowledge, values, behavioural intentions, behaviours, literacy, previous experiences, skills, readiness to change, life goals. <i>External factors:</i> social support from family and friends, support from institutions, local media, social norms, economic status, political support, laws, support from employers and access to nutritional health community services.	What is your attitude regarding this message? What are your beliefs in relation to the message? Would your family and friends support you if you decided to follow the desired action conveyed in the message? Would your employer support you in the behaviour encouraged in the message? For instance, leaving your place of employment two hours early to breastfeed. What barriers do you think may prevent you from adopting the desired behaviour conveyed in the message?
Message qualities	Sad, funny, fear-inducing, foreboding, one or two-sided, fact/evidence-based, audiovisual characteristics.	What tone do you prefer nutritional health messages to take: funny, fear-inducing, foreboding or fact-based? Are you more likely to believe and act on a nutritional health message that is humorous or one that frightens you?

Writing an audience profile

An audience profile is a comprehensive description of each audience segment and key factors related to a nutrition problem. This profile will serve as a guide for you and your partners during the development and implementation of a nutrition communication intervention and will increase the chance that an audience will be responsive to a message.

Identifying consumer preferences helps to identify solutions to nutrition problems, and includes information relating to the messages, the settings in which your audience are most likely to be responsive to the information, the conditions under which they will receive the message, the most credible sources for messages and materials which best convey the message. Practices, knowledge and attitudes relating to a nutrition problem includes the information that shapes an audience's belief that a problem exists and their acceptance of the recommendations regarding the desired behavioural change and their motivation to adopt the change. (Figure 10).

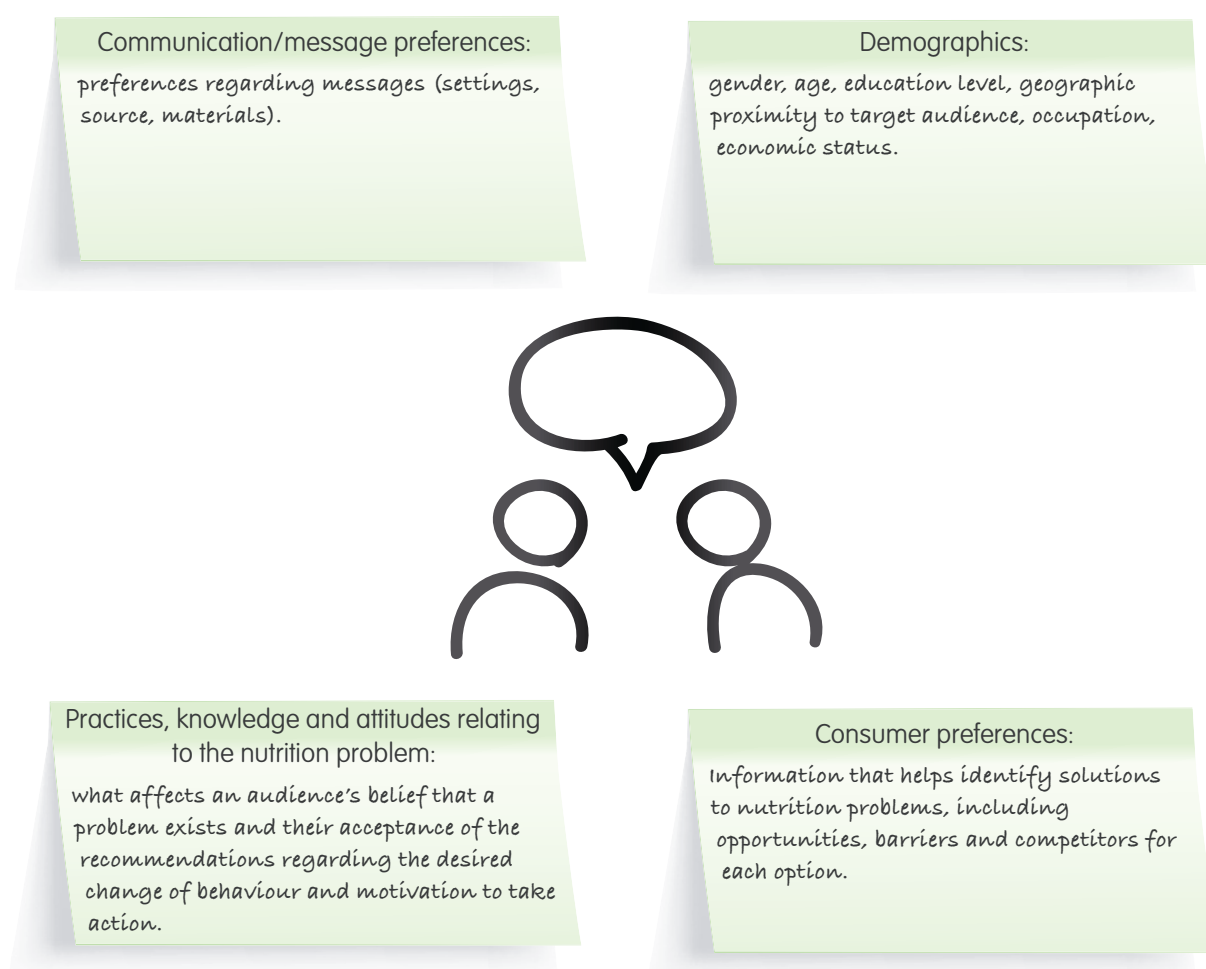


Figure 10. Communication preferences

Writing a creative brief

A creative brief is a summary that provides the guidelines for selecting appropriate concepts/messages, settings, channels and materials. It summarizes what has been learned about a target audience and the most effective ways of communicating a health message to them. This summary should not be longer than three pages and should include a list of intended audiences (primary, secondary and tertiary) and objectives for each group. Table 9 provides an example of a creative brief template.

The results of your formative research cover information on audience preferences and relate to communication input variables (sources of information, the settings in which information is delivered, the types of activities and materials used to deliver messages, receiver characteristics (knowledge, attitudes and behavioural intentions), and message qualities (content, tone, type of appeal, audio and visual characteristics)). Table 10 provides an example of a creative brief for a communication strategy to increase the practice of breastfeeding.

Table 9. An example of a creative brief template

	Primary audience	Secondary audience	Tertiary audience
1. Intended audiences Whom do you want to reach with your nutrition communication?			
2. Objectives What do you want an intended audience to do after exposure to your nutrition communication programme?			
3. Barriers Which barriers exist to an audience adopting the desired behaviour?			
4. Key benefits Which benefits are promised to an audience upon adopting the desired behaviour?			
5. Support statements Support statements clarify the benefits against the barriers. (These often become the messages.)			
6. Tone What tone should your nutrition communication adopt? Should it be funny, encouraging, fear-inducing, foreboding or fact-based?			
7. Channel Channel through which you will convey messages?			
8. Creative considerations Are there creative considerations to be taken into account in your message? (Design issues in terms of colours, clothing or language, etc.)			

Table 10. Example of a creative brief for a communication strategy to increase the practice of breastfeeding

	Primary audience	Secondary audience	Tertiary audience
1. Intended audiences Whom do you want to reach with your nutrition communication?	Lactating mothers.	Mothers and mothers-in-law.	Husbands.
2. Objectives What do you want an intended audience to do after exposure to your nutrition communication programme?	To breastfeed their baby for 2 years.	To encourage their daughters and daughters-in-law to breastfeed.	To encourage their wives to breastfeed.
3. Barriers Which barriers exist to an audience adopting the desired behaviour?	Lack of awareness. Misconceptions about exclusive breastfeeding. The difficulty faced by working mothers to breastfeed at work.	Lack of awareness. Misconceptions about exclusive breastfeeding.	Misconceptions about exclusive breastfeeding. Men's lack of involvement in child feeding practices.
4. Key benefits Which benefits are promised to an audience upon adopting the desired behaviour?	Good health and healthy growth of their babies. Benefits to their own health.	Good health and healthy growth of their grandsons and granddaughters.	Good health and healthy growth of their sons and daughters. Health benefits to their wife's health. Financial issues.
5. Support statements Support statements clarify the benefits against the barriers. (These often become the messages.)	Benefits to the baby. Benefits to their health.	Benefits to their grandsons and granddaughters.	Benefits to their sons and daughters. Benefits to their wife's health. Financial issues.
6. Tone What tone should your nutrition communication adopt? Should it be funny, encouraging, fear-inducing, foreboding or fact-based?	Encouraging. Fact-based. Foreboding to induce early weaning.	Encouraging. Fact-based. Foreboding to induce early weaning.	Encouraging. Fact-based. Foreboding to induce early weaning.
7. Channel Through which channel will you convey your messages?	Interpersonal communication with doctors, nurses and health educators. Communication materials. Media.	Interpersonal communication with doctors, nurses and health educators. Community channels. Media.	Interpersonal communication with religious and community leaders. Community channels. Communication materials. Media.
8. Creative considerations Are there creative considerations to be taken into account in your message? (Design issues in terms of colours, clothing or language, etc.)	Design issues in terms of colours, clothing or language, etc.	Design issues in terms of colours, clothing or language, etc.	Design issues in terms of colours, clothing or language, etc.

Summary

Figures 11 and 12 show graphically the steps involved in planning a nutrition communication strategy to address a nutrition problem. Figure 11 shows the general steps and Figure 12 shows the specific steps involved in an intervention to address iron deficiency anaemia.

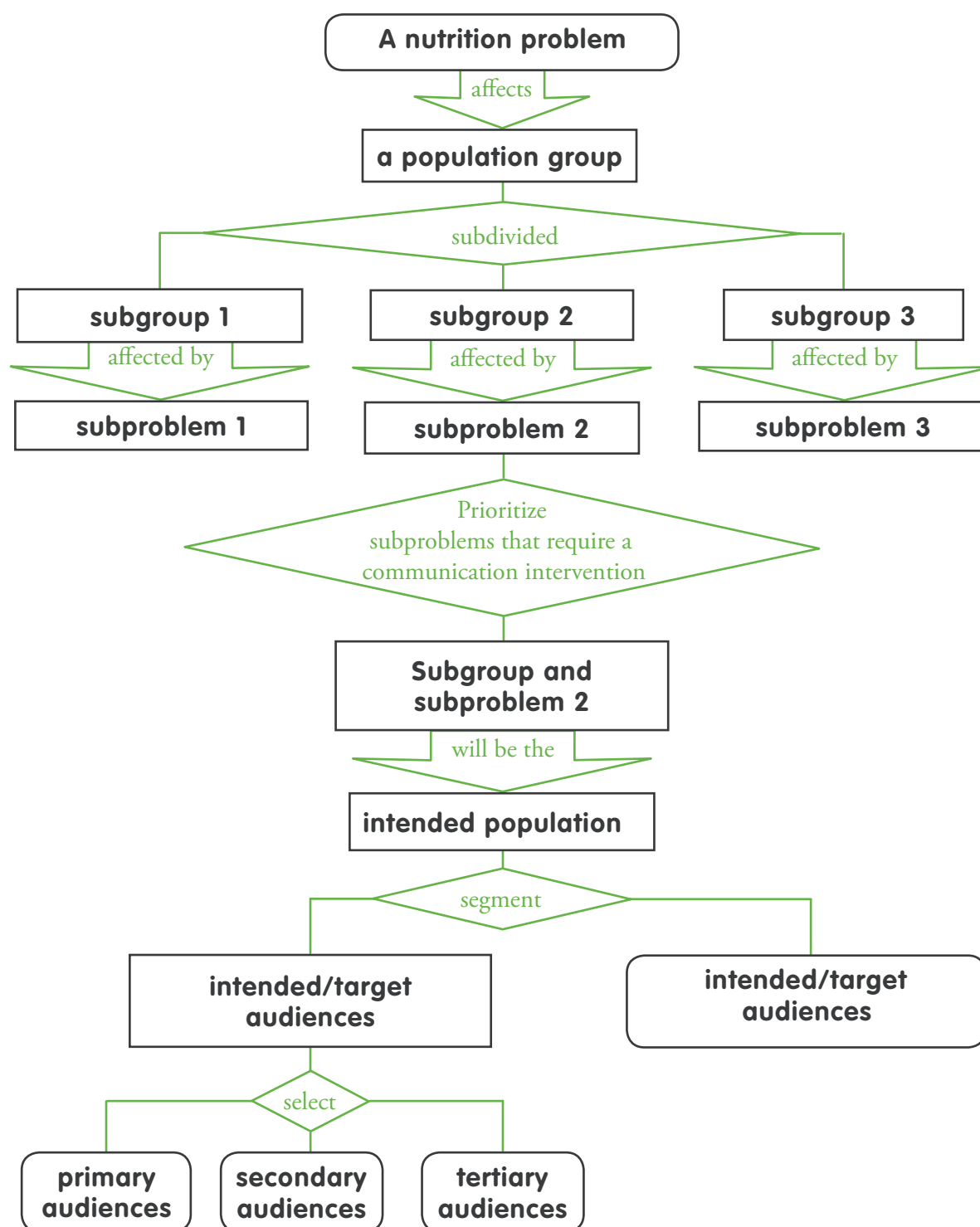


Figure 11. Steps involved in planning an intervention to address a nutrition problem

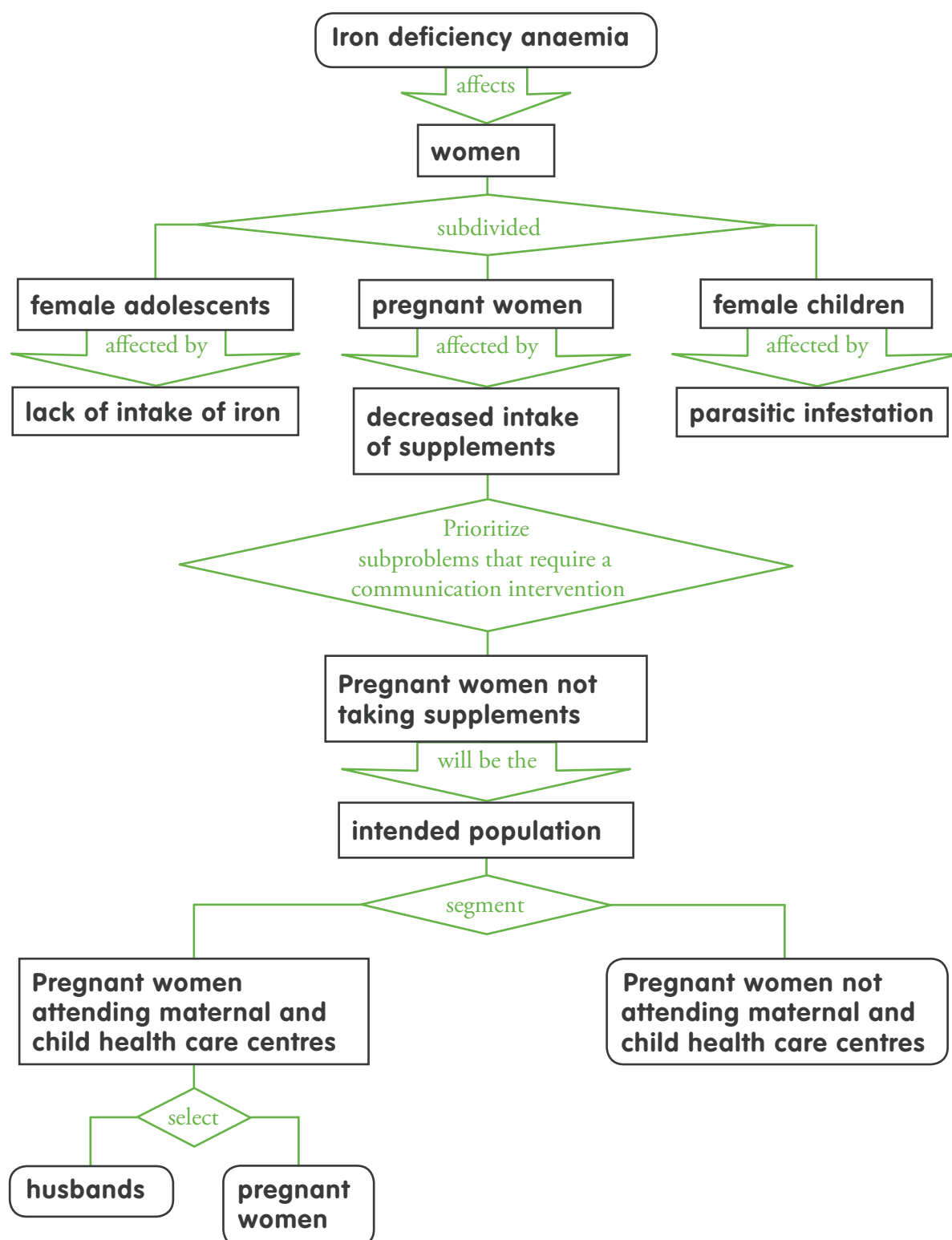
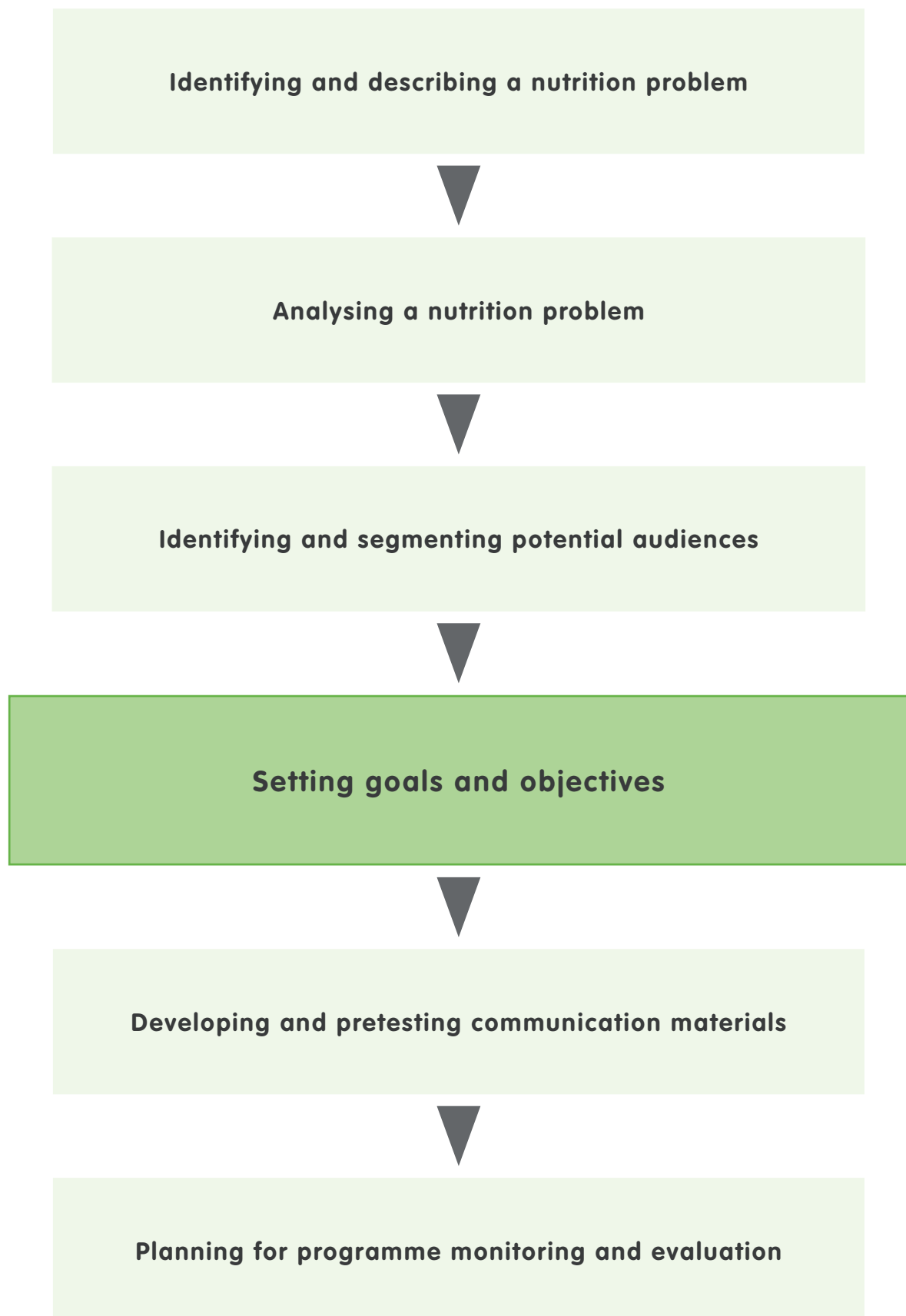


Figure 12. Steps involved in an intervention to address iron deficiency anaemia



Chapter 2

Setting goals and objectives

Summary

This chapter explains how to set goals and objectives for a communication intervention to address and contribute to the solution of a nutrition problem.

Learning objectives

By the end of this chapter you will be able to:

- set goals and objectives for a nutrition communication strategy;
- describe what communication objectives should state;
- list basic types of objectives;
- understand the importance of setting SMART (specific, measurable, achievable, relevant and time-bound) objectives;
- apply steps to create objectives for a nutrition communication programme.



Figure 13. Steps involved in setting goals and objectives

Introduction

After preparing a problem statement on a nutrition problem and identifying the direct and indirect causes of the problem, the next step is to define the goals of a nutrition communication intervention and to develop objectives that represent intermediate steps that must be taken in order to reach these goals. Communication objectives can be developed by taking into account the goals of a programme and by asking what a communication intervention can do in order to reach these goals, considering the level of behavioural change required and the ability of the target population to adopt the behaviour.

Creating communication objectives will assist in setting priorities and determining the message and content you will use for each objective accordingly. Once you have defined and set the communication objectives, they describe the purpose of your nutrition communication programme or strategy and can be used as the standards against which you will evaluate the outcomes. Figure 13 shows the steps involved in setting goals and objectives.

Goals

A goal is a general statement of what you wish to achieve and usually refers to a long-term plan. For instance, a goal may be to raise the awareness of the general public by 30% to the benefits of a diet rich in vitamin A. In writing goals and objectives it is important to use active verbs such as improve, increase, promote, protect, minimize, prevent and reduce.

Communication objectives

Communication objectives are the specific measurable outcomes you aim to achieve in support of the overall goal of an intervention. Communication objectives offer specifics about what will be accomplished by whom and by when. They are more specific than goals and state intermediate accomplishments that represent progress towards the goal. Communication objectives should state:

- who performs the change;
- what will change in terms of behaviour, health services, knowledge, policies;
- in what direction the change will occur (for instance, increased use of iodized salt or decreased use of full cream milk);
- how much change will occur;
- where the change will occur;
- by what time the change will occur.

For example: By 2015 (*by when*), to increase (*direction*) by 20% (*how much*) the number of male adolescents (*who*) who eat a healthy diet (*of what*) according to their body requirements in a certain city (*where*).

Table 11. Communication objective worksheet

Who performs the change?
What will change (behaviours/health services/knowledge/policies)?
In what direction will the change occur?
How much change will occur?
Where will the change occur?
By what time will the change occur?

*Adapted from *CDCynergy micronutrient malnutrition edition phase 3*.

Types of communication objectives

Communication objectives are classified into three main types: cognitive, affective and psychomotor.

Cognitive objectives

Cognitive objectives are specific concept statements. They deal with processes such as knowing, perceiving, recognizing, thinking, conceiving, judging and reasoning; verbs which address the intellect.

Affective objectives

Affective objectives are specific statements that describe changes in attitude. They deal with feeling, emotion, attitude, appreciation and value.

Psychomotor objectives

Psychomotor objectives refer to statements that describe psychomotor skills. They deal with skills and ways of doing things. (For a list of verbs see Annex 1.)

All verbs which are used in writing objectives should be measurable, while those such as understand, feel, aware and believe should be avoided.

Characteristics of SMART objectives

Objectives refer to specific measurable results. These changes must be able to be tracked and measured in such a way to show that a change has occurred. Objectives need to be specific, measurable, achievable, relevant and time-bound (SMART). They should explicitly state what you want to happen, when and to whom as a result of your intervention. An example of a specific objective is 'by the end of next year, at least 90% of lactating mothers in a certain area will practise exclusive breastfeeding for 6 months after birth. An example of a non-specific objective is 'to enhance exclusive breastfeeding'.

Measurable objectives identify the extent of change that is desired and expected. Measurable objectives will guide evaluation in order to track progress toward a desired goal. An example of a measurable objective is 'to increase fruit and vegetable consumption among female adolescents in schools of a certain city by 50% by the middle of next year'. An example of a non-measurable objective is 'to ensure that female adolescents in schools of a certain city eat more fruit'.

Achievable objectives by definition need to be realistic. Communication strategies with wildly unreasonable objectives are bound to fail. It is generally impossible to achieve a behavioural change of 100%, particularly if your intervention is aimed at changing chronic, habitual behaviours, such as eating a high carbohydrate diet, habitually drinking tea after meals or smoking. It may be necessary to settle for small steps in the lengthy process of changing an individual's habitual behaviour. It is important to remember that setting realistic objectives will reflect on your credibility. An example of an achievable objective is 'to postpone drinking tea for 2 hours after meals among 50% of people in a certain area by the end of the year'. An example of a non-achievable objective is 'to prevent drinking tea after meals among 50% of people in a certain area by the end of the year'.

Relevant objectives are logically related to your overall goals. An example of a relevant objective is 'to develop nutrition guidelines which can be understood by individuals with poor reading skills to improve their nutritional habits by 10% in the next six months'. An example of an irrelevant objective is 'to teach people with poor reading skills greater literacy in order to be able to understand nutritional guidelines to improve their nutrition habits by 10% in the next six months'.

Objectives also need to be time-bound as interventions must be limited by time constraints, and the effects of interventions need to be measured at appropriate intervals. An example of a time-bound objective is 'to increase the proportion of adults who take daily exercise to 20% by the end of next year', and an example of an objective which is not time-bound is 'to increase the proportion of adults who take daily exercise to 20%'.

Creating communication objectives

Baseline data

Baseline data are the facts and figures which provide information on the extent of a nutrition problem, who is affected, how they are affected and on the severity of a problem. They provide your organization with a starting point against which you can measure how much progress has been made. The two basic methods of collecting baseline data are conducting primary or secondary research.

Determining changes to be made

The key to establishing realistic objectives is to decide which changes need to be adopted in order to reach your goal. The people who need to be included in discussions are stakeholders and partners, such as teachers, business leaders, religious leaders, local politicians, community members, nongovernmental organizations, the media and other members of your organization. Other stakeholders and partners include local experts, such as members of other organizations who have experience of the nutrition problem you are addressing, target audiences, the people who are experiencing the problem and those people whose actions contribute to the problem. The successful outcome of your objectives will be changing their behaviour.

Deciding on realistic accomplishments

After determining the extent of a problem and the desired outcomes you wish to achieve with your communication strategy, it is necessary to determine how much you believe can be achieved through your strategy and whether you have the resources to achieve the overall goal. This requires reference to the SWOT analysis you have undertaken.

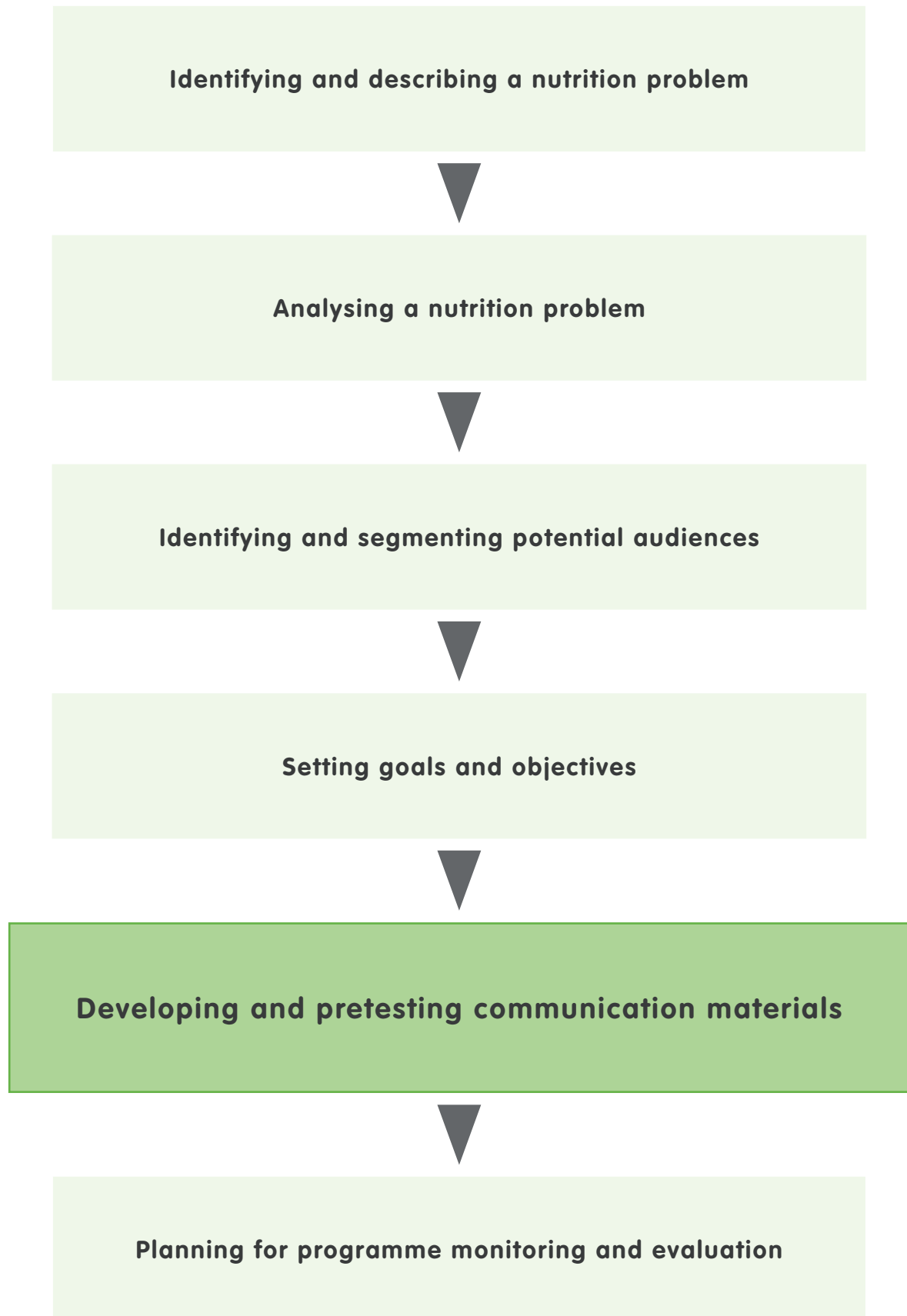
Reviewing the objectives

Before finalizing communication objectives they need to be reviewed with stakeholders and partners and members of your target audience. You can ask reviewers to comment on whether your objectives

are SMART, or if there is anything controversial about them. If there is potential for controversy then you have to be clear and explicit about this point. For instance, if using fortified flour in bread will change the taste of the bread then you need to acknowledge this in your message.

Evaluation relevance

Setting goals is an essential element for any type of evaluation. Goals serve as standards against which data collected in the evaluation are compared in an attempt to identify discrepancies. Setting objectives is a key step in the evaluation process in that objectives which are measurable provide the evaluator with objective standards of comparison that can be used to determine the effects of various intervention activities.



Chapter 3

Developing and pretesting communication materials

Summary

This chapter focuses on the pretesting of messages, concepts, settings, channels and the materials used for promoting health messages. This information is based on what is known about your target audience from the results of formative research and what has been determined and summarized in the audience profile and creative brief.

Learning objectives

By the end of this chapter you will be able to explain the:

- purpose and the importance of pretesting;
- importance of developing and pretesting message concepts, messages, settings, channel-specific activities and materials;
- characteristics of an effective nutrition message;
- importance of producing a variety of materials for dissemination.

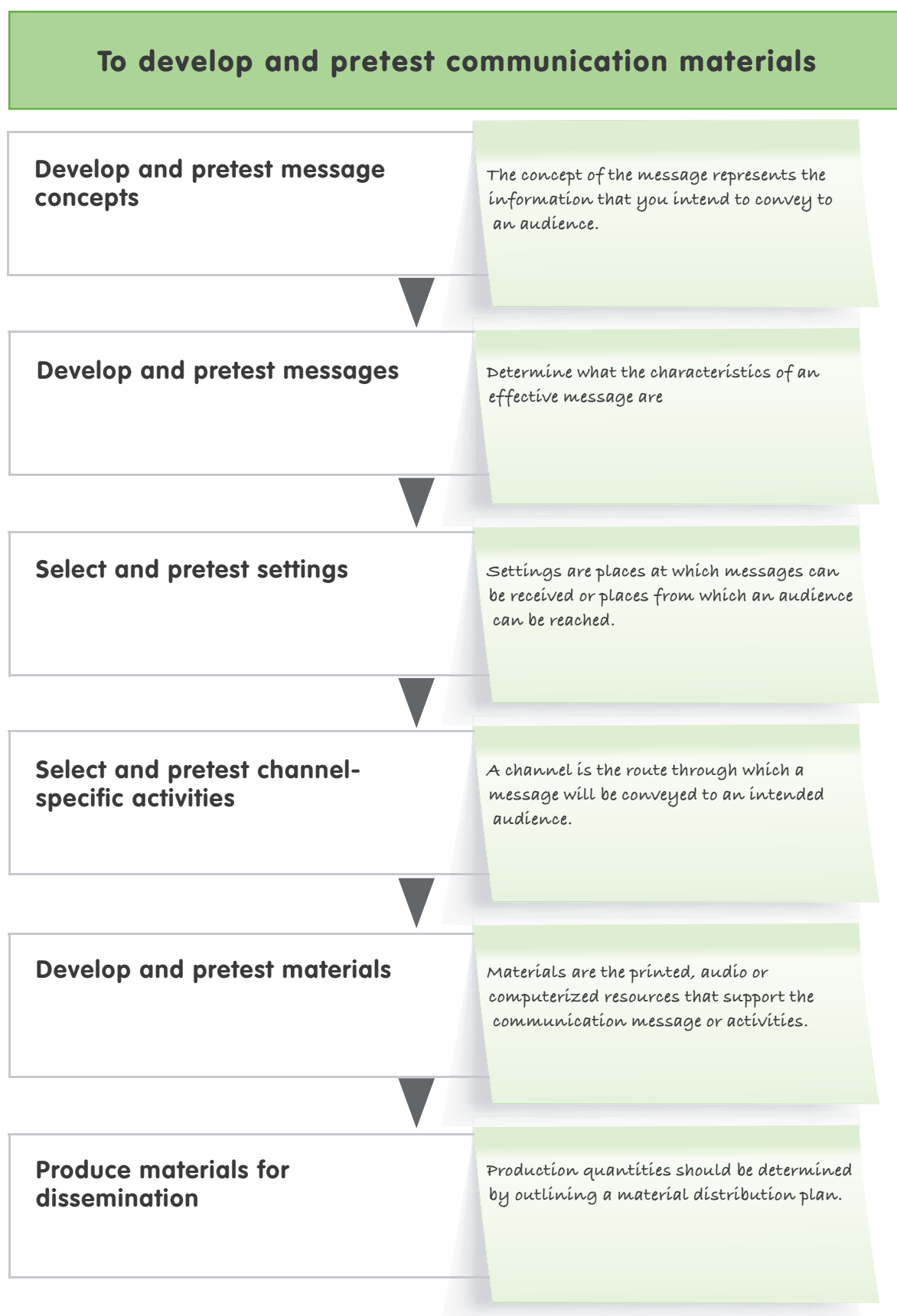


Figure 14. Steps involved in developing and pretesting communication materials

Pretesting messages

It cannot always be assumed that the message you wish to convey will be perceived by an audience in the way that you intend. For this reason it is necessary to pretest the message in order to gauge the audience's response and to determine that you are getting your message right. The message must be pretested with those for whom the nutrition communication materials were developed, and with those who will use the materials. Teachers, doctors, nurses or people involved in the media are people who can facilitate your access to a target audience and it is important to work with these people when developing and pretesting messages.

The purpose of pretesting is to assess comprehension, attention and recall, to identify the strengths and weaknesses of a communication intervention, to determine personal relevance to an audience, assess the credibility and acceptability of a message and to determine behavioural intent.

Assessing comprehension is important for determining whether the intended audience can understand the message easily. Assessing attention and recall determines whether the message attracts and retains the attention of an intended audience, it is necessary to consider that your message may be competing with contradictory messages in advertising.

Identifying strengths and weaknesses of a communication strategy ensures determining that all the elements of the material (message, format and style) are likely to work well with a target audience, and pretesting materials identifies which elements of the materials are attractive, informative or motivational to an audience. It will also determine the extent to which an audience like the material and which elements of it they particularly like or dislike.

Determining personal relevance is necessary to ensure that an audience understand the relevance of a nutrition problem in their lives and agree with the value of the solution for them. They need to be aware of the benefits they will receive by adopting the desired behaviour. Credibility determines whether a message and/or its source are perceived as credible by the audience and whether the material is presented realistically and convincingly. Acceptability determines whether there is anything in the message that is perceived as unacceptable to the primary, secondary or tertiary audience.

Finally, pretesting determines whether an audience is likely to take action as a result of a message. It can determine if a message is effective and if there are any barriers to an audience adopting the behaviour being promoted and whether the message promises sufficient benefits for them to adopt the behaviour. Figure 14 shows the steps involved in developing and pretesting communication materials.

Developing and pretesting message concepts

The message concept is the information that you intend to convey to an audience. The process of describing and analysing a nutrition problem, segmenting and profiling intended audiences and setting goals and objectives for a communication intervention forms the basis for developing message concepts. Concept testing will help to save an organization time and money, as it will identify which messages work best with an intended audience. Testing concepts with a target audience before messages are developed helps to ensure that messages are clear and will be well received by a target audience. While testing concepts it is important to focus on ideas and themes rather than on the material itself. Questions should be designed for the target audience(s) to determine the following information.

- Which concepts appeal to the target audience? How do they react to different aspects of the message's concept? Why do they react in that way?
- What do members of the target audience want to know about a nutrition problem?
- What would motivate them to adopt the desired behaviour?

- What is their level of understanding of the problem? (This information assesses an audience's informational needs.)
- What strengths and resources do audience members possess in relation to addressing a nutrition problem? How can these be used to adopt the desired behaviour and in developing concepts?

When gathering data in order to develop message concepts, the following methods are appropriate: referencing existing secondary data, conducting focus groups, in-depth interviews, intercept surveys and in-person surveys. (See Module 4, Chapter 2.)

Write objectives for your concepts that will serve as the standards against which you will compare your pretesting result, for example, if your objective is to motivate an audience, then after exposure to each concept individuals should be asked whether or not they are motivated by the concept. It is necessary to determine that you are providing them with enough information to change their behaviour.

A brief paragraph should be written to describe each concept to the audience and the following topics discussed: the audience's perception of the main idea of each concept, the personal relevance and the motivational effect of each concept and any suggestions for changing or improving the concept. Three to five concepts that seem most appropriate to the target audience should be identified and then a winning concept should be selected based on their feedback.

- Which concepts are most appealing?
- Which concepts are culturally appropriate?
- Which concepts are relevant to the audience?
- Which concepts are easily understood?
- Which concepts attract and retain the audience's attention?
- Which concepts deliver a credible message?

Developing and pretesting messages

Referencing your creative brief and the results from concept testing, it should now be possible to develop a nutrition message to effectively convey the information you wish to communicate to an intended audience. An effective message should have clarity and accuracy, should contain as few technical/scientific terms as possible and should not contain any information that an audience does not need, such as overly detailed information on the nutrition problem, the results of statistical research or background information on an organization. Messages should attempt to convey clear, consistent and accurate information.

The main points in the message need to be emphasized through repetition or other means. Messages need to be appealing and delivered in an appropriate tone, depending on the topic, the desired impact and the target audiences' preference. Messages should be as honest and complete as possible. Information should be credible and from a reliable source, and should not make audiences feel stigmatized, deprived, over-anxious or make promises that cannot be fulfilled.

Audience relevance

Messages should be based on information that is most important and relevant to a target audience and should include incentives to adopt the recommended behaviour beyond the health benefits they will experience, for example, children's academic ability will be improved by consuming food rich in iron in addition to the health benefit of reducing iron deficiency anaemia and its effects on general health. People's experience should be drawn upon when developing your message. A target audience will learn new information more easily when you proceed from the familiar to the unfamiliar, for

example, most people add salt to food during cooking but may not be aware that the use of iodized salt will prevent iodine deficiency.

Messages need to be developed to match the readiness of the intended audience to adopt the behavioural change. The “stages of change model” describes five stages that people pass through in adopting behavioural change, these stages include: precontemplation, contemplation, preparation, action and maintenance. Messages that are developed to match the readiness to change start at the stage at which an intended audience starts. It is unrealistic to expect an intended audience who have never heard of a nutrition problem to immediately adopt behavioural changes to remedy it. It is better to begin to raise awareness of the issue (precontemplation) and help move the intended audience to a consideration of change (contemplation).

Message testing is intended to provide information about the appeal of a message, how well it is understood, which wording and colours are attractive to, or are preferred by, an audience, and how appropriate the intended settings, channels and activities are.

Selecting and pretesting settings

Settings are places at which messages can be received or places from which an audience can be reached. They include:

- the home;
- schools;
- workplaces;
- health care centres;
- private clinics;
- billboards;
- places of worship (mosques, churches);
- malls;
- markets;
- social clubs;
- eating places;
- gyms.

The following questions should be asked when selecting and pretesting settings.

- Which settings attract large numbers of a target audience?
- Which settings are the best places to reach a target audience to convey your message?
- Which settings are compatible with the pretesting results of concepts and messages?

Once settings have been identified, a pretesting method needs to be selected to determine how an audience will receive the message within that setting. The method you select will depend on the message channel you plan to use to convey your message.

Selecting and pretesting channels

A channel is the route through which a message will be conveyed to an intended audience (e.g. interpersonal, small group, organizational, community and mass media).

How to select channel-specific activities

Your selection of communication activities should be guided by important considerations, such as the purpose of the communication as stated in the goals and objectives of the programme, the results of concept, message and settings testing, the nature and content of the messages, and the selection of message settings.

Types of channel-specific activities

Interpersonal channels

Interpersonal channels may include physicians, teachers, friends, family members and counsellors. Influence through interpersonal contacts may work best if an individual is already familiar with the message after hearing it through media exposure, etc. Similarly, messages delivered through the media are most effective at changing behaviour when they are supported by interpersonal communication.

The advantages of interpersonal channels are that they are most effective for teaching and demonstration and are more likely to influence and be trusted by an audience than the media as the source is familiar. These channels are among the most effective for affecting attitudes, skills and behavioural change and they also provide an opportunity for feedback. The disadvantages of interpersonal channels are that they are time-consuming as a result of the process of developing messages, materials and activities to promote the health message. Interpersonal channels can only reach small audiences at a time, and the sources themselves may need to be convinced and trained before they are able to effectively convey the information to others.

Group channels

Group channels include activities conducted in the classroom, neighbourhood, clubs or malls, or in places of worship. The influence of group channels is more effective when groups are already familiar with the message through interpersonal or media channels.

The advantages are that they can help your programme reach more of its intended audience and can have the same influential effect of interpersonal channels. Nutrition messages can be designed for homogenous groups who share common experiences, such as working together or attending the same school. These channels also have the advantage of allowing group discussion or an exchange of experience on the subject of a nutrition message. The disadvantage of group channels is that it is time-consuming to develop messages, materials and activities within this channel to promote a health message. As with interpersonal channels, group channel sources may need to be convinced and trained themselves before they are able to convey the health information to others. Organizations and community groups can conduct activities that include:

- delivering speeches;
- organizing conferences;
- forming advocacy groups through meetings with community leaders and policy-makers;
- holding events and presenting nutrition information;
- placing displays in salons, pharmacies, grocery stores, bus stations and other locations where people gather;
- placing inserts with bills in shopping bags;
- stamping programme logos on shopping bags;
- distributing buttons, refrigerator magnets or other corporate giveaways;
- sending community newsletters;
- producing dramas or performances;

- hosting appreciation events, such as breakfasts or dinners for local organizations;
- displaying window banners at local stores;
- announcing loudspeaker messages in stores;
- posting public scoreboards to show the progress toward a programme goal i.e. 90% of the population now use skimmed milk or iodized salt.

The advantages are that their involvement can add to a programme and message's credibility. Organizational/community channels can provide feedback, allow discussion, provide clarification and enhance motivation and support for adopting the recommended behavioural change and reinforcing and maintaining this change. The disadvantages are that they have a higher cost than interpersonal channels and require convincing and trained spokespeople.

Mass media channels

Mass media channels include radio, television, magazines, billboards and newspapers. These channels take different forms of dissemination such as references in news programmes, entertainment and current affairs programmes, discussion on talk shows, live remote broadcasts and editorials (television, radio, newspapers and magazines). Information can be displayed in posters and brochures, discussed in health and political columns in newspapers and magazines and highlighted in public information campaigns. One advantage of the mass media is that it is very effective at raising awareness of a nutrition problem and positive behaviour, and of the benefits that result from adopting positive behavioural change. Another advantage is that it stimulates the target audience to seek information and services.

A disadvantage is that the media does not provide an opportunity for immediate feedback. Mass media channels are also expensive as they require creative teams, artists/actors and the expense of TV or radio time. Media channels are also more effective in increasing awareness rather than encouraging behavioural change as behavioural change requires long-term, multiple intervention campaigns rather than single communication activities or campaigns. Communication activities should be combined in order that they reinforce and complement one another. For example, news and media activities can be planned in a way which draws attention to, enhances and reinforces audience-based messages and the other activities which are being used to deliver them.

Developing and pretesting communication materials

Materials are the printed, audio or computerized materials that support the communication message or activities. Materials should be selected from among the many options that support a nutrition communication message, setting, message channel and activity, and which are based on the results of the pretesting of concepts, messages, settings and channels. Nutrition communication materials can include:

- pamphlets;
- press kits;
- billboards;
- leaflets;
- movies;
- editorial letters;
- web pages;
- posters;

- newsletters;
- magazine articles or advertisements;
- paycheck inserts;
- bookmarks;
- comic books;
- factsheets;
- audio/video news releases;
- public appearances of media personalities;
- printed materials with pictures and entertaining storylines;
- displays;
- kiosk displays;

Using pre-existing materials

Before developing new nutrition communication materials, it is always important to determine whether there are existing materials that are relevant to your nutrition communication programme's objectives. Using pre-existing materials will save your organization time and money, although the following questions should be answered before deciding to use existing materials.

- Does the message of the material match the concepts and objectives of your planned nutrition communication strategy?
- Do the materials contain an effective message? Is it clear, accurate, complete and relevant and does it have the correct tone and appeal?
- Are the materials appropriate for your target audience in terms of format, style and readability? Are the pictures used in the material culturally appropriate in terms of dress, style, traditions, etc.?
- Can the materials be modified to be appropriate in terms of amending pictures, language, adding a logo, adding your organization's name, adding contact numbers? (You need to take into consideration lessons that were learned when the materials were first used.)
- Do you have permission to modify or use parts of the material as it may be protected by copyright?

Developing new materials

If existing messages and materials are unsuitable, new nutrition communication messages and materials need to be developed which appeal to your target audience based on the concepts you have already pretested. As the material is being developed, it is necessary to consider the following issues.

- Write in the active voice.
- Clarify all points with examples.
- Use illustrations and graphics that are relevant and reinforce the text to gain the attention of the audience and to aid understanding and recall.
- Be consistent in the style of graphic illustration in your material, in terms of colour scheme, style of illustration, characters, logos or themes.
- Avoid using unprofessional illustrations or technical diagrams.
- Avoid using small type (less than 10 points) and large blocks of text.
- Use short sentences or short paragraphs.
- Break up text with visuals and bullet points to emphasize important points.
- Avoid jargon, abbreviations and technical terms.
- Summarize at the end for review.
- Add the nutrition communication programme's logo if there is one.

The messages in all materials and channels should reinforce each other and should be compatible with the goals and objectives of your nutrition communication programme. The special needs of a target audience need to be considered in terms of levels of literacy, language, cultural appropriateness, the medium used, and materials need to be tailored accordingly. A variety of materials need to be produced to target the various audience segments and audio and visual materials need to use culturally appropriate language, music and images. Materials should also be of high quality as materials of low quality will waste funds, distract the audience's attention and damage the credibility of the message and your programme. Pretesting the materials requires testing the draft materials with representatives of the target audience before materials are produced in their final forms. Pretesting draft materials with representatives of a target audience should provide feedback on:

- how well the main idea of the message represented in the material was communicated.
- how effectively the material motivates the audience to adopt the recommended action.
- how acceptable and credible the information in the material is perceived as.
- how personally relevant and interesting for an audience the information in the material is.

Producing materials for dissemination

Production quantities should be determined by outlining a material distribution plan. If printing materials, it is necessary to consider the following issues.

- Printing larger quantities reduces the cost per copy.
- Quality and costs vary so seek recommendations from colleagues and obtain cost estimates from several printers.
- Paper stocks vary in cost so it is necessary to consider a range of stocks as a way of reducing costs.
- Prices increase with each additional colour used in the material.

If producing audiovisual materials, it is necessary to consider the following issues.

- Using a professional announcer for public service announcements or voice-over artists may seem expensive but it will save time and money, as professionals need less time to deliver the script correctly. A non-professional artist may take longer to deliver a good recording and therefore will add to studio costs.
- Low-quality videos can distract the viewer from the content of a message, so if possible, spend sufficient resources on developing high-quality video productions.

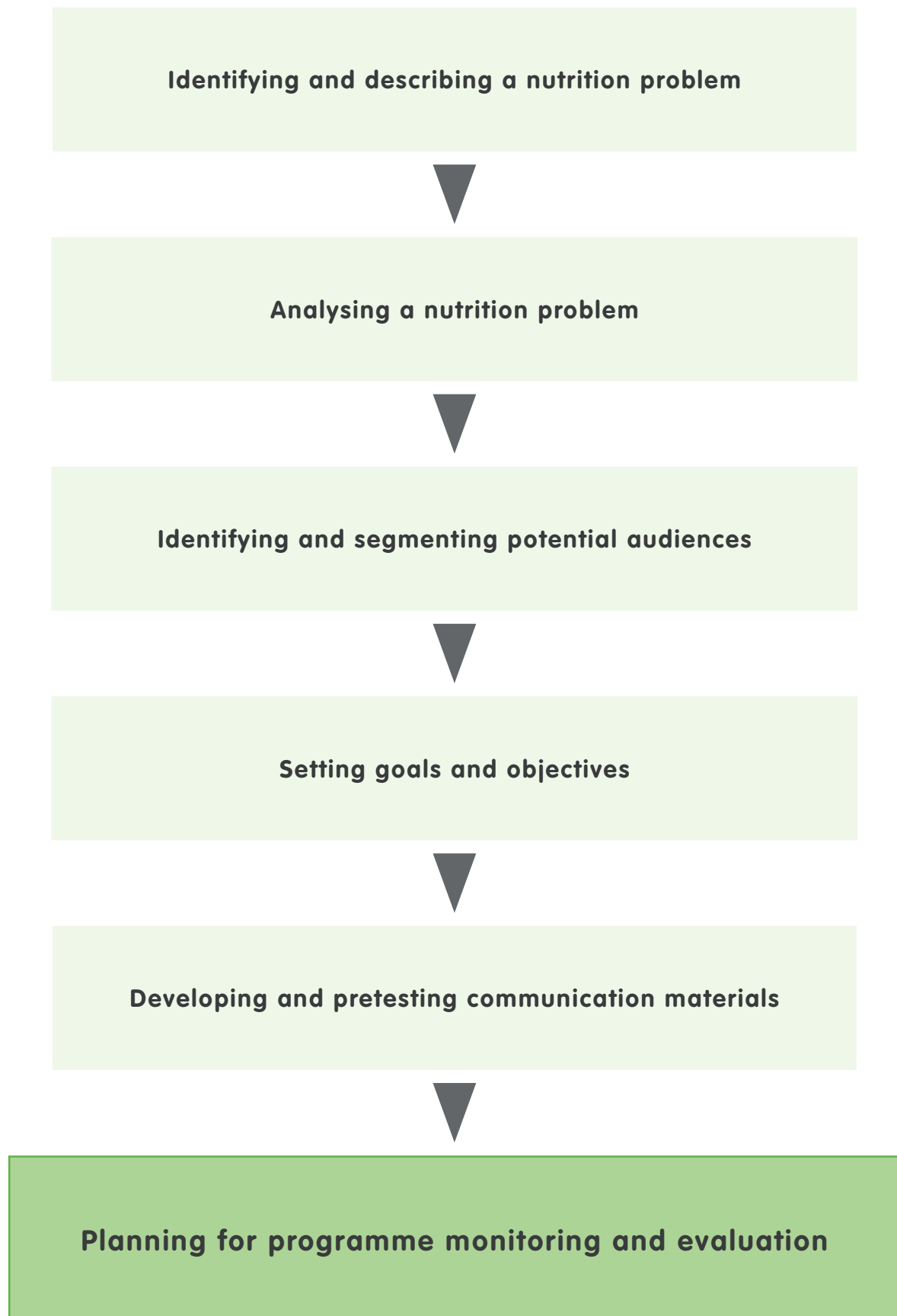
Evaluation relevance

Trial product performance evaluation (pretesting) is essential in order to collect information about the effectiveness and relevance of activities, concepts/messages or materials before they are finally produced. This type of evaluation determines the extent of difference or similarity that exists between your nutrition communication objectives and the extent to which the activities, messages or products actually achieve these objectives.

Module 4

Chapter 1
Monitoring and evaluation

Chapter 2
Tools of research



Chapter 1

Planning for programme monitoring and evaluation

Summary

This chapter discusses the importance of programme monitoring and evaluation and explains the main steps involved in the programme monitoring and evaluation process.

Learning objectives

By the end of this chapter you will be able to explain the:

- importance of programme monitoring and evaluation;
- importance of writing an evaluation plan;
- basic steps in planning the evaluation of a nutrition communication programme.



Figure 15. Steps involved in planning for programme monitoring and evaluation

What is monitoring?

Monitoring is the regular observation and the keeping of records of activities being undertaken in a programme. It is the process of routinely gathering information on various aspects of a programme and observing the progress of project activities. Monitoring also involves providing feedback on the programme's progress to partners and stakeholders involved in programme implementation.

The purpose of monitoring

Monitoring is an essential element in nutrition communication programme planning and implementation. It allows partners and stakeholders, involved in programme implementation, to track the progress of activities and allows programme managers to make adjustments to a programme to ensure that strengths and weaknesses are being addressed. Monitoring provides information that is useful for:

- analysing the implementation phase of a programme;
- determining whether resources are being well utilized;
- addressing a programme's strengths and weaknesses;
- ensuring activities are undertaken on time and are being carried out by the relevant personnel;
- sharing experiences and the lessons which have been learned from other programmes; and
- determining whether planning has adequately identified the most appropriate actions to address the problems.

Monitoring indicators consist of input, output, outcome and impact indicators, which are explained below.

Input indicators	provide the baseline data for a programme. For instance, in a programme designed to reduce the level of obesity among schoolchildren, input indicators are represented by the number of overweight pupils in a school and their level of awareness regarding obesity and the amount of money they spend on fast food.
Output indicators	measure the output of programme activities, such as the amount of printed nutrition communication materials being produced, the range of available nutrition communication settings or the level of radio or TV exposure given to a nutrition issue.
Outcome indicators	measure the product of an activity. For instance, the number of adolescents attending settings in which nutrition education can be provided and in which nutrition communication materials can be received.
Impact indicators	measure changes in a nutrition problem. For instance, the extent to which obesity among adolescents has been reduced.

What is programme evaluation?

Evaluation differs from monitoring but the two processes are closely related. Rossi and Freeman (1994) define programme evaluation as “the systematic application of social research procedures for

assessing conceptualization, design, implementation, and utility of health or social interventions.” Figure 15 shows the steps involved in planning for programme monitoring and evaluation.

Evaluation plans

Writing an evaluation plan is crucial as it acts as a guide through each step of the process of evaluation and helps to determine which information is needed and at what time it needs to be supplied. An evaluation plan helps to identify the best methods of data collection and determines strategies for obtaining this information. It also sets reasonable and realistic timelines and budgets for the evaluation process.

Evaluation stages

Evaluators are asked to plan and implement evaluations of health-related interventions at three distinct stages: conceptual, developmental and operational.

- The conceptual stage refers to the stage at which the programme is first conceived.
- The developmental stage refers to the stage at which decisions are taken concerning programme interventions and/or decisions are taken regarding any part of an activity.
- The operational stage refers to the stage at which the programme is operating.

These distinct stages of evaluation highlight the importance of focusing on evaluation from the very beginning of planning a nutrition communication strategy (see Evaluation relevance for each phase of the programme at the end of each chapter). The basic steps in planning an evaluation of a programme are:

- engaging stakeholders;
- explaining the programme;
- designing the evaluation;
- gathering credible evidence;
- justifying conclusions;
- providing feedback and sharing experiences from the lessons learned.

Engaging stakeholders

It is essential to involve stakeholders in the process of evaluation in order to determine what type of information they require from an evaluation, and in order to receive feedback that is necessary for any adjustment to a programme. When stakeholders are not involved in the process, evaluation findings are likely to be ignored, criticized or resisted. This illustrates why the involvement of stakeholders in the evaluation process is crucial. There are three principle groups of stakeholders who it is important to involve in programme evaluation, these include individuals or organizations involved in programme operations, individuals or organizations served or affected by the programme and primary intended users of the evaluation.

Stakeholders include community members, sponsors, collaborators, partners, funding agencies, administrators, managers and staff. As these people have a professional role in the planning and implementation of a programme, they may perceive programme evaluation as an evaluation of their own performance and so it is important to clarify that programme evaluation is related to, but different from, personnel evaluation that has its own distinct process.

People or organizations served or affected by a programme include those who are either affected directly such as pregnant women, adolescents or children receiving services, or indirectly, such as

organizations, academic institutions, decision-makers or advocacy groups who are benefiting from improved community health. These groups need to be identified and involved in the evaluation process. You should also consider that it may be necessary to involve individuals who are unconvinced by, or opposed to, a programme as the success of your programme and their subsequent acceptance of it will strengthen the credibility of an evaluation.

Primary intended users of an evaluation are specific individuals who are in a position of programme management and who can act upon or affect changes as a result of evaluation results. Primary intended users of an evaluation should not be confused with primary intended audiences. Recognizing primary intended users, such as programme staff and donors early in the planning process and maintaining regular communication with them helps to ensure that an evaluation adequately addresses their informational needs.

Describing a nutrition communication programme

The description of a programme forms the basis for linking the various aspects of a programme with their effect on the intended audiences (Figure 16). In addition, a description will provide stakeholders with a clearer understanding of a programme's goals and objectives. Evaluations undertaken without clear agreement on a programme's goals and objectives are likely to be of limited use, and agreement on the following issues must be reached for the success of a programme and the credibility of an evaluation. A description of a programme should include the following information.

- programme needs;
- expected outcomes;
- type of activities;
- stages of development;
- available resources;
- programme context;
- logical model.

Programme needs

A statement of need relates to the nutrition problem to be addressed, the goals or objectives that a nutrition communication programme seeks to achieve and which actions will be taken in response to the problem which has been identified. Important aspects in describing a programme's need include: (i) the nature and size of the nutrition problem, (ii) which populations are affected by the problem, (iii) information on whether the need is changing (increasing or decreasing).

Expected outcomes

The expected outcomes, also known as programme effects, are a programme's intended results. Expected outcomes describe what a programme hopes to accomplish in order to be considered successful. The descriptions of expectations should be organized by time, ranging from specific or immediate to broad or long-term effects. A programme's goal and objectives represent varying levels of expected effects. If your communication intervention is to address the problem of obesity among adolescents, the programme's effect will range from specific immediate effects, which are to decrease the prevalence of obesity among adolescents, to the broad long-term effects, which are to decrease the prevalence of hypertension, diabetes and cardiovascular diseases. Also, a description of expected effects should include possible unintended problems with, or results from, your nutrition communication programme, such as controversy or opposition.

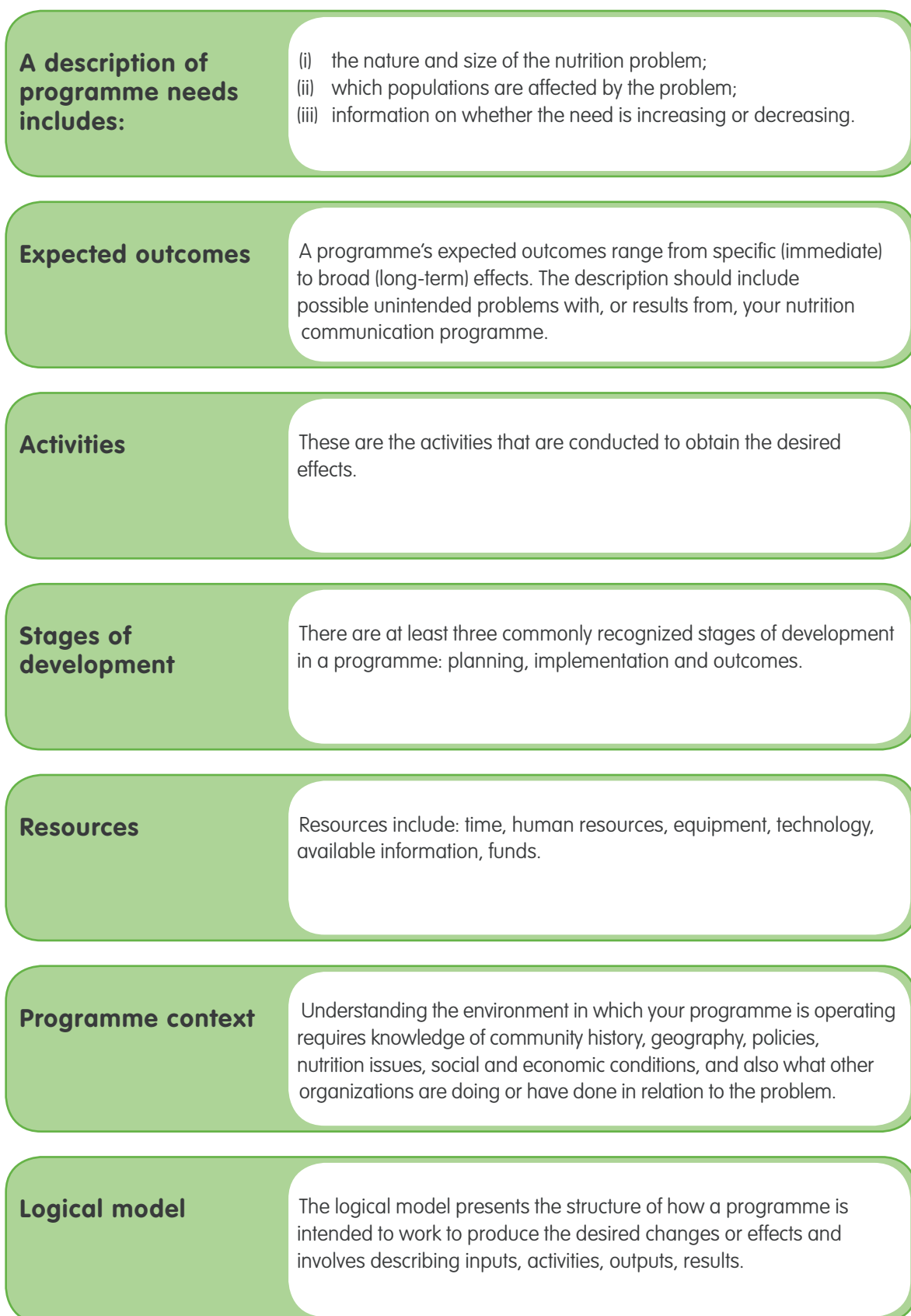


Figure 16. Essential elements in a description of a programme

Types of activities

These are the activities that are undertaken to obtain the desired effects. Providing a clear description of programme activities will help to:

- determine strategies and actions followed in a logical and structured sequence;
- explain how different programme activities relate to one another;
- provide an opportunity to distinguish activities that are the direct responsibility of your organization from those conducted in related programmes by partner organizations;
- highlight external factors, such as laws or policies, which may affect the success of a programme.

Stages of development

There are at least three phases of commonly recognized developmental stages of a programme—the planning stage, the implementation stage and the effects or outcome stage. Each of these stages needs to be evaluated. At the planning stage, programme activities are as yet untested and the goal of the evaluation process is to refine plans as much as possible according to the evaluation findings. In the implementation phase, programme activities are being field-tested and modified. The goal of the evaluation process at that time is to compare the implemented activities with the ideal activities and to improve operations accordingly. At this stage, enough time has passed for programme activities to have had an effect, the goal of the evaluation process at this time is to identify and to understand a programme's results, including those that were unintended.

Available resources

Available resources include time, trained personnel, equipment, technology, available information, funds and other factors that support programme activities. It is important to review programme resources as this will reveal:

- the extent and effectiveness of a programme's services;
- incompatibility between the desired activities and the resources available to implement those activities;
- the importance of programme costs in assessing the cost–benefit ratio as a part of the evaluation.

Programme context

The context relates to the environment in which the programme is being implemented. This includes the community's history, geography, policies, nutrition issues and social and economic conditions. It also involves identifying what other organizations are doing and have done in relation to the nutrition problem being addressed. Understanding these environmental variables and influences is necessary for the evaluation process in considering whether a programme is compatible with the surrounding environment in which it is operating and allows users to interpret findings accurately and assess how any conclusions can be generalized to a wider environment.

Logical model

The logical model presents the structure of how a programme is intended to work to produce the desired changes and effects. The model is displayed in a flowchart, map or table to illustrate the sequence of steps which are necessary to create results. Creating a logical model allows stakeholders to improve and focus programme direction. It can be considered as a frame of reference for more than one aspect of a programme in the evaluation process. A detailed logical model can also form

the basis for estimating a programme's effect at various points. Interrelated elements within a logical model may vary but generally include the following (Figure 17).

It is also important to consider different variables, such as staff turnover, inadequate resources, political pressures or community participation that may affect programme performance.

Evaluation design

Designing an evaluation means planning the evaluation process in advance, deciding which of the stakeholders' questions need to be answered and which steps the evaluation process will take to reach conclusions and findings. Depending on the type of information needed, some types of evaluation designs will be more suitable than others. Accurate planning predicts intended uses and creates a useful, feasible and accurate evaluation strategy. A well-focused evaluation plan will increase efficiency and save time and resources. The issues to be considered when designing an evaluation are:

- purpose of the evaluation;
- users of the evaluation;
- uses of the evaluation;
- stakeholders' questions;
- methods of evaluation;
- agreement on the chosen design.

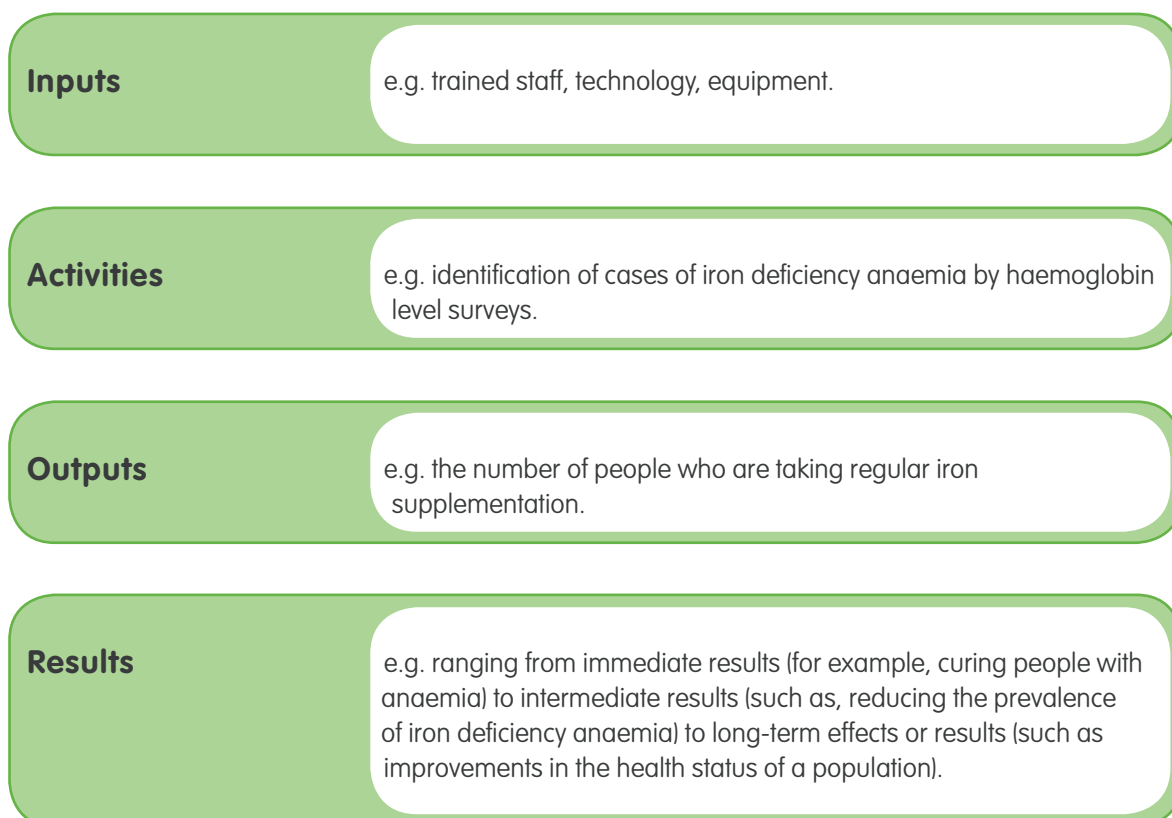


Figure 17. Logical model

Purpose of an evaluation

The purpose of an evaluation is to assess a programme. Taking the time to determine the exact purpose of an evaluation will help an organization to make the right decisions about how the evaluation process should be conducted. The general purposes for which you might conduct an evaluation of a nutrition communication programme include to gain insight, to make refinements to a programme and to determine what effects a programme is having.

Gaining insight is appropriate during the planning stage as it assists in obtaining information about whether an intervention is practical or not. If your intervention to address obesity is to build sport centres then this is not practical, but increasing people's awareness of healthy or low-calorie diets is.

Making refinements to a programme is appropriate during the implementation stage. Information gathered on programme activities can improve operationalization of a programme or can be used to refine your strategy. Evaluations undertaken for this purpose include efforts to improve the quality, effectiveness or efficiency of programme activities. Client reaction to your nutrition communication efforts can provide useful information which can be used to refine nutrition communication messages accordingly.

Evaluations undertaken to determine the effects of a programme delineate the relationship between programme activities and observed effects, for instance, it is possible to note if more nursing mothers are breastfeeding their babies as a result of a programme to encourage breastfeeding. This type of evaluation helps to establish the effects of a programme and adds credibility in the minds of donors, decision-makers and the community.

Users of an evaluation

Users of an evaluation are the specific individuals who will receive the evaluation findings and use them to assess a programme. Users of an evaluation should always be involved in designing an evaluation plan. An evaluation designed without adequate user involvement can become misguided and irrelevant. When users are encouraged to clarify an evaluation's intended uses, prioritize questions to be answered and choose methods of evaluation, the evaluation is more likely to provide an accurate picture of the programme and encourage useful feedback. This is important at this stage in order that any necessary adjustments to a programme can be made in accordance with the evaluation's findings.

Stakeholder questions

The evaluation needs to answer specific stakeholder questions and address issues that are of concern to them. The evaluation process can determine the success of specific components of a nutrition communication programme by answering the following questions.

- Were intervention activities developed as planned?
- Are the communication inputs consistent with expected standards?
- Were the intervention activities implemented as expected?
- Were the intended audiences reached and did they listen to, and understand, the messages?
- Were the desired immediate, intermediate and ultimate effects achieved?
- Were the resources used in the intervention relatively greater, equal to or less than the effects/benefits gained from the intervention?

Methods of evaluation

Three types of evaluation method are commonly recognized—experimental, quasi-experimental and observational (or case study) designs.

Experimental methods use random sampling to compare the effect of an intervention among similar groups, for example, if your intervention is a nutrition communication strategy to control anaemia among pregnant women, the method of evaluation will use an experimental design by comparing a randomly sampled group of pregnant women attending maternal and child health care centres who take iron supplements with those attending who do not take supplements (Figure 18).

Quasi-experimental methods make comparisons between groups who are dissimilar, for example, pregnant women exposed to a nutrition communication message and activities versus those who are not. These methods may also involve collecting data at different time intervals to make comparisons (Figure 19). Observational or case study methods use comparisons within a group to describe and explain unique features of its members and what occurs within various communities.

No single evaluation design is better than another. Evaluation methods should be selected on the best basis for providing information to stakeholders. As each method has its own limitations, evaluations which employ several methods are generally more effective. During the course of an evaluation, evaluation methods may also need to be revised and modified if circumstances change. An evaluation's intended use can shift from a focus on improving a programme's current activities to determining whether to expand programme services to a new population group. Thus, changing conditions may require changes or a redesign of methods to keep an evaluation on track and relevant.

Agreement

Agreement serves to clarify evaluation procedures and the roles and responsibilities of stakeholders. An agreement also decides how evaluation activities will be implemented. Elements of an agreement

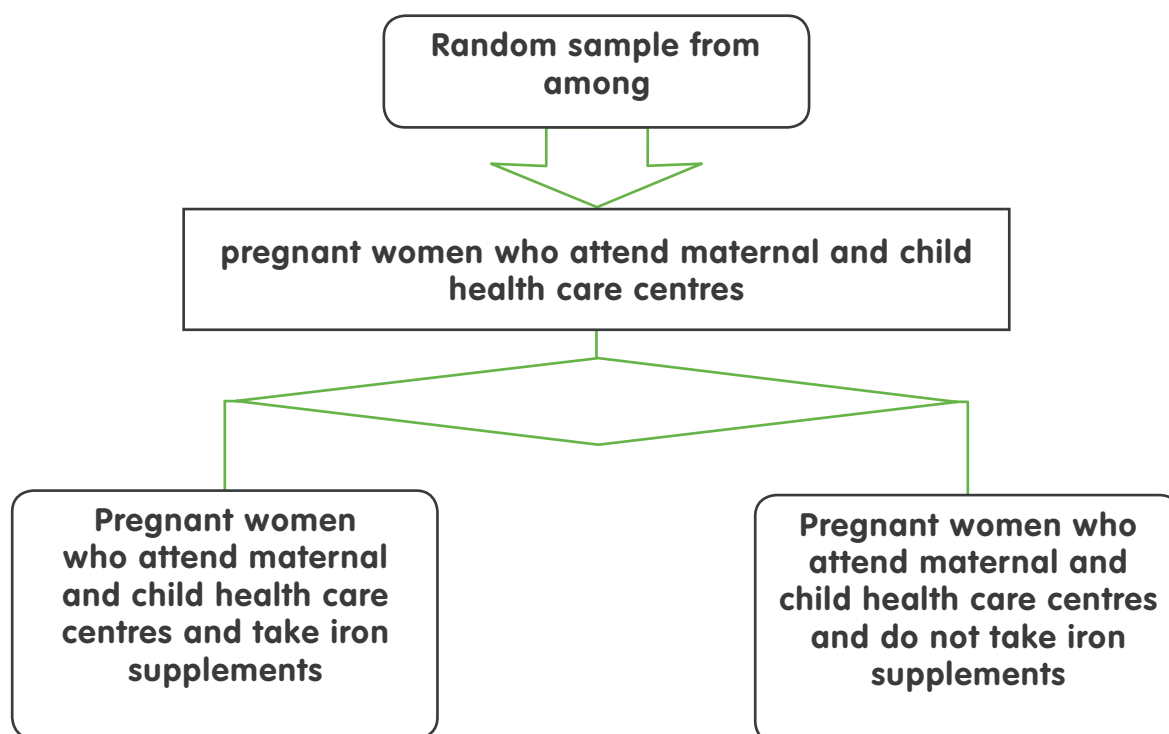


Figure 18. Experimental method of random sampling for evaluation

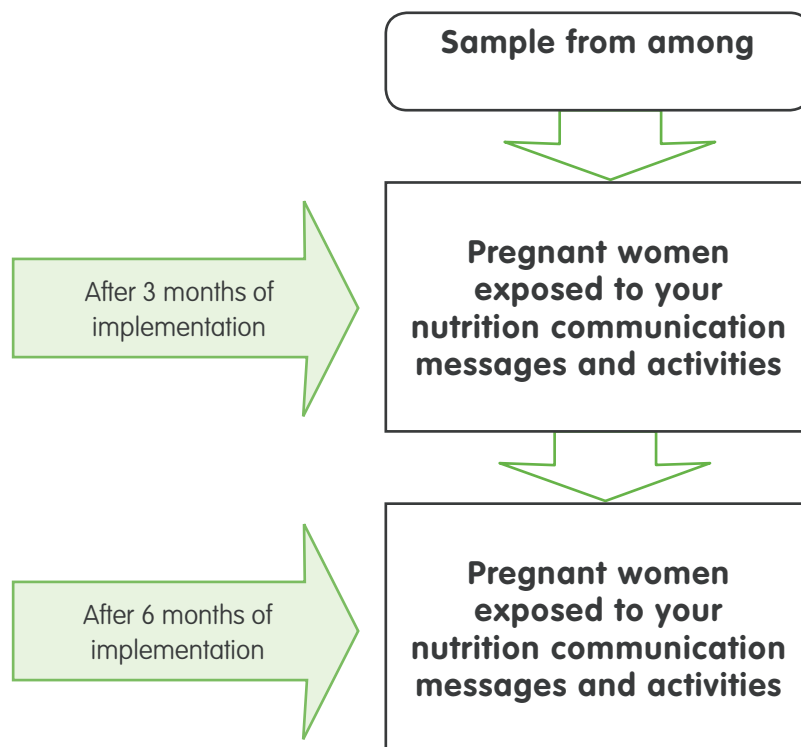


Figure 19. Quasi-experimental method of comparison for evaluation

include statements about the intended purpose of an evaluation, users, uses and methods of an evaluation, in addition to providing information on programme management, schedules and budgets. The agreement may take the form of a legal contract, a detailed protocol or a simple memorandum of understanding depending on the relationship between those involved. Agreement provides a mutual understanding of the evaluation process between intended users and the basis for modifying procedures if necessary. Regular and scheduled meetings can be held with specific intended users to better understand their informational needs and to decide on the timeline for action.

Gathering credible evidence

Credible evidence is the basis of a good evaluation. The information gathered needs to be perceived by stakeholders as credible, reliable and relevant. This requires thorough consideration of what constitutes evidence. The standards for credibility require available results of experimental or systematic observation depending on the kind of information requested by stakeholders or on the situation in which it is collected. Presenting credible evidence strengthens the results of an evaluation and the recommendations that follow it. Although all types of data have limitations, it is possible to improve an evaluation's overall credibility by using multiple procedures for collecting, analysing and interpreting data. Encouraging participation by stakeholders will also increase credibility. When stakeholders are involved in preparing questions and gathering data they are more likely to accept the evaluation's findings and conclusions and to act on any recommendations resulting from the evaluation. Elements of evidence gathering include: indicators, sources, quality, quantity and logistics.

Indicators

Indicators translate general concepts about a nutrition communication programme and its expected effects into specific and measurable parts. Examples of indicators to measure a nutrition communication programme's activities include the:

- programme's capacity to deliver messages;
- ability to reach intended audiences through messages delivered through suitable and appropriate settings and channels;
- level of understanding attained by the target audience;
- efficient use of resources;
- level of an intervention's exposure (the number of people exposed to the message and the extent of their exposure).

Measures of a nutrition communication programme's effects include:

- assessing changes in audiences' behaviour;
- assessing changes in community conditions or norms in relation to the nutrition problem being addressed by a programme;
- assessing changes to the environment through new programmes, policies or practices;
- assessing long-term changes in the population's nutritional status (i.e. decreasing levels of malnutrition).

Indicators should address the criteria that will be used to judge the efficacy of a programme. Several indicators are generally needed to judge the success of its implementation and the effects of a programme or intervention.

Sources of evidence

In an evaluation process, sources of evidence may be people, documents or observations, and more than one source may be used to gather evidence for each indicator. Selecting multiple sources provides an opportunity to include different perspectives of a programme and increases the evaluation's credibility. Gathering qualitative and quantitative information can convey evidence that is more complete and more useful in meeting the needs and expectations of stakeholders.

Quality

Quality refers to the appropriateness and integrity of information collected in the evaluation process. High-quality data are reliable and informative. Factors that can affect the integrity of information may include: a lack of well-defined indicators, the evaluation design, data collection procedures, the level of training of those involved in data collection, selecting sources of information and the routine checking of errors.

Quantity

Quantity refers to the amount of evidence gathered in an evaluation process, and it is necessary to estimate in advance the amount of information that will be required. The quantity of information gathered will affect the level of confidence users of an evaluation will have in the results of an evaluation.

Logistics

Logistics refers to the methods, timing and physical and technical means of gathering evidence and data. There are cultural preferences that favour ways of asking questions and of collecting information,

including considerations of who will ask the questions and how. The techniques for collecting evidence in an evaluation process must be appropriate and acceptable within the cultural norms of the community, and data collection procedures should always ensure that privacy is protected.

Justifying conclusions

Conclusions will be justified by linking them to the evidence gathered and by judging them against stakeholders' values and needs. Justifying conclusions on the basis of evidence relies on:

- standards;
- analysis and synthesis;
- interpretation;
- judgement;
- recommendations.

Standards

Standards reflect the values held by stakeholders about a programme. They provide the basis for judging whether a nutrition communication programme's performance will be considered successful, adequate or unsuccessful.

Analysis and synthesis

Analysis and synthesis are methods of discovering and summarizing an evaluation's findings. They include isolating important findings (analysis), or combining different sources of information for greater understanding (synthesis).

Interpretation

Interpretation requires understanding what the findings of an evaluation imply. Determining negative or positive facts about a nutrition communication programme's performance is not enough to form conclusions, the facts must be interpreted in order to understand their practical significance.

Judgements

Judgements are statements about the significance of a programme. It is possible to make judgements by comparing the findings of an evaluation and their interpretation against the standards which have been set.

Recommendations

Recommendations are suggestions or advice for a course of action which arise as a result of an evaluation's findings. If the proposed recommendations are not supported by adequate evidence they can reduce an evaluation's credibility.

Feedback

Feedback represents the opinions of those involved in the evaluation process. Providing and receiving feedback will lead to greater trust among partners and stakeholders and also ensures that all partners are kept informed on how the evaluation process is proceeding according to the pre-planned steps. The feedback of stakeholders and partners is needed during every phase of an evaluation and can

be obtained through convening regular meetings or disseminating step-by-step findings, provisional interpretations and oral or written draft reports. Oral or written evaluation reports should be concise, clear and well organized and should include the following key elements:

- a brief description of a programme's components and activities which are being assessed by the evaluation;
- feedback on stakeholders' questions;
- a description and discussion on the differences between what was expected to occur and what actually occurred;
- recommendations on how activities and strategies can be modified;
- justification of any conclusions in the evaluation report.

Follow-up relates to the means of support that evaluation users need during the evaluation process and following the evaluation. Due to the amount of effort required, there is a misconception that reaching conclusions in an evaluation is an end in itself. For this reason, active follow-up is necessary to remind users of the intended uses of the evaluation findings. Follow-up may also be required to emphasize the lessons that have been learned, and so it is useful to have someone involved in the evaluation to serve as an advocate for the evaluation's findings during any subsequent decision-making phase. Active follow-up can also help to prevent programme opponents from over-emphasizing negative findings without highlighting a programme's positive results.

Dissemination is the process of communicating the activities or the lessons learned from an evaluation to the users in a timely, accurate and appropriate manner. As with other elements of the evaluation, the reporting schedule should be discussed in advance with intended users and other stakeholders. A checklist of items to consider when developing evaluation reports includes:

- tailoring the report's content for users;
- explaining the focus of an evaluation;
- explaining the limitations of an evaluation;
- listing both the strengths and weaknesses of an evaluation.

Chapter 2

Tools of research

Summary

This chapter illustrates and discusses different types of research and the tools that can be used to conduct research throughout the planning process of each stage of a nutrition communication programme. It focuses on how to gather information and to build background information on a nutrition problem, and on how to collect data on a target audience's culture, lifestyle, behaviours and motivations, interests and needs.

Learning objectives

By the end of this chapter you will be able to:

- describe different methods of research;
- list the differences between qualitative and quantitative research methods;
- describe selected methods of research (qualitative and quantitative);
- apply different tools of research during the planning phase of a nutrition communication programme.

Methods of data collection

Tools of research are methods of data collection (either qualitative or quantitative) which help build information on a nutrition problem, its causes and a target audience's culture, lifestyle, behaviours and motivations, interests and needs. It is possible to use more than one research method depending on the particular research objectives, the available resources, the goal and objectives of a nutrition communication programme and the time frame for conducting research.

Conducting focus groups with intended audiences can provide information about the types of messages and the channels which are most likely to be effective with an intended audience. You can also conduct focus groups and in-depth interviews to learn more about intended audience members' motivations, attitudes and behaviours. Messages and materials can then be pretested with an intended audience and intercept interviews can be conducted to gain information on how best to encourage the adoption of the desired behaviour. Employing multiple methods can also assist in obtaining accurate information about an intended audience and their response to a nutrition communication programme.

Quantitative research

Quantitative research provides information on people's behaviour, for example, the percentage of students in schools who eat fast food regularly and the quantity they are eating each week.

Qualitative research

Qualitative research is a combination of methods which provides detailed and clear information about an audience's points of view, feelings, attitudes and behaviours. For example, research can be undertaken on the same group of students to obtain information on why they prefer fast food, whether they feel that it is healthy or not and whether they are likely to change their behaviour regarding the practice if they are provided with health information highlighting the negative outcomes of this behaviour. Tables 12–19 present information on quantitative and qualitative methods of research.

You can also collect information from demographic health surveys that provide epidemiological data and information on how patterns relating to health issues have evolved. The surveys can also serve as a source of comparative baseline data and impact indicators.

Review methods

Review methods are research methods concerned with the collection of essays on programme materials or approaches. They are usually employed by scientific and technical staff, social workers, teachers and community leaders according to the purpose of a review and of the materials to be reviewed. Table 20 highlights the differences between expert and gatekeeper review methods.

Table 12. Corresponding differences between qualitative and quantitative data collection methods

Qualitative method	Quantitative method
This method is used to answer the reasons why an audience feel or act in the way that they do.	This method is used to establish the number of, and the relationship between, variables.
Text-based.	Number-based.
Uses small, purposive samples.	Uses large, random samples.
Provides more in-depth information on fewer cases.	Provides less in-depth but a greater breadth of information across a larger number of cases.
Records participants' emotions, language, feelings, perceptions, attitudes and what motivates them (inductive process).	Documents how norms, skills, beliefs and attitudes are linked to particular behaviours (deductive process).
It is more subjective as it describes a problem or condition from the point of view of those experiencing it.	It is more objective as it provides observed effects (interpreted by researchers) of a programme on a problem or condition.
Unstructured or semi-structured response options.	Fixed response options.
No statistical tests.	Statistical tests apply for aggregating, summarizing, describing and comparing data.
The method can be valid and reliable but this largely depends on the skill and rigour of the researcher.	The method can be valid and reliable but this largely depends on the measurement device or instrument used by the researcher.
Time expenditure is reduced in the planning phase and greater during the analysis phase.	Time expenditure is greater in the planning phase and reduced in the analysis phase.
Less general.	More general, allows for broad generalizations of findings to larger populations.

Common qualitative methods tools of research

Table 13. Focus group discussions

Description	Focus group discussions are a qualitative method of data collection in which a moderator facilitates discussion on a selected topic with between 6 and 10 respondents, allowing them to respond spontaneously to the issues raised and talk more freely about feelings, beliefs and attitudes. Through such discussions, planners and communicators become more sensitive to the values, concerns and needs of target audiences. Focus group discussions usually last for 60 to 90 minutes per session. The moderator must go over the research topics, establish an environment in which all points of view are welcome, and follow up on unexpected but important related topics that are raised. Members of the research team can also observe during a focus group discussion and take notes. Sessions can also be recorded by audio or videotape.
Pros	<p>Interaction in the group can help to stimulate in-depth thought and discussion.</p> <p>There is considerable opportunity to elicit answers.</p> <p>There is the potential for the collection of richer data than surveys offer concerning people's thoughts and behaviour.</p> <p>The moderator is able to read nonverbal gestures and exploit them to control the flow of discussion.</p>
Cons	<p>Findings can not be generalized as they are related to the members of the focus group discussion.</p> <p>Respondents may be concerned about the lack of anonymity and privacy.</p> <p>Can be costly, particularly if groups are conducted in multiple locations.</p>
Common uses	<p>Explore complex topics with target audience prior to the programme (e.g. what helps/hinders healthy eating).</p> <p>Learn about feelings, motivators, past experiences related to the programme issue.</p> <p>Test concepts, messages and materials.</p> <p>Can generate and test hypothesis.</p>

Table 14. In-depth personal interviews

Description	In-depth personal interviews are one-on-one discussion conducted between an interviewer and a respondent (interviewee) about selected topics. The structure and interviewing style are less rigid than in quantitative, interviewer-administered surveys. The interview must be planned carefully and a clear idea established in advance of the information you are intending to obtain.
Pros	<p>Draft communication materials can be discussed.</p> <p>Interviews can be effective with those with lower levels of literacy.</p> <p>Allows an opportunity to discuss respondents' answers.</p> <p>Allows for intensive investigation of individual thought, opinions, attitudes and way of life and people's perceived needs.</p> <p>Interviews can target secondary audiences to determine how they interact with the primary audience and how they influence that audience.</p> <p>Interviews can be used with opinion-leaders and policy-makers.</p>
Cons	<p>It is a time-consuming method of research.</p> <p>It requires a considerable level of trust between interviewer and respondent, particularly when dealing with sensitive issues.</p> <p>Interviewer must be highly skilled in active listening, probing, observing and other interviewing skills.</p> <p>A level of skill is required in preparing and asking questions and knowledge of when to use different types of questions (simple direct questions, leading questions, open-ended questions, etc.).</p> <p>Interviewer must be knowledgeable about, and sensitive to, a respondent's culture.</p> <p>There is a probability of obtaining false answers from the respondent.</p> <p>Results can not be generalized to the larger population.</p>
Common uses	<p>To develop concepts or messages.</p> <p>To test long or complex draft materials.</p> <p>To conduct a needs assessment.</p> <p>To provide a greater understanding of particular values or viewpoints of opinion-leaders and of a relatively small number of either a primary or secondary audience.</p>

Table 15. Observational studies

Description	Observational studies are a qualitative data collection method that is used to describe actual behaviour patterns or to identify obstacles to adoption of a new behaviour. The observer must decide in advance what to observe, how it will be observed and when. Observational studies must be undertaken thoroughly and accurately.
Pros	<p>The method provides information on the extent of a particular behaviour.</p> <p>The method provides information on the obstacles to adoption of a new behaviour.</p>
Cons	<p>The observer must be highly skilled in listening and other observational skills.</p> <p>It may be time-consuming, particularly when the observation is undertaken by one person or a small group.</p>
Common uses	Observational studies are used to determine the extent of a particular behaviour or the degree of use of a specific product and whether the materials which are needed to support such behaviour/use are in place.

Table 16. Central-location intercept interview

Description	<p>Central-location intercept interviews consist of stationing interviewers at places that are frequently visited by your target/intended audiences (such as pharmacies, clinics, market places, health centres, bus stops and cafes) and asking individuals who fit the study criteria to participate in a study.</p> <p>For intercept interviews to be effective, you must obtain results from a minimum of between 60 and 100 respondents from each intended audience segment you want to test.</p>
Pros	<p>You can connect with harder-to-reach respondents in locations convenient and comfortable for them.</p> <p>The interviews can be conducted quickly. (The interview should be no longer than 15 to 20 minutes.) The interviews are a cost-effective means of gathering data in a relatively short time.</p> <p>If you choose an appropriate location, you will increase your chance of interviewing respondents who are among your intended audience.</p>
Cons	<p>The interviewers must be trained.</p> <p>Your results cannot be generalized to the larger population.</p> <p>Intercept interviews are not appropriate for sensitive issues.</p> <p>Intercept interviews do not allow you to probe easily for additional information (due to time constraints).</p> <p>Central-location intercept interviews should not be used if respondents must be interviewed in-depth or on emotional or sensitive subjects. The intercept approach also may not be suitable if respondents are resistant to being interviewed on the spot.</p>
Common uses	<p>Central-location intercept interviews are used to determine the extent of a particular behaviour or the degree of use of a specific product and whether the materials which are needed to support such behaviour/use are in place.</p> <p>They may be used to provide a greater understanding of particular values or viewpoints of a primary or secondary audience.</p>

Common quantitative methods tools of research

Table 17. Self-administered survey (handout)

Description	<p>Questionnaires or survey forms are filled out by the respondents themselves. Question design and instructions for completion must be very clear. The researcher uses handouts to be administered to respondents for them to complete at locations frequently visited by the target audience (e.g. during a conference, in a classroom, etc.).</p>
Pros	<p>Can more readily improve the response rate as there is an opportunity to persuade respondents personally.</p> <p>Can collect both programme data and personal data (e.g. participants' characteristics).</p>
Cons	<p>A self-administered survey is inappropriate for respondents who cannot read or write.</p> <p>Allows for the possibility of an incomplete questionnaire.</p>
Common uses	<p>It can provide baseline data and be repeated upon completion of an intervention to measure the results of that intervention.</p> <p>It provides self-reported information on behaviours, behavioural intentions and attitudes.</p> <p>It tests knowledge and comprehension.</p>

Table 18. Survey by interviewer

Description	Surveys are used to determine the relative prevalence of a given practice or belief. They can examine the relationship between beliefs, behaviours, background characteristics and exposure to communication channels within a particular population. They involve interviews with a large sample chosen to represent the target audience and typically use highly focused questions that can be coded for computer-based analysis. A trained interviewer asks survey questions of respondents. The method allows the respondent to ask for clarification and allows the interviewer to control the question sequence.
Pros	<p>Surveys provide generalized results (if it is a sufficiently large enough sample with a high response rate).</p> <p>They are appropriate for those with lower levels of literacy.</p> <p>They are useful with difficult-to-reach populations (e.g. homeless, low literacy) or when a target audience cannot be sampled by using other data collection methods.</p> <p>Interviewer available to clarify questions for the respondent and examine answers.</p> <p>It reduces the possibility of incomplete questionnaires.</p>
Cons	The method is less appropriate for sensitive questions (respondents may not answer truthfully in person).
Common uses	<p>It is possible to collect baseline data.</p> <p>It can provide feedback on communication materials.</p> <p>It provides self-reported information on behaviours, behavioural intentions and attitudes.</p> <p>It tests knowledge and comprehension.</p>

Table 19. Knowledge, attitude and practice (KAP) surveys

Description	It is a method of collecting data in which a target audience's level of knowledge regarding a specific health problem is examined intensively, including their attitudes toward the problem and the ideal and actual behaviours associated with the health problem.
Pros	<p>It gives an idea about a target audience's level of knowledge regarding a specific health problem or their attitudes toward the problem.</p> <p>It provides generalized results (if it is a sufficiently large enough sample with a high response rate).</p> <p>It is able to clarify questions for the respondent and elicit answers.</p>
Cons	<p>It may be time-consuming, particularly when it is undertaken by one person or a small group.</p> <p>Results can not be generalized to larger populations if the sample is not large enough or has a limited response rate.</p> <p>Respondents may not answer truthfully, particularly in relation to sensitive issues.</p>
Common uses	It can be used when it is necessary to know about a target audience's level of knowledge regarding a specific health problem, their attitudes toward the problem and the ideal and actual behaviours associated with the health problem.

Table 20. Corresponding differences between expert and gatekeeper review

	Expert review	Gatekeeper review
Description	Expert review involves the reviewing of programme materials or approaches performed by knowledgeable experts. The scientific and technical accuracy or cultural appropriateness of programme material can be checked. Expert reviewers may include medical research scientists, social workers, law enforcement officials, teachers or community leaders.	The appropriateness of draft programme materials for a target audience can be assessed by gatekeepers. Gatekeeper commitment may be necessary to ensure that a programme will be implemented as planned.
Pros	It is inexpensive. It can assist in obtaining support for a programme. It assists in developing and producing accurate and appropriate programme materials to reduce negative effects and to obtain the desired impact.	It is inexpensive. It can assist in obtaining support for a programme. It can ensure easy access to a target audience.
Cons	There is a risk of experts seeking to take over or radically change programme plans. It can be challenging as a result of different viewpoints.	It is unsuitable if major revisions are needed (project staff can plan ahead and use formative research to avoid this).
Common uses	It provides input prior to programme design from experts in the area of the programme or from those who have experience working with a target audience. It ensures that a message is scientifically accurate. It provides an opportunity of testing programme materials to ensure that materials are culturally appropriate.	It ensures that messages will be disseminated by obtaining gatekeeper approval prior to programme dissemination. It can assist in obtaining support from influential people who control distribution channels. It ensures that products conform to gatekeeper agency policies and goals (e.g. the dissemination of materials to reduce the levels of iron deficiency anaemia in schools is appropriate and compatible with the policies and goals of the Ministry of Education).

Module 5

Chapter 1
Advocacy

Chapter 2
Social marketing

Chapter 1

Advocacy

Summary

This chapter focuses on advocacy as a component of communication directed at policy- or decision-makers (as the primary audience). It also discusses the application of the main principles of advocacy in the support of nutrition programmes and the prevention of, or solution to, nutrition problems through a change of policy, legislation or rules, etc. It discusses the various stages in planning an advocacy strategy and in conveying effective advocacy messages to policy-makers and other organizations in order to inform and to persuade them of the relevance and importance of the health information you are intending to convey.

Learning objectives

By the end of this chapter you will be able to:

- define advocacy;
- apply the planning stages of an effective advocacy strategy to inform and persuade policy-makers and other organizations of important nutrition issues;
- develop and deliver effective advocacy messages, in particular, the one-minute message.



Figure 20. The six stages of advocacy

Advocacy

Advocacy activities can persuade and motivate policy-makers and opinion-leaders to support nutrition communication programmes. Television, newspapers, seminars, meetings and publications, etc. can be employed to make policy-makers more aware of the magnitude of a nutrition problem and of the direct and indirect benefits of improving nutrition on a population's general health. Also, nutrition advocacy can make policy-makers more aware of the magnitude of particular actions, such as supportive legislation, enforcement or funding, and of their impact on individual practices and on improving general and nutritional health.

Definition of advocacy

The following is a list of the many definitions of advocacy.

- Advocacy is working with other people and organizations to make a difference (The Centre for Development and Population Activities (CEDPA), 1995).
- Advocacy is putting a problem on the agenda, providing a solution to that problem and building support to act on both the problem and solution.
- Advocacy can aim to change an organization internally or to alter an entire system.
- Advocacy can involve many specific, short-term activities to reach a long-term vision of change.
- Advocacy consists of different strategies aimed at influencing decision-making at the organizational, local, provincial, national and international levels.
- Advocacy strategies include lobbying, social marketing, information, education and communication, community organization and many other tactics.
- Advocacy is the process of people participating in decision-making processes which affect their lives.
- Advocacy is an action directed at changing the policies, positions or programmes of any type of institution.
- Advocacy is speaking up, drawing a community's attention to an important issue and directing decision-makers toward a solution.
- Advocacy is strategic and targets well-designed activities to key stakeholders and decision-makers.
- Advocacy is always directed at influencing policy, laws, regulations, programmes, or funding—decisions made at the upper-most levels of public or private sector institutions.

Effective advocacy can succeed in influencing decision-making, policy and implementation through the education of leaders, policy-makers or those responsible for affecting policies relating to important nutrition problems in communities. It can lead to reform of existing policies, laws and budgets to control nutrition problems, to the development of new programmes and can create more democratic, open and accountable decision-making structures and procedures (InterAction, 1995).

Planning stages of advocacy

Advocacy is a dynamic process which can be subdivided into the following six stages (Figure 20).

Situation analysis

A situation analysis is the first step in the process of effective advocacy. Effective advocacy efforts that are likely to have an impact on public policy begin with accurate information concerning a nutrition problem and a detailed understanding of a nutrition problem.

Effective advocacy efforts also necessitate detailed knowledge of all interested parties, policies and implementation or non-implementation of relevant policies, relevant agencies working in the field and channels of access to influential people and decision-makers (e.g. interpersonal communication or factsheets). A situation analysis can be conducted by answering the following questions.

1. What is the nutrition problem?
2. What are the existing policies that cause or relate to this problem and how are they implemented?
3. How would changes to policy help to solve the problem?
4. What type of policy change is needed (legislative, regulative, committee action, institutional practice or other)?
5. What are the financial implications of a desired policy change?
6. Who are the stakeholders able to drive policy change?
7. Who are the advocates and supporters?
8. Who are the opponents?
9. Who are the decision-makers?
10. Who and what influences the decision-makers?
11. What are their priorities?
12. What benefits would they accrue?
13. What is the communication structure related to policy-making?
14. What are the channels through which to reach policy-makers?
15. What are the characteristics of a credible message for policy-makers?

Table 21 provides an example of these questions answered in relation to advocacy efforts aimed at reducing the incidence of anaemia among a population.

Strategic planning

Every advocacy effort needs a strategy that must be built on the results of the situation analysis phase. In planning an advocacy strategy, it is necessary to establish a working group to develop a strategy and to plan activities and also to identify the primary and secondary audiences. It is important to note that the definitions of primary, secondary and tertiary audiences change depending on the stage in the process a programme is operating.

At this stage, the primary audience includes decision-makers who have the authority to affect the desired outcomes resulting from advocacy efforts, such as political leaders, ministers, governors and parliamentary members. These are the individuals who must actively approve policy change and who are the primary targets of an advocacy strategy.

The secondary audience are individuals and groups who can influence the decision-makers (i.e. primary audience), such as the media, religious leaders, traditional leaders, nongovernmental organizations, women's organizations, professional associations and business groups. The opinions and actions of these influential individuals and groups are important in achieving the objectives of advocacy efforts as they affect the opinions and actions of the decision-makers. The secondary audience may contain oppositional forces to your objective, if so, it is extremely important to gain information about them and address them as part of your strategy. The advocacy campaign's target audiences must be determined for each advocacy objective to be achieved and include the primary target audience (decision-makers), as well as the secondary target audience (persons and/or institutional bodies who can influence the decision-makers). Information on these audiences helps you to target your advocacy activities and to develop effective messages.

Table 21. Questions to support advocacy efforts aimed at reducing the incidence of anaemia among a population

What is the nutrition problem?	The high prevalence of anaemia among different age groups in the population.
What are the existing policies that cause or relate to this problem and how are they implemented?	For instance, an existing policy that may cause or relate to this problem is that fortified flour is not sold in local markets.
How would changes in policy help to solve the problem?	A policy change could result in the selling of fortified flour in local markets.
What type of policy change is needed (legislative, regulative, committee action, institutional practice or other)?	Legislative and committee action between government and private sectors would be required for this particular policy change.
What are the financial implications of the desired policy change?	Money will be needed to buy new equipment to produce fortified flour.
Who are the stakeholders associated with the desired policy change?	The stakeholders and supporters may be international organizations such as WHO, UNICEF or government ministries.
Who are the stakeholders associated with the desired policy change? Who are the advocates and supporters?	The stakeholders and supporters may be international organizations such as WHO, UNICEF or government ministries.
Who are the opponents?	The opponents may be the private sector or private restaurants.
Who are the decision-makers?	The decision-makers may be the parliamentary members.
Who influences the decision-makers?	Medical doctors, scientific researchers, media and press and international organizations.
What are their priorities?	Public health.
What benefits would they accrue?	The benefits would be to increase their credibility among the public and to improve the community's health.
What is the communication structure related to policy-making? What are the channels through which to reach policy-makers?	The channels may be interpersonal communications, briefing meetings or factsheets.
What are the characteristics of a credible message for policy-makers?	The characteristics of the message should be evidence-based and include the impact on general health and the benefits for the whole community.

It is important to select appropriate channels of communication to both your primary and secondary audiences. Once an audience has been identified, it is necessary to determine the level of support or opposition to be expected from those among the primary and secondary audiences and to begin to assess the audiences' level of knowledge and support before message development. The following stages should be followed in the process of strategic planning.

- Develop your goal and SMART objectives.
- Position your advocacy issue in order to offer decision-makers a unique and compelling benefit or advantage for the desired change.
- Identify your resources and plan to build coalitions and mobilize support.
- Seek out and work with appropriate partners, coalition advocates, spokespeople and the media.
- Identify your competition from among policy-makers who may struggle against the desired action.
- Plan activities that are the most appropriate for your intended audience.
- Minimize opposition or find areas of common interest as often as possible.
- Prepare an implementation plan and budget.
- Plan for and combine multiple channels of communication, including interpersonal communication, community media, mass media (print, radio and TV) and new information technologies such as the Internet.
- Develop intermediate and final indicators to monitor the processes and evaluate the impact.
- Give the proposed policies or policy changes an appealing name that is easily understood in order to mobilize support.

What is an advocacy goal?

The goal is the subject of an advocacy effort and represents the vision. It is what you hope to achieve over a longer period of time. The advocacy goal can be general, for example, to reduce childhood malnutrition to improve children's health.

What is an advocacy objective?

An advocacy objective aims to change policies and programmes. Your advocacy objective is what you want to change and involves determining who will make the change, by how much and by when. Generally, the time frame for an advocacy objective will be a shorter interval. An objective is a step toward a larger goal or your vision. Examples of advocacy objectives are 'In the next 2 years, to start a government-sponsored programme to iodize salt in order to increase intellectual capacity and reduce neonatal mortality', or 'to increase national funding for the fortification of flour by 25% in the next 2 years'.

Mobilization

The previous two steps were situation analysis and strategic planning, in this planning step, mobilization will take place in the form of coalition building, meeting with decision-makers, awareness-raising and delivering effective messages and materials which must be designed according to objectives, audiences, partnerships and resources.

Your message should impact positively on policy-makers and elicit the maximum participation of all coalition members. It should also minimize opposition to a programme.

The following steps need to be undertaken in order to mobilize an audience.

- Develop an action plan describing the situation, intended audience, advocacy objectives, activities and timelines and indicators to evaluate each activity.

- Encourage all coalition partners to actively participate.
- Plan events using credible spokespeople from different partner organizations.
- Develop a schedule and sequence of events of activities.
- Determine the roles and responsibilities of coalition partners to implement and monitor activities.
- Compile data/documentation which supports your position and which highlights the importance of taking action.
- Present information in a brief, effective and memorable way (message development).
- Specify desired actions clearly.
- Emphasize the importance and priority of a desired action.
- Plan for and organize news media coverage to publicize events and present new data.

Advocacy messages

An advocacy message is a concise and persuasive statement about an advocacy goal that captures what you want to achieve, why and how. The message should include proposed actions and the purpose for undertaking the action. Content is an important part of the message. Other non-verbal factors, such as who delivers the message (the source), the settings in which the message is delivered and the timing with which the message will be delivered, can be as, or more important, than the content alone. In terms of content, the following questions need to be asked: What ideas do you want to convey? What you want to achieve? Why do you want to achieve it (the positive result of taking action and/or the negative consequence of inaction)? How do you propose to achieve it? What action do you want the audience to take?

Messages to decision-makers should be direct, short, definitive, concise, persuasive and defensible (backed up by the science and data). It is also necessary to bear any opposition in mind and to be prepared to defend your position, particularly against economic arguments. Generally, messages to decision-makers are called 'the one-minute message' as most policy-makers and people in positions of responsibility are extremely busy and have limited time, so messages or presentations need to be brief but also effective.

The one-minute message consists of a statement plus evidence, plus an example, plus a call for action. The statement is the central idea of a message. The evidence is the data that relates to the audience and supports the central idea. Your example should be a real-life example, and the call for action clearly indicate what the audience can do to change the situation.

Choose the words you will deliver the message in clearly and effectively. Choose a source or messenger who the audience will respond to and find credible, and choose a format to deliver your message for maximum impact (meeting, letter, brochure or radio). It is also important to consider the best time and place to deliver the message.

The following points are some tips for effective message development and delivery.

- Command attention.
- Deliver a consistent message to an audience through multiple channels over a long period of time. Emphasize the message through repetition although it should be conveyed in different forms in order that it does not become too repetitive.
- Create trust by establishing a credible source for the message. The messenger may be as important, or more important, than the message itself. For example, if you are trying to reach the public through the press, use a newspaper that is widely read and well respected. If you are targeting parents, try to reach them through parent organizations or through other parents.

- Create a message that an audience will understand. Use the language or dialect of the target group. Ensure your message is clear and avoid technical terms or jargon. Communicate the benefit to the audience of adopting the desired behaviour.
- If you use charts as a message, keep them clear, simple and easy to understand. Use words or phrases that have positive images rather than terms that may leave a negative impression. For example, it is sometimes better to say “improve health” rather than “reduce illness”.

Suggested advocacy message formats include:

- formal or informal face-to-face meetings;
- informal conversations at social, religious, political or business gatherings;
- letters (personal, organizational);
- briefing meetings;
- programme site visits;
- factsheets;
- pamphlets or brochures;
- graphics or illustrations;
- short video presentations;
- computer presentations;
- overhead or slide presentations;
- newspaper articles or advertisements.

Action

Keeping all partners together and sustaining your activities and actions are essential in carrying out advocacy. Repeating the message and using credible materials helps to retain people’s attention on the relevant issue.

- Repeat advocacy messages and develop materials according to a continuous schedule.
- Maintain communication among all advocacy coalition partners in order that all partners are kept informed of activities and results.
- Develop and maintain the support of the media through all means of communication (personal contacts, press releases and press conferences).
- Respond rapidly to controversy and opposition by turning it to your own advantage.
- Keep a record of all activities including successes and failures, and disseminate lessons learned among coalition members and partners.
- Monitor public opinion and publicize positive changes.
- Acknowledge and accredit the role of policy-makers and coalition partners.

Evaluation

Being an effective advocate requires continuous feedback and evaluation of your efforts and the setting of new goals based on your experience to determine if you have succeeded in reaching your advocacy objectives and if your advocacy strategies can be improved. For effective evaluation of your advocacy objectives the following steps should be followed.

- Establish and measure your indicators based on your SMART objectives.
- Evaluate specific events and activities.
- Compare final results with the indicators to measure change.
- Identify key factors contributing to policy changes.

- Document unintended results (opposition or rumours).
- Share results and lessons learned.
- Set new goals and objectives based on your experience.
- Publicize successes transparently and clearly to stakeholders.

Continuity

Advocacy, like communication, is an ongoing process and planning for continuity means articulating long term-goals, keeping functional coalition partners together and maintaining data and arguments to keep pace with the changing situation. The steps required for continuity are:

- evaluating resulting situations;
- monitoring evaluation if desired policy changes occur;
- reviewing previous strategies and actions, refining and repeating the advocacy process or identifying other actions to be taken if desired policy changes do not occur;
- develop plans to sustain and reinforce change.

Chapter 2

Social marketing

Summary

This chapter focuses on the principles of social marketing and on how social marketing can be used to change people's behaviour. It discusses the necessary steps in the preparation of a social marketing campaign and explains the four Ps of social marketing: product, price, place and promotion.

Learning objectives

By the end of this chapter you will be able to:

- define social marketing;
- identify the main differences between social marketing and commercial marketing;
- explain the importance of social marketing;
- conduct a social marketing campaign;
- list the stages of change arising as a result of social marketing efforts;
- explain the basic principles of social marketing: product, price, place and promotion.

Table 22. Comparative differences between social marketing and commercial marketing

Social marketing	Commercial marketing
The product is complex.	The product is tangible.
Well-planned and continuous effort needs to be undertaken in order for the benefits to be achieved.	Benefits are easier to achieve as the products are tangible and personally relevant.
Social marketing tries to change people's behaviour for the benefit of the target population or of society as a whole.	Commercial marketing tries to change people's behaviour for the benefit of the marketer.

What is social marketing?

Social marketing is based on business marketing principles but involves more than selling a product. It was recognized that marketing principles that were being used to sell products to consumers could also be used to “sell” ideas, attitudes and behaviours. In social marketing the primary focus is on the consumer through determining their needs rather than trying to persuade them to buy what is being produced and providing services accordingly. Social marketing uses the media and other communication tools (e.g. interpersonal communication, school curricula, flyers, etc.) to raise awareness of health risks, promote the benefits of healthy living and encourage changes in people's attitude and behaviour.

Social marketing is “the application of commercial marketing techniques to the analysis, planning, execution and evaluation of programmes designed to influence the voluntary behaviour of target audiences in order to improve their personal welfare and that of society.” It involves adopting similar principles used in selling commercial products to convince people to change their behaviour (see Table 22).

Why is social marketing important?

As social marketing is based on market research of audience's perceptions, beliefs and behaviour, it helps to identify the best ways of reaching target audiences. It also helps in customizing your message to reach greater numbers of the target audiences, and by doing so, helps to create greater and longer-lasting behavioural change among those audiences.

Implementing a social marketing campaign

To conduct a social marketing campaign, it is necessary to undertake the following.

- Identify the behaviour you want to change.
- Identify the target audience. The target audience are a group(s) of individuals who your social marketing programme seeks to reach and influence in order to change their behaviour. This group is a selected segment of a larger population that is directly affected by a nutrition problem (see Module 3, Chapter 1). Such groups can be segmented by age, gender, level of education and economic status.

- Identify the barriers to change. The barriers are issues that make the desired behavioural change difficult to accomplish or unattractive to a target audience. They may arise as a result of external factors, such as a lack of adequate health care facilities, or as a result of internal factors, such as audiences' attitudes, beliefs, values or lack of skills. Barriers can be identified through conducting market research in the form of interviews, surveys, focus groups or other research methods (see Tools of research, Module 4, Chapter 2).
- Identify the competition to your recommended behaviour. This relates to the behaviour and related benefits that a target audience are used to or may prefer over the behaviour you are promoting. Competition also involves organizations and persons who offer or promote alternatives which represent a barrier to adopting the desired behaviour (e.g. fast food restaurants).
- Develop simple messages that highlight the benefits of change. Benefits are the positive results, feelings or attributes that the audience will gain from the desired behavioural change. For example, mothers (the audience) will create a loving bond with their newborn infants (benefit) when they breastfeed (behaviour). People need to understand the benefits of adopting the behavioural change. Messages also need to highlight the exchange. Exchange relates to the concept of people comparing the costs and benefits of performing the desired behaviour before actually adopting it. The benefits must outweigh the costs in order for people to adopt the desired behaviour. Exchange provides a way to understand the costs and benefits a target audience associates with a desired behavioural change and offers them the benefits they want in return for adopting it. An example of exchange is that buying healthy food for your family may be more expensive and may require greater time and effort to prepare but the exchange is the good health of your family, the enjoyment of the food and an increased family bond as a result of sharing meals together rather than individual family members picking up food at fast food restaurants (see Table 23).

Table 23. Implementing a social marketing campaign

Identify the behaviour you want to change	Eating unhealthy fast food.
Identify your target audience	Adolescent males and females.
Identify the barriers to change	The relatively higher price of healthy food; the lack of appeal of healthy options; the unavailability of healthy foods in clubs, malls and cinemas and places in which adolescents frequent.
Identify the competition to your recommended behaviour	Having potato chips with lunch competes with including fruit and vegetable at each meal because of taste and low cost. Fast food restaurants offer less healthy food choices. Fast food restaurants are available wherever adolescents frequent, e.g. clubs, cinemas, malls.
Develop simple messages that you want to convey which contain the benefits of change	When adolescents eat healthy food their academic performance will improve. Their health status will be improved. They will be more athletic. They will have greater protection from diseases, such as diabetes, hypertension and cardiovascular diseases, in the future.
Highlight the exchange	Although healthy food may cost more, a healthy diet will improve your health and looks.

The stages of change through social marketing efforts involve (see Table 24):

- creating awareness and interest by publishing messages which attract the attention of your target audience;
- changing the audience's attitudes in order that they develop a positive attitude towards adopting the desired behaviour;
- motivating people to change their behaviour; social marketing helps people to move from attitude to intention, and beyond;
- empowering people to act through transforming their intention into action and by facilitating the provision of services or training if necessary;
- maintaining behavioural change through positive reinforcement which will ensure the continuation of the newly-adopted behaviour;
- assessing the results and determining whether the desired change has been created.

Basic principles of social marketing

The basic principles of social marketing are: product, price, place and promotion (see Table 25).

Product

In social marketing, product relates to achieving the desired behavioural change and its associated benefits. The desired behaviour may be breastfeeding or convincing people to eat healthier food or a more diverse diet. Tangible products may include the use of iodized salt, skimmed milk or iron or vitamin A supplements, or the use of services that support or facilitate behavioural change. It is important to note that people will not be interested in the product unless they perceive that they have a "problem", and that the product presents a good solution to the problem. Market research identifies whether a target population perceive a problem and how they feel about the product. In the case of "selling" a tangible product, it needs to be marketable and appealing and needs to be thought of as a commercial product.

Table 24. Stages of change through social marketing efforts

Create awareness and interest	Publish attractive messages to increase awareness of healthy food options and the dangers to health of eating fast food.
Change attitudes	Adolescents (your audience) develop a positive attitude towards eating healthy food instead of eating fast food.
Motivate people to adopt the recommended behaviour	Adolescents will be motivated to change their behaviour from eating unhealthy fast food to eating healthy food.
Empower people to act	Selling healthy food in school cafeterias. Teaching individuals the skills needed to prepare simple healthy meals. Advocate for selling healthy meals in social clubs in order that adolescents will have the option of choosing healthy food instead of unhealthy fast food.
Maintenance	Keep conveying attractive messages to the audience and updating your messages.
Assess your results	Determine if you have created the change you intended, and if not, why not?

Table 25. Basic principles of social marketing: 'The four Ps'

Product	The desired behaviour and you are asking the audience to adopt with its associated benefits: eating healthy food instead of unhealthy fast food. Tangible products: healthy food e.g. vegetables, fruits, fresh juices, skimmed milk and cheese. Services that support or facilitate behavioural change: selling healthy meals in the school cafeteria and clubs, incorporating lessons into the school curricula to teach adolescents how to prepare simple healthy meals and sandwiches.
Price	Relatively higher cost of the healthy food. Limited attraction and less taste of the healthy food options. Limited availability of healthy food choices.
Place	For a tangible product such as healthy food: home, school cafeterias and clubs. For an intangible product: interpersonal communication, communication materials (e.g. posters, flyers and pamphlets) available in malls, markets, cinemas, clubs and other attractive places for this age group, and television.
Promotion	The communication messages (encouraging tone and attractive style), the sources (actors, actresses, football players, school teachers), the communication materials and special promotional items (water bottles, refrigerator magnets, notepads, T-shirts, pens and pencils), the communication channels and activities that consumers pay attention to (television, CD-ROMs, websites, billboards) that will best reach your audience to promote the benefits of the desired behaviour in addition to the product or special events they would attend (sports competitions, school parties, seminars).

Price

Price refers to the cost (financial, emotional, psychological or time) borne by the “consumer” in adopting the desired behavioural change. An obese person may be the first to admit that obesity is a dangerous condition, but may still perceive that the costs, in terms of effort, to change dietary habits are too high. If the perceived costs are greater than the benefits, the value of the service will be minimal and will not be accepted. However, if the “consumer” believes that the benefits will be greater than the costs, the chances of trial and adoption of the “product” are greater.

Interventions should be planned which reduce the costs of the desired behaviour, for example, if a programme aims to promote exclusive breastfeeding, an effective intervention would be to train lactating mothers to pump breast milk in order to prevent embarrassment when feeding their babies in public, or to increase the costs of competing behaviour, such as raising the price of formula to encourage greater breastfeeding.

Place

Place is the channel through which the product reaches the consumer. For a tangible product the channel is the distribution system which delivers products to markets for purchase or for free distribution. It is the place in which the service is provided, such as antenatal care clinics or mobile clinics or nutritional information presented on a restaurant menu or grocery store food shelf. For the consumer the place must be accessible, available and appropriate.

For an intangible product the channel through which the product reaches the consumer is the channel through which consumers are offered information or training. This may include doctors' offices, markets, shopping malls, television or in-home demonstrations.

Promotion

Promotion refers to the communication messages, materials, channels or activities that will best reach an audience to promote the benefits of the desired behaviour in addition to the product. Market

research can identify which type of advertising or media consumers pay attention to (television, radio, newspaper); which promotional items they may use (e.g. water bottles, refrigerator magnets, notepads); which special events they would attend (seminars, conferences); and how audiences can be influenced. It can also identify the most effective characteristics of the message in terms of appeal, tone, style and message source.

The additional four Ps of social marketing are: the public, partnership, policy and purse strings (see Table 26).

Public

Public refers to both the external (outside your organization) and internal (inside your organization) groups involved in planning, developing and implementing a nutrition communication programme.

Partnership

Nutrition issues are often so complex that one agency can not work alone and so collaboration with other organizations in the community is necessary for interventions to be effective. You can create strategic partnerships by identifying organizations that have similar goals and by developing ways of working together.

Policy

Social marketing programmes can be successful in motivating individuals to change their behaviour but it may be difficult to maintain that change unless the community supports long-lasting change. Often, policy changes are required, and therefore, media advocacy programmes can be an effective element to a social marketing programme.

Purse strings

Purse strings relates to funding and where resources are coming from.

Table 26. The additional 'four Ps' of social marketing

Public	External groups from outside your organization (media, nongovernmental organizations). Internal groups from inside your organization (team members in the form of health educators, colleagues from other related departments such as reproductive health and maternal and child health departments, leaders and managers in your organization).
Partnership	WHO, UNICEF, the Ministry of Education, the private sector (restaurant owners).
Policy	Advocate for a policy to distribute free healthy meals in schools, selling healthy food in clubs, offering healthy food options in fast food restaurants.
Purse strings	Funds from your own organization, funding agents or raised by the community.

Module 6

Case studies

Case study 1

Increasing the calcium intake of schoolchildren in Beirut, Lebanon

Case study 2

Reducing anaemia among children under 2 years of age in the Islamic Republic of Iran

Case study 3

Oman's maternal and child health care communication strategy

Case study 1

Increasing the calcium intake of schoolchildren in Beirut, Lebanon

Problem statement

Calcium is known to be an important mineral in aiding many biological functions and bone growth, and in preventing potential health problems. The presence of calcium in our bodies is essential for survival, and a large number of studies have been conducted to determine the functions of calcium in the body and the amount needed to maintain sufficient levels. Recent studies have shown that many people are suffering from calcium deficiencies and are therefore vulnerable to diseases, some of which are serious.

Calcium deficiency is caused by a lack of calcium and is a condition which reduces the absorption of calcium into the body, increases the level of excretion and causes osteoporosis. Hypocalcaemia, which is an abnormally low level of calcium in the blood stream, occurs either as a result of a medical problem, such as renal failure, or as a result of surgical treatment, such as the surgical removal of the stomach or the use of certain types of diuretics. It does not occur as a result of a low intake of calcium. Numbness and tingling in the fingers, muscle cramps, convulsions, lethargy, poor appetite and mental confusion are all symptoms of hypocalcaemia, which can also cause abnormal heart rhythms and even death.

Although children, post-menopausal women, amenorrheic women (and athletes with female athlete triad), lactose-intolerant individuals and vegetarians were identified as affected subgroups experiencing calcium deficiency among the population of Beirut, the subgroup chosen for the communication intervention were middle- to upper-class elementary schoolchildren between the ages of 6 and 13 years.

Stakeholders

The stakeholders involved in the communication strategy to raise awareness of the importance of calcium included the American University of Beirut and the Ministries of Health and Education in Lebanon.

Subgroups

Children

Preadolescent children between the ages of 6 and 13 are in a phase of growth during which most bone mass is accumulated, and therefore, are at a phase which represents a time of highest need for calcium. Adequate calcium intake during childhood and adolescence ensures beneficial effects in adulthood by increasing bone density and improving the chances of living a healthy life.

Post-menopausal women

Post-menopausal women are at an increased risk for experiencing calcium deficiency as bone starts to lose 3%–5% annually of bone mass in the first 5 years following menopause. Reductions in estrogen production result in increased bone resorption (break down) and reduced calcium absorption.

Amenorrhea and the female athlete triad

Amenorrhea refers to the suppression of normal menstrual flow for any reason other than pregnancy. It results from reductions in circulating estrogen and it affects the balance of calcium in the body. Female athlete triad is a combination of three conditions: disordered eating, amenorrhea and osteoporosis, and a female athlete can have one, two or all three conditions of the triad. It causes low bone mineral density, menstrual irregularities, and among individuals with a history of prior stress factors, represents an increased risk for future stress problems.

Lactose-intolerant individuals

A lactose-intolerant individual is unable to completely digest lactose, the sugar that is found in milk. Bloating, flatulence and diarrhoea after consuming large amounts of lactose are symptoms of the condition, and it is important for those who are lactose intolerant to be supplemented with non-dairy sources of calcium in their daily diet.

Vegetarians

Calcium absorption levels among vegetarians may be reduced as a result of eating larger quantities of fruit and vegetables which contain oxalic and phytic acids which are known to affect calcium absorption. It is important for vegetarians to include adequate amounts of calcium in their diet as they are at increased risk of experiencing calcium deficiency. Vegetarians' diets containing less protein may also decrease calcium excretion. While an inadequate intake of calcium may result in calcium deficiency, too much calcium can also cause hypercalcaemia. The daily upper limit for the intake of calcium is 2500 mg a day.

Factors affecting calcium absorption and excretion

Factors such as age, vitamin D levels, pregnancy and diet affect calcium absorption and excretion.

Age

Among infants and young children, the net percentage of calcium absorption can be as high as 60%. Gradually, the absorption rate decreases to between 15% and 20% during adulthood and further decreases as individuals age. As a result, the recommended intake for calcium is higher among adults aged 50 years and older.

Vitamin D

The sun activates the active form of vitamin D, which is obtained from food in its inactive form. Vitamin D is essential for bone preservation and growth and in assisting calcium absorption. Although vitamin D is important, excessive levels of vitamin D can cause impaired kidney function and can decrease the absorption of other minerals.

Pregnancy

Although adequate calcium intake is essential for all women, during pregnancy, intestinal calcium absorption increases and so additional amounts of calcium are required for the healthy growth of the bones of the fetus and for other bodily functions of the fetus.

Diet

Phytic acid and oxalic acid are natural substances found in fruit, vegetables and pulses which can combine to prevent optimal absorption of calcium in the body. Spinach, collard greens, sweet potatoes, rhubarb and beans are among the vegetables which are high in oxalic acid. Whole grain bread, beans, seeds, nuts, grains and soybeans are high in phytic acid. Fibre also has a high content of phytate and can prevent the absorption of calcium in the body. Individuals whose diets contain a low intake of calcium and a high intake of fibre are prone to problems associated with calcium deficiency.

Calcium is also excreted from the body in urine, faeces and sweat. Calcium excretion can be affected by many factors, including levels of dietary sodium, protein, caffeine and potassium. Higher levels of sodium and protein in the body increase the level of calcium excretion. Although caffeine does not have a substantial effect on calcium absorption, it can temporarily increase the excretion of calcium and may moderately decrease its absorption. Increased levels of potassium dietary intake (more than 5100 g a day) may help to decrease the excretion of calcium, particularly among postmenopausal women. Phosphorus and alcohol can also affect the absorption level of calcium but their effects are minimal. Reduced calcium absorption and increased calcium excretion can both harmfully affect bone health.

Targeted subgroup

Middle- to upper-class elementary schoolchildren in Beirut, Lebanon, between the ages of 6 and 13 years were chosen as the target subgroup for the intervention to increase calcium intake among the population. This group were chosen as they are at a phase of their lives during which bone mass is accumulated, and therefore, they are at the highest need for calcium and for a communication strategy to raise their awareness of the importance of calcium for their health.

Communication strategy interventions

To promote increased calcium intake posters were displayed in the halls of schools and “calcium days” were held in which only calcium-rich dairy products and sandwiches were sold to raise children’s awareness of the good taste and health benefits of dairy products rich in calcium. Simple talks on

the benefits of calcium were also given to children and a television media campaign promoting the benefits of calcium was also aired on national television between the hours of 4 p.m. and 7 p.m. to coincide with the children's programming schedule. (Table 1).

Audience profile

The target audience were categorized into primary and secondary audiences. Children were identified as the primary audience, and teachers and parents as the secondary audience.

Communication objectives

For the primary audience, the communication objectives were to promote the benefits of calcium, to familiarize schoolchildren with the sources of calcium and to promote behavioural and dietary change by including more dairy produce in their daily diet. For the secondary audience of teachers and parents, the communication objectives were to: increase awareness of the necessity of calcium in children's diets; correct misconceptions associating calcium intake to increased fat intake and increased body weight as a result of eating dairy products; familiarize parents with low-fat alternatives; improve knowledge of the particular nutritional needs of infants and children; and increase awareness of how diet affects a child's skills and cognitive behaviour, including their physical and mental health.

Table 1. Communication objectives to familiarize schoolchildren with the importance of calcium for improved health

Primary audience	Children between the ages of 6 and 13 years.
Consumer preferences Information that helps identify solutions to nutrition problems, including opportunities, barriers and competitors for each option.	Providing information on how a nutrition problem can affect children's health and providing information on calcium-rich food.
Communication/message preferences Information that identifies preferences regarding messages, including the places where target audiences prefer to receive information, the conditions under which they will receive a message, the source of a message, the person, agencies and organizations from whom a message will be credible and the strategies and materials that best convey a message.	Displaying posters in the halls of schools. Organizing "calcium days" in which only calcium-rich dairy products are sold. Offering sandwiches to raise children's awareness of the good taste and health benefits. Giving simple talks to children on the benefits of calcium. Airing a national television campaign.
Practices, knowledge and attitudes relating to the nutrition problem. Information on what affects an audience's belief that a problem exists and their acceptance of the recommendations regarding the recommended change of behaviour and their motivation to take action.	Lack of awareness regarding the seriousness of the problem. Lack of dairy produce in diet.

The creative brief

Messages were designed to encourage schoolchildren to increase their intake of calcium. Schools were also encouraged to increase children's calcium intake by increasing and varying sources of calcium in the school cafeteria. One message appearing on a promotional poster was "The skeleton within you is in need of calcium". The poster accompanying the message displayed the hands of a skeleton holding a bowl into which milk was being poured. The picture aimed to promote the importance of calcium for children aged between 10 and 13 years old, an age at which milk is among the most important and richest nutrient source of calcium to encourage strong bone growth. Another poster targeting all children displayed the message "Eating dairy products every day keeps you healthy and strong".

A third poster contained the message "Eat a healthy breakfast of cereals and milk and a healthy lunch for stronger bones". This poster targeted children between the ages of 10 and 13. In addition to encouraging children to eat a healthy breakfast, it was also intended to encourage them to choose healthy lunch options that were provided by many schools.

A fourth poster targeted children between the ages of 6 and 10 and displayed the message "Eat cheese and yogurt and drink milk everyday to become a hero". It was felt that this was an effective message as children relate to the concept of a hero and the message would reinforce the notion of strength and good health to effectively reach children.

A slide show targeted children between the ages of 6 and 9, as an audiovisual medium was considered most appealing to this age group who relate to cartoons. Through this medium the message was intended to reach a greater number of children. The cartoon featured a bull and a cow character who were husband and wife. Text appeared on the screen subtitled the words spoken by the characters in order that the message would have maximum impact. The bull explained how dairy products containing calcium were made from the milk produced by cows and highlighted the importance of calcium for strong bones and teeth. The bull encouraged schoolchildren to increase their calcium intake in order to make his wife happy.

Development and pretesting of communication materials

Table 2 shows the timetable for programme development and pretesting of communication materials.

Table 2. Timetable for the development and pretesting of communication materials

	2005				2006											
	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
Formative research																
a) Conducting in-depth interviews		●	●							●	●					
b) Conducting focus groups		●	●							●	●					
c) Developing the branding/ packaging			●	●	●	●	●									
Developing/revising marketing plan			●	●	●	●				●	●					
Developing messages				●	●	●										
Pre-testing messages					●											
Producing mass media campaign						●	●				●					
Producing promotional materials						●	●				●					

Case study 2

Reducing anaemia among children under 2 years of age in the Islamic Republic of Iran

Problem statement

Iron is essential for the production of haemoglobin, which is, in turn, essential for the delivery of oxygen from the lungs to body tissue. When insufficient levels of iron are available in the body, the consequences can be profound and the condition can result in anaemia, iron deficiency anaemia and iron deficiency without anaemia. Iron deficiency can impair cognitive performance at all stages of life, and morbidity from infectious diseases is increased among populations suffering from iron deficiency. Among individuals suffering from severe anaemia, the ability to monitor and regulate body temperature when exposed to cold is reduced and the capacity for physical work is significantly reduced.

The results of national and local studies have shown that iron deficiency is still a matter of concern among various segments of the population in the Islamic Republic of Iran. Anaemia is prevalent among more than a third of children under the age of 2, and over one fifth of 6-year-old children and pregnant women were found to be anaemic. Controlling micronutrient deficiencies among vulnerable groups, such as women of childbearing age, adolescents and children under the age of 2 is considered one of the most important priorities of the Ministry of Health and Medical Education. As a result of health engineering, the Ministry have been able to produce iron supplements in the form of drops and tablets and believe that the distribution of iron supplements through the primary health care system is achievable.

Planning team

The programme planning team includes the National Scientific Committee on Child Nutrition, the Nutrition Department of the Ministry of Health and Medical Education, the National Nutrition and Food Technology Research Institute (NNFTRI), provincial health officers, medical universities and pharmaceutical companies. Activities are being developed in stages with the assistance and collaboration of all relevant donors and available resources, including UNICEF and WHO.

Determining subgroups

The national integrated micronutrients survey in 2001 showed that different age groups of the population were suffering from a severe depletion of iron stores. The prevalence of iron deficiency was higher among females although the condition was also identified as a problem among men. The average prevalence rate of anaemia was reported as 38% among children under the age of 2, although rates varied from 26% to 54% in different regions. The prevalence rates among boys and girls were identified as 39.9% and 35.3%, respectively. Serum ferritin at less than 20 mg/dl was reported for approximately 60% of children aged between 15 and 23 months at national level. A study conducted by the Ministry of Health and Medical Education also found regional differences in the rates of anaemia reported. In Sistan, the percentage of children under 2 identified as anaemic was 60%, but in Gilan and Mazandaran only 20% of children were reported as anaemic.

The comprehensive food consumption survey (2000–2002) showed that 70% of households received an inadequate intake of iron, and that 44% of households, nationally, received less than 70% of their iron need. Mean iron intake at provincial level showed a similar undesirable status; the national average (intake-to-need rate) was 79%. As the majority of iron in the population's diet is provided through plant products (non-haeme iron) with low bioavailability (3%–8%), low bioavailability was cited as the main cause of iron deficiency among the population.

Due to insufficient dietary micronutrient intake, a significant proportion of the general population suffer from multiple micronutrient deficiencies. Children who do not receive a sufficient amount of iron are at risk of iron deficiency anaemia. There are numerous studies which demonstrate a relationship between iron deficiency and/or iron deficiency anaemia and the strength of muscle function, physical activity, school productivity and mental activity and concentration among older children and adults. There is also an increased susceptibility to heavy metal (including lead) poisoning among iron-deficient children.

Subgroup: children

The prevalence of anaemia among children between the ages of 15 and 23 months was reported in the south at 54%. The food consumption survey data also highlighted a low intake of iron in the same region. Children under 2 from the rural areas of Sistan and Baluchistan provinces were found to be particularly vulnerable to experiencing iron deficiency and were the subgroup targeted for the health communication intervention.

Communication strategy intervention

Ferrous sulfate drops are distributed through the health care system free-of-charge. Iron supplementation is started when a child reaches six months or at the start of complementary feeding and is administered up until a child reaches 2 years of age. The recommended dosage of iron is 2 mg elemental iron per 1 kg of body weight. Among low-birth-weight children, iron supplementation is initiated when body weight reaches twice the weight at birth. The recommended dosage is based on iron stores and at least 2 mg per kg of body weight. However, evidence shows that approximately 83% of children do not receive iron drops regularly and the bioavailability of iron drops is low. These factors are likely to result in a failed programme. Moreover, a knowledge, attitudes and practices study revealed that many of the mothers' knowledge, attitudes and practices were incompatible with the programme (see Table 1).

Table 1. Direct and indirect causes of anaemia in the Sistan and Baluchistan provinces

Subgroup: Children under 2	Direct cause	Indirect cause
The subgroup have been identified as children under 2 from the rural areas of Sistan and Baluchistan.	Low iron intake The comprehensive food consumption survey showed that approximately 30% of the population of Sistan and Baluchistan were receiving less than 70% of their iron need. (It should be noted that only 5.6% of dietary iron is provided through meat consumption.)	Lack of awareness.
	Low bioavailability Iron deficiency anaemia is often a consequence of a poor quality diet rather than an insufficient quantity of food and often exists even when iron intake is relatively high. Even though the iron content of staples, such as whole grain cereals, rice and vegetables, may be relatively high, these foods also contain high levels of naturally occurring compounds called phytates which bind with iron, thereby inhibiting iron absorption.	In Sistan and Baluchistan, 65% of iron intake is provided through bread and cereal; the national average is 54%. It can be concluded that severe anaemia in this province may be mainly due to low intake of highly bioavailable iron. Low bioavailability of iron in iron supplementation.
	Dietary patterns Fruit and vegetables rich in vitamin C, which can triple the absorption of iron from cereals and vegetables, are rarely consumed or eaten with meals. In rural areas, the mean of vitamin C intake was 26 mg a day while the mean requirement was determined to be 42 mg a day. Vitamin A intake, as an essential nutrient for iron transfer in blood, should be taken into account. In Sistan and Baluchistan, approximately 78% of households receive less than 70% of their vitamin A need. Findings of a survey conducted in the province to determine the prevalence of vitamin A deficiency among children under 2 confirmed a vitamin deficiency problem in the province.	Poverty and limited resources.
	Cost and availability of iron-rich foods Iron-rich animal products are often too costly or unavailable to those most at risk.	Poverty and limited resources.
	Access to interventions Foods fortified with iron are not available in the country. However, since 2005 several academic groups have worked on developing a holistic national plan for iron fortification.	Poverty and limited resources.

Prioritizing and selecting subproblems

It was recognized that there was a lack of awareness among mothers of the importance of a healthy diet, and eating food rich in iron and of the importance of iron supplementation. There was also a

lack of awareness among health care providers of the need for children under 2 to receive regular iron supplementation. Table 2 shows the aims of the health communication plan to reduce the levels of anaemia among children and highlights the subproblems.

SWOT analysis

A SWOT analysis was undertaken by the Ministry of Health and Medical Education to assess the internal and external strengths and weaknesses of the Ministry's programme (Table 3).

Table 2. Subproblem interventions

Intervention	Subproblem
To improve awareness of iron deficiency anaemia among mothers.	Lack of awareness among mothers of the importance of a healthy diet and eating food rich in iron and of the importance of iron supplementation.
To increase health care providers' awareness of the need for iron supplementation among children under 2.	Lack of awareness among health care providers of the need for iron supplementation among children under 2.

Table 3. SWOT analysis to determine internal and external strengths and weaknesses of the programme

Factors/variables	Internal	External
Positives	Strengths Government's commitment to eliminate iron deficiency anaemia. Other ongoing programmes and programme development. Personnel and resources are currently devoted to the reduction of iron deficiency anaemia among children. There are ongoing activities to strengthen programmes and to make them more cost effective. The distribution of iron supplements through the primary health care system is achievable.	Opportunities Trends in health care delivery and local acceptability. Supplementation is available in the form of drops and so is easily taken by young children. Special interest of key donors.
Negatives	Weaknesses The quality of local iron drops is unacceptable. There are budgetary limitations. There is a lack of a sufficient body of evidence to make final decisions (there are several descriptive studies but analytical findings are limited). Weak working relationships and channels to key donors. Lack of a monitoring system in terms of regular consumption.	Threats Limited awareness of the importance of micronutrients for health and in reducing levels of disease among children. High level of illiteracy among mothers. Fear of consuming new substances in some regions. The quality of local iron drops is not acceptable. Mothers are unaware of the importance of micronutrients in their child's diet. No undesirable effect of iron supplementation has been reported to date.

Identifying and segmenting potential audiences

The audience were segmented into primary, secondary and tertiary audiences. The primary audience were identified as mothers of children under 2 years of age, and for effective communication purposes, this group were further segmented into low and high-income levels and levels of literacy. The secondary audience were identified as fathers, older siblings, mothers-in-law and grandmothers. For communication purposes, this group were further segmented into low- and high-income levels and according to levels of literacy. The tertiary audience were identified as community opinion-leaders, such as *Kadkhoda*, teachers (as a result of their influence on mothers) and health care providers.

Primary audience

Mothers are encouraged to collect iron drops from health care providers in the primary health care system and to comply with the proper regimen by the end of the first-year plan. They are encouraged to attend educational sessions during which they are provided with relevant information about iron deficiency, its consequences and how to prevent it (Table 4).

Secondary audiences

Useful information will be given to fathers and older siblings at school will be familiarized with the issue, as both groups are in a position to provide support to mothers. Mothers-in-law and grandmothers will be educated about the benefits of taking regular iron supplementation and will be encouraged to influence their daughters and daughters-in-law into giving their children the supplements.

Tertiary audiences

Community leaders can encourage mothers and the secondary audience to comply with the programme. Health care providers can educate and counsel women regarding the importance of providing their children with supplements and can also recommend treatment and prescribe supplements.

Table 4. Audience profile

Primary audience	Mothers of children under 2
Consumer preferences Information that helps to identify solutions to nutrition problems, including opportunities, barriers and competitors for each option.	Increasing awareness of the importance of giving their children iron supplements.
Communication/message preferences Information that identifies preferences regarding messages, including the places where audience members prefer to receive the information, the conditions under which they will receive a message, the source of a message, the person, agencies and organizations from whom a message will be credible, and the strategies and materials that best convey a message.	Attending health education sessions. Providing home visits. The preferred sources of a message are health care providers, husbands and religious leaders.
Practices, knowledge and attitudes relating to the nutrition problem Information about what affects an audience's belief that a problem exists and their acceptance of the recommendations regarding the recommended change of behaviour and their motivation to take action.	Lack of awareness regarding a nutrition problem. Fear of consuming new substances in some regions. Mothers are unaware of the importance of micronutrients in their child's diet.

Communication objectives

The following communication objectives were set for the primary, secondary and tertiary audiences (Table 5).

Primary audience

By the end of the sixth month, 80% of mothers should have heard, read or seen information about anaemia and the free provision of iron supplements to children. The percentage of mothers attending maternal and child health care clinics who are giving their children supplements should increase. By the end of 12 months, the number of mothers who report giving daily iron supplements to their children should increase, and by the end of 24 months, anaemia among children under 2 should have decreased nationally.

Secondary audience

By the end of the sixth month, 70% of fathers, older siblings, grandmothers and mothers-in-law should have heard, read or seen information on anaemia and the provision of iron supplements for children under 2. By the end of the sixth month, the number of grandmothers and mothers-in-law who encourage their daughters to provide their children with a healthy diet and iron supplements should have increased by 70%.

Tertiary audience

By the end of 12 months, community leaders and health care providers should educate 90% of mothers attending primary health care and private clinics on the importance of taking supplements. They should also conduct unofficial social gatherings to raise awareness.

Development and pretesting of communication materials

All communication efforts are closely coordinated between the Ministry of Health and Medical Education, pharmaceutical companies and the media. In as far as is possible, communications have employed the same format and message across sectors so that the intended audiences receive mutually reinforcing information.

Messages

It was agreed that the following messages should be pretested with audiences.

- Taking iron supplements will result in improved health and intelligence.
- A small daily intake of iron provides the same health benefits as eating a large amount of certain foods, such as spinach.
- Iron supplements can improve future academic performance.
- Iron deficiency among children can result in problems later in life.

Settings

At retail settings, iron supplements will be accessible to all mothers, even in remote areas. There are small villages in Sistan and Baluchistan without local health houses, and for these areas, weekly or monthly supplies should be provided. Both public and private health care facilities can distribute materials to promote the use of the supplements. Community leaders, factory managers and policy-makers were targeted with specific messages to elicit their support for the programme.

Table 5. Creative brief

	Primary audience	Secondary audience	Tertiary audience
Intended audiences Whom do you want to reach with your nutrition communication?	Mothers of children under 2.	Fathers, grandmothers and mothers-in-law, older siblings.	Community leaders. Health care providers. Policy-makers.
Objectives What do you want your intended audiences to do after exposure to your message?	Mothers are expected to obtain the drops and give them to their children regularly.	This audience are expected to support mothers to obtain the drops and to give them to their children regularly.	This audience are expected to convince and support mothers to obtain the drops and to give them to their children regularly. Policy-makers are expected to support the programme both administratively and financially.
Barriers What obstacles do your audience face in undertaking the desired behaviour?	Lack of availability of high-quality iron. Underestimation of prevalence of micronutrient deficiency among children. Negative influence of mothers and mothers-in-law.	It may be difficult to convince grandmothers of the benefits of taking supplements. Lack of interest of fathers in this issue.	It may be difficult to convince policy-makers that the issue is a priority. Community leaders will not easily accept a new programme.
Key promise/benefit The promise/benefit that an audience will experience upon undertaking the desired behaviour.	Children will be healthier and will improve academically.	Children will be healthier and become more productive adults.	Children will be healthier and become more productive adults. Supplementation to prevent iron deficiency anaemia will have a positive economic impact at community level.
Support statements/ reasons why These clarify the benefits against the barriers. These often become the messages.	Iron supplements protect children from anaemia. Iron drops are inexpensive and are available.	Iron supplements protect children from anaemia. Iron drops are inexpensive and are available.	Iron supplements protect children from anaemia and can prevent disability and future poor health. They have a vital role in determining the health of the next generation.
Tone What tone should a message have? Should it be funny, fear-inducing, foreboding or fact-based?	Encouraging tone.	Encouraging tone. Fear-inducing.	Encouraging tone. Fact-based.
Channel The channel through which you will convey your messages.	The campaign will use a multi-media approach including television and radio, as well as face-to-face communication (i.e. in mosques).	The campaign will use a multi-media approach including television and radio, as well as face-to-face communication (i.e. in mosques, traditional coffee shops and schools).	Interpersonal communication and advocacy events will be used for policy-makers and community leaders. Workshops or seminars will be held for health care providers.
Creative considerations Are there creative considerations to be taken into account in your message? (Design issues in terms of colours, clothing or language, etc.)	Messages should be delivered in the colloquial languages of the provinces. Characters used in the campaign should wear the culturally-appropriate dress and preferred colours of the region.	Messages should be delivered in the colloquial languages of the provinces. Characters used in the campaign should wear the culturally-appropriate dress and preferred colours of the region.	Creative approaches should appeal to the target audience and focus on anaemia, health and the economic-related consequences of anaemia.

Channel-specific communication activities

The following were identified as specific channels through which to conduct communication activities.

- Radio offers penetration to all groups, particularly mothers in rural areas.
- Advertisements and films will be aired during the campaign.
- Women magazines may be useful, although in view of the low rates of literacy among women in the rural areas of the province (28%) and their lack of accessibility to magazines, newspaper advertisements will only reach a very limited number of these women.
- Posters and informational leaflets targeting mothers will be distributed to retailers and health care providers, including doctors and midwives, pharmacies and health care centres.
- A series of seminars and workshops will be held for professionals and others who are in a position to influence mothers.
- In traditional rural areas, community leaders can still be considered one of the most effective channels for imparting messages to a community.

Staff and partner responsibilities

The NNFTRI will carry out formative research and collect available scientific evidence on the issue of iron deficiency. The Ministry of Health and Medical Education will fund a campaign focusing on general awareness of iron deficiency anaemia and the demand for iron supplements. UNICEF and WHO will also coordinate with the Ministry of Health and Medical Education campaign focusing on the printing of educational materials. The Ministry will coordinate with pharmaceutical companies to produce the most suitable form of the supplements, and relevant sectors, such as the Ministry of Education, will assist in educating teachers on the issue. Religious organizations and committees will encourage their representatives in the Region to cooperate in order to raise awareness among the population.

The NNFTRI, in cooperation with the Ministry of Health and Medical Education, will develop the communication materials and UNICEF, WHO, nongovernmental organizations and related governmental organizations will assist in supporting the programme financially.

Programme evaluation planning

A number of meetings will be held to clarify the goals and evaluation procedures among the primary stakeholders (the Ministry of Health and Medical Education, UNICEF and WHO and key community stakeholders such as health care workers and physicians). During the implementation phase of this programme, the participation and contribution of the media will be sought. This collaboration needs to be arranged during the developmental stage of producing the communication materials. Private media companies can contribute significantly to the dissemination of information targeted towards mothers but should also be involved in the design of the project.

The goal of the programme

The goal of the programme is to reduce the prevalence of iron deficiency anaemia among children under 2 by motivating mothers to give their children iron drops. The intervention is designed to motivate:

- mothers to give their children iron supplements;
- grandmothers, mothers-in-law, fathers and older siblings to support mothers in obtaining the supplements and giving them to their children;
- health care service providers to recommend and prescribe iron supplements;
- policy-makers to consider the issue when making decisions related to the problem;
- opinion-leaders to support the programme and promote its goals through specific channels.

The evaluation phase

Consumer acceptance

Total distribution records will be used as a measure of the accessibility of mothers to iron supplements. Qualitative data will also be gathered on reactions, impressions and the compliance of audiences.

Monitoring the distribution

In order to adjust sales and distribution during the course of the programme, the availability and sales of iron supplements in retail outlets will be tracked on a monthly basis. Qualitative data will be gathered, including the perceptions of consumers and all stakeholders (health care providers, retail outlets, distribution channels for promotional materials and policy- and opinion-leaders).

Intervention standards

The intervention standards are to:

- increase the availability and use of iron supplements through the development and expansion of public and private sector distribution;
- improve the knowledge, attitudes and practices of mothers and other family members about iron deficiency anaemia and the importance of taking iron supplements;
- increase the awareness of health care providers on the importance of taking regular iron supplements;
- convince opinion-leaders of the importance of the programme in improving community health;
- highlight the desirable impact of the programme to policy-makers.

Data-gathering methods and sources

The following are relevant research questions to ask during the process of gathering data.

1. To what extent are mothers exposed to the iron supplementation campaign through each chosen channel?
2. Which media channels and non-media channels (e.g. posters, leaders and health care providers) are being used?
3. What are the main knowledge, attitudes and practices of mothers regarding iron supplements and the consequences of iron deficiency among children?
4. What channels do mothers report as their main sources of information on iron supplements? Which of them are considered the most effective?

5. What, if any, are the effects of the campaign on the knowledge and/or reported behaviour regarding iron supplements?
6. What, if any, are the effects of the campaign on the knowledge, attitudes and practices of other target family members?
7. What was the impact of the programme on the attitude of community leaders, health care providers and policy-makers?

Resources

Information from media and non-media channels and from the results of provincial data will be used for the evaluation of the programme. Radio, television and media campaigns/news/commercials will be tracked using broadcast monitoring and content analysis. Non-media channels will be tracked by conducting descriptive studies through questionnaires to assess the knowledge, attitudes and practices of mothers, as well as those of other target audiences. Relevant data on any official decisions regarding the production and distribution of iron supplements will be gathered. Information on the prevalence of iron deficiency among children will be gathered from provincial data.

Developing an evaluation design

Consumer perception data will be gathered at the post-project stage and will be compared to the baseline results of formative research. Qualitative impressions of project stakeholders will be gathered at the post-project stage. Qualitative data will be gathered at the close of the project. Agreements will be formalized and an internal and external communication plan will be developed. A memorandum of understanding between the Ministry of Health and Medical Education, WHO and UNICEF will be concluded. Close coordination with the government's anaemia prevention programme will result in a consistent approach to anaemia prevention from both the public and private sectors.

Justifying conclusions

Records outlining programme development from all various partners and contractors will be documented. All partners will be involved in discussions on which objectives have and have not been achieved, on activities which could have been improved upon and on lessons learned which could prove useful for future programmes.

The Ministry of Health and Medical Education will hold workshops to share their experiences with 29 other province stakeholders. Programme partners will discuss the strengths and weaknesses of the programme and results of evaluation findings will be published in a report by the Ministry.

Case study 3

Oman's maternal and child health care communication plan

Problem statement

Oman began its sustained programme of national development after H.M. Sultan Qaboos succeeded his father in 1970. A study undertaken by the UN Economic Commissioner for West Asia from 1977 to 1979 showed that in the late 1960s about one third of all Omani children died before their fifth birthday and infant mortality was estimated at over 200 per 1000 live births. Data from the 1988–1989 child health survey indicated that in the early 1970s infant mortality was estimated at 30 per 1000 live births. Infant and under-5 mortality rates were attributed to childhood infectious diseases, such as polio, measles, whooping cough, diarrhoea and upper respiratory infections. The early introduction of supplementary feeding, low birth weight and chronic stunting were some of the symptoms of nutrition problems in the country.

In 1985, the Ministry of Health in Oman started implementation of a programme to address child health problems and sought the involvement of other ministries and international organizations. A task force comprising representatives from the Ministries of Social Development, Information, Education and the Interior was formed to implement the campaign. The range of partners was broadened following the first two successful years of the programme's implementation, and in 1988, the Ministry of Health formed a committee to develop the national women and child care plan, comprising representatives of the Ministries of Social Development, Information, Education, Islamic Affairs, the Interior, Commerce, Police, Defence and Muscat and regional municipalities, women's associations and UNICEF. The Ministry conducted studies in the area of maternal and child health and nutrition, and based on the results, decided to develop a communication plan to deal with a range of health issues affecting mothers and children, including antenatal care, immunization, breastfeeding and weaning, maternal nutrition, the environment, diarrhoeal diseases and upper respiratory infections.

Subgroups and subproblems

The communication plan targeted the general population but identified specific subgroups as: women, health care providers, men, ministry staff and children. Women were chosen as a subgroup due to their high levels of illiteracy, the fact that they do not attend clinics regularly and as a result of the need to improve their child care skills. Health care providers provide health services but many health workers do not speak Arabic as they are non-nationals. Men were targeted as they can be responsible for encouraging women to attend clinics. Ministry staff were targeted as they provide social, informational and educational services but do not have a health background, and finally, children as a result of high infant and under-5 mortality rates (Table 1).

Based on discussions among the committee members it was agreed that the following three subproblems should be addressed by the programme, as each was interrelated and could be addressed simultaneously. A communication strategy to increase awareness and to support antenatal care services was created.

- Subproblem 1: Women do not attend clinics regularly, there are high levels of female illiteracy and a lack of awareness of how to protect children's health.
- Subproblem 2: Health care providers provide health services but do not speak Arabic.
- Subproblem 3: Other ministry staff provide social, informational and educational services but do not have a background in health.

Table 1. Identifying direct and indirect causes of subproblems

Subgroup	Subproblem	Direct cause	Indirect cause
Women	Women do not attend clinics regularly. High levels of illiteracy. Lack of awareness of how to protect children's health. Weak antenatal care services.	Lack of awareness of the importance of antenatal care and the prevention of childhood diseases.	Lack of transportation and knowledge of preventive measures.
Health care workers	Provide health care services but do not speak Arabic.	Many health workers are non-nationals.	Cannot conduct effective education as a result of language barrier.
Men	Responsible for women and children attending clinics.	Not aware of the importance of antenatal care.	Do not take women to clinic.
Other ministry staff	Provide social, informational and educational services but do not have health background.	—	Cannot conduct effective education due to their lack of health information.
Children	High infant and under-5 mortality rates.	Infectious diseases.	Unhygienic environment, lack of adequate nutrition and lack of clean water.

Table 2. SWOT analysis to determine the internal and external strengths and weaknesses of the Ministry of Health's communication plan

Factors/variables	Positives	Negatives
Internal	Strengths: Staff are motivated and dedicated. The policies of the Ministry of Health support preventive services. Staff working in the maternal and child health care clinic are well trained in preventive programmes for immunization and antenatal care. Key leaders in the Ministry of Health are committed to offering preventive health services for mothers and children.	Weaknesses: The majority of medical staff in the Ministry do not speak Arabic. There is no effective communication plan. There are few individuals trained in media production. No studies have been conducted on the knowledge, attitudes and practices of the community regarding these health issues.
External	Opportunities: Key leaders in other organizations are interested in participating in the programme and will provide staff, transportation and facilities.	Threats: Other organizations have their own priorities. Lack of funds. The difficult terrain of the country and the unavailability of certain services.

SWOT analysis

Table 2 shows the result of the SWOT analysis undertaken by the Ministry of Health to determine the internal and external strengths and weaknesses of the communication plan.

Categorizing target audiences

The target audience were categorized into primary, secondary and tertiary audiences. The primary audience were identified as pregnant women and mothers of children under 5. The secondary audience were identified as health care providers (doctors, nurses and medical orderlies), and the tertiary audience as high school students and staff from other Ministries.

Goals and objectives

The goal of Oman's health communication strategy was to improve the health of mothers and children and to reduce maternal and child morbidity and mortality rates (Table 3).

Creating communication objectives

The objectives of the communication plan were to:

- reduce infant mortality by one third;
- increase the number of women receiving antenatal care to 90%;

Table 3. Audience profile

Primary audience	Women aged between 13 and 50 years, mainly illiterate, living in urban and rural areas.
Consumer preferences Information that helps identify solutions to the nutrition problems, including opportunities, barriers and competitors for each option.	Availability of good organizational structure of other stakeholders in all the regions that support implementation of the programme.
Communication/message preferences Information that identifies preferences regarding messages, including the places where audience members prefer to receive the information, the conditions under which they will receive a message, the source of a message, the person, agencies or organizations from whom a message will be credible, and the strategies and materials that best convey a message.	Television is available in 95% of houses. Posters are preferred by the community. Women frequent health centres to socialize. Radio and newspapers are the preferred form of media among some members of the community.
Practices, knowledge and attitudes regarding a nutrition problem Information about what affects an audience's belief that a problem exists and their acceptance of the recommendations regarding the recommended change of behaviour and their motivation to take action.	Information about a community's attitudes toward health issues, such as antenatal care, immunization, breastfeeding and weaning, nutrition for mothers, diarrhoeal diseases and upper respiratory infections, and on issues such as the environment. Some mothers are unaware of the dangers of unsafe water and animal or child faeces to health. Some mothers believe that formula is healthier for babies as they gain weight more quickly.

- increase the number of women having hospital deliveries to 90%;
- increase the number of women receiving postnatal services after delivery to 80%;
- increase the number of health centres that conduct health education in schools to 100%;
- increase the number of children who are immunized to 100%;
- reduce protein energy malnutrition by 50%;
- reduce maternal mortality by 50%;
- increase the availability of safe drinking-water and provide adequate services for the proper disposal of sewage;
- reduce the number of children who regularly suffer from dehydration.

Table 4 shows the creative brief template prepared by the planning team in the Ministry of Health.

Development and pretesting of communication materials

From 1990–1991, there were a limited number of staff working in the area of health education and communication and so no formative research was conducted. Table 5 shows the timetable for the development and pretesting of messages. Table 6 shows the pretesting and communication implementation plan worksheet.

Table 4. Creative brief

	Primary audience	Secondary audience	Tertiary audience
Intended audiences Whom do you want to reach with your nutrition communication?	Pregnant women, mothers of children under 5.	Health care providers (doctors, nurses and medical orderlies).	High school students. Staff from other ministries.
Objectives What do you want an intended audience to do after exposure to your communication programme?	Attend antenatal clinic 12 times during pregnancy. Eat healthy food. Attend a clinic after delivery. Immunize their children. Use oral rehydration salts as soon as the child has diarrhoea. Wash hands after changing baby diapers and after taking care of animals. Wash hands before preparing children's food. Boil drinking-water. Breastfeed children exclusively for 4 months. Start to introduce solid foods at 4 months.	To educate mothers in the clinic (key messages prepared).	To communicate key health messages to raise awareness among family members.
Barriers What obstacles face an audience in undertaking the desired behaviour?	Limited knowledge. Lack of transportation to go to the health centre. Lack of safe drinking-water.	Language barriers.	To educate mothers in the clinic (key messages prepared).
Key promise/benefit The promise/benefit that an audience will experience upon adapting the desired behaviour.	Healthy mothers and children. Reduce the number of days children spend suffering from ill-health. Reduce morbidity and mortality rates.	Greater compliance.	Healthy families.
Support statements/reasons why These clarify the benefits against the barriers. These often become the messages.	Pregnant women should attend antenatal clinic 12 times during pregnancy. Eat healthy food for your own health and for the health of your baby. Attend postnatal clinic 40 days after delivery. Take children to be immunized at the clinic according to the appointment given by the nurse. Use oral rehydration salts as soon as a child has diarrhoea to reduce dehydration. Wash hands after changing baby diapers and after taking care of animals. Wash hands before preparing children's food. Boil drinking-water. Breastfeed children exclusively for 4 months. Start to introduce solid food at 4 months.		
Tone What tone should your message have? Should it be funny, fear inducing, foreboding, or fact-based?	Appealing to the emotion of the mother. Fact-based. Funny.	Fact-based.	Fact-based.
Channel The channel through which you will convey your messages.	Television and radio. Newspapers. Folders and posters. Flip charts and slide presentations.	Folders and posters. Flip charts and slide presentations.	Folders and posters.
Creative considerations Are there creative considerations to be taken into account in your message? (Design issues in terms of colours, clothing or language, etc.).	Very colourful material. Simple language. Lots of illustrative pictures.		

Table 5. Timetable for the development and pretesting of messages

	1989				1990				1991			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Formative research												
a) Conducting surveys		●										
b) Conducting focus groups												
c) Developing the branding/ packaging												
Developing/revising marketing plan												
Developing messages			●									
Producing mass media campaign					●				●			
Producing promotional materials			●	●			●	●		●	●	

Q = quarter

Table 6. Pretesting and communication implementation plan worksheet

	People responsible	Resources needed	Delivery (beginning date)	Delivery (completion date)	Frequency of evaluation
Key message	National women's and child care plan committee	Consultant	1989	1990	Every 6 months
Audience	Pregnant women and mothers	Transportation	1989	1990	Every 6 months
Setting	Nurses	Training and material	1989	1990	Every 6 months
Channel	Departments of Health and Education	Training	1989	1990	Every 6 months
Activities	Staff from other ministries	Training	1989	1990	Every 6 months
Materials	Departments of Health and Education	Providing material	1989	1990	Every 6 months

Planning for programme evaluation

The organizations that were involved in the evaluation of the programme were the Ministries of Social Development, Information, Education, the Interior, Islamic Affairs, Commerce, Police and Defence, Muscat and regional municipalities, the Organization for Marketing Agricultural Products, scouts and girl guides, women's associations and UNICEF.

The communication plan

The health communication plan targeted pregnant women and mothers of children under 5 and comprised many interrelated messages. It covered many health issues and other issues related to pregnancy and child care, and necessitated the involvement of other ministries. During each year of programme implementation, two training workshops were conducted: one for the stakeholders in Arabic and one in English for health care providers. Following training, each group planned activities in the community. Examples of the activities included the following.

- Nurses and doctors were trained in communication skills and given basic messages (in Arabic) to impart to women in antenatal and child health care clinics.
- Medical orderlies were trained in communication skills and were given tools in order to effectively communicate with mothers in the community.
- Teachers were trained to give information and educational materials to students to facilitate the transfer of information to mothers and other family members.
- Municipality staff were trained and given information on the environment and hygiene in order to educate the community.
- Imams in mosques were trained to incorporate health messages into Friday prayers.
- Scouts and girl guides were trained to go into the community and talk to families.
- Community development workers were trained to incorporate health messages in their social activities.
- *Walis* and *sheikhs* (mayors) were involved in encouraging the community to attend clinics and to seek out those who were failing to immunize their children in order to encourage them to do so.
- Staff from the Organization for Marketing Agricultural Products were trained to incorporate nutrition messages in their activities in the community.
- The Ministry of Health and UNICEF, in coordination with some members of NWCCP, produced television campaigns, posters, leaflets, flip charts and slide presentations.
- The Ministry of Health, in coordination with the Ministry of Information, broadcast many television and radio programmes and published articles in newspapers and magazines.
- Many activities were implemented in the community by volunteers (community support group members).

The NWCCP continued to conduct a health communication programme until 1996. After 1990, each year a theme was chosen by the committee to deal with specific issues such as birth spacing, genetic disorders, parenting and educational problems, malaria, school health and many other health and social issues.

Evaluation design

Although there was no formal evaluation of the programme, monitoring and follow-up of staff was undertaken and regular training was conducted.

Gathering credible evidence

National statistics provided by the Ministry of Health indicated that the communication programme was successful in improving maternal and child health as demonstrated by the figures in Table 7.

Justifying conclusions

The following factors were considered crucial for the programme's success.

- team work involving coordination with other organizations;
- economic improvement and social development;
- participation of community leaders and involvement of the community;
- ability of health facilities to address health issues;
- accessibility to primary health care facilities in all regions;
- community preparedness to learn about, and to improve, their health.

During this time, the Ministry of Health was involved in several preventive programmes targeting mainly pregnant women and mothers of children under 5. This made it easy to conduct educational programmes and to reach the target group. Although various health messages were being disseminated they were targeted towards one group.

Table 7. Indicators demonstrating the success of the communication plan in Oman

	1989	1991	1995
Infant mortality rate (per 1000 live births)	30.0	25.0	18.0
Under-5 mortality rate (per 1000 live births)	28.0	24.0	20.0
Diarrhoeal diseases (no.)	—	190.0	170.0
Polio (no.)	—	270.0	200.0
Low birth weight (%)	—	9.0	8.0
Exclusive breastfeeding (%)	—	4.0	20.0
Immunization coverage (%)	—	94.0	98.0

Feedback and lessons learned

Although the national women's and child care plan committee is no longer operational, the Department of Health Education and Information has continued to conduct activities to improve maternal and child health through the existing programme run by the Ministry. The target group demographic has changed to literate women aged between 22 and 40 years, as these women need, and are more receptive to, health information.

There are now 124 Arabic-speaking health educators working in Oman in various health centres, and a network of community volunteers is assisting health educators to reach a larger number of the target group. The programme is more holistic and has incorporated all of the messages in a series of educational materials distributed to target groups (women and mothers of young children). Other new topics are added every year based on feedback from the community.

Problems and barriers

The following factors were identified as problems which need to be addressed in order to improve future programmes.

1. As a result of the fact that health educators in the Region are overburdened with work, departments are not complying with the entire process in order to plan effective nutrition communication strategies.
2. No formative research is being conducted prior to the development of communication plans.
3. Partnerships with other organizations are not being forged.
4. The pretesting of materials is not being undertaken as a result of limited human resources and funding.
5. There is limited production of television and radio programmes.
6. No baseline data are collected for the planning or evaluation of programmes.
7. Inadequate evaluation of programmes is being conducted.
8. The Ministry is dealing with a greater number of health issues that are becoming increasingly difficult to address, such as sedentary lifestyles and chronic diseases.

References

Module 1 Chapter 2

CDCynergy micronutrient malnutrition edition. Centres for Disease Control, 2001.

Guidelines for training community health workers in nutrition. World Health Organization offset publication No. 59.

Making health communication programs work. National Cancer Institute, National Institutes of Health, US Department of Health and Human Services, 1998.

Education for health: Manual on health education in primary health care. Geneva, WHO, 1988.

Module 2 Chapter 2

CDCynergy micronutrient malnutrition edition. Centres for Disease Control, 2001.

Making health communication programs work. National Cancer Institute, National Institutes of Health, US Department of Health and Human Services.

Education for health, manual on health education in primary health care. Geneva, WHO, 1988.

Module 3 Chapter 3

CDCynergy micronutrient malnutrition edition. Centres for Disease Control, 2001.

Making health communication programs work. National Cancer Institute, National Institutes of Health, US Department of Health and Human Services.

Communicating public health information effectively, a guide for practitioners. DE Nelson et al. Washington, American Public Health Association, 2002.

Module 4 Chapter 1

CDCynergy micronutrient malnutrition edition phase 5. Centres for Disease Control, 2001.
Framework for program evaluation in public health. Centres for Disease Control. MMWR 1999;48 (No. RR-11).

Module 4 Chapter 2

CDCynergy micronutrient malnutrition edition. Centres for Disease Control, 2001.
Making Health Communication Programs Work. National Cancer Institute, National Institutes of Health, US Department of Health and Human Services.

Module 5 Chapter 1

Ritu R. Sharma. *An introduction to advocacy, training guide*. Washington DC, Support for Analysis and Research in Africa (SARA), 1995.
A frame for advocacy. Population Communication Services, Center for Communication Programs, John Hopkins Bloomberg School of Public Health, 1999.

Module 5 Chapter 2

CDCynergy social marketing edition. Centres for Disease Control, 2001.
Social marketing for public health. D Chapman Walsh et al. *Journal of Public Health Policy*, 104–119, 1993.

Annex 1

List of verbs

Cognitive verbs

Apply	Devise	Identify	Rate
Classify	Differentiate	Illustrate	Recall
Compare	Discuss	Interpret	Repeat
Conclude	Distinguish	Justify	Select
Contrast	Estimate	Label	State
Decide	Evaluate	List	Summarize
Define	Examine	Name	
Demonstrate	Explain	Prepare	

Example verbs for feelings and attitudes

Accept	Augment	Comply	Differentiate
Acclaim	Avoid	Conform	Discuss
Adhere	Balance	Control	Discriminate
Advocate	Believe	Cooperate	Display
Applaud	Challenge	Criticize	Dispute
Approve	Change	Debate	Evaluate
Argue	Choose	Decide	Examine
Ask	Combine	Defend	Favour
Assist	Commend	Desire	Follow
Attempt	Compare	Develop	Formulate
Attend	Complete	Devote	Give

Help	Organize	Receive	Subscribe
Influence	Participate	Recommend	Suggest
Invite	Persist	Reject	Support
Investigate	Practise	Relinquish	Test
Initiate	Praise	Request	Theorize
Join	Prefer	Resist	Try
Judge	Promote	Resolve	Verify
Justify	Propose	Respond	Visit
Listen	Protest	Revise	Volunteer
Modify	Pursue	Seek	Weigh
Obey	Question	Select	
Object	Read	Share	
Observe	Realize	Specify	

Example verbs for physical action and motor skills

Adjust	Centre	Inspect	Scale
Administer	Change	Lengthen	Select
Agitate	Clean	Load	Set up
Approach	Demonstrate	Locate	Shake
Assemble	Heat	Make	Sharpen
Bandage	Hook	Manipulate	Shorten
Bend	Increase	Mark	Slide
Blend	Inject	Rinse	Solve
Build	Inoculate	Rip	Sort
Calibrate	Insert	Roll	