

The Public Health Challenge of Ending Malnutrition: The Relevance of the World Health Organization's GINA Database

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journals.sagepub.com/home/aph**Fanny Buckinx, MSc, PhD¹****Abstract**

In order to address malnutrition, implementation of nutrition actions is needed. While academic institutions will certainly play a part, strong coordination and leadership from major United Nations agencies are needed. To this effect, the World Health Organization has launched a Global Database on the Implementation of Nutrition Action (GINA). It contains information collected from various sources, including direct submissions by users. Users can share information on how programs are implemented, including country adaptations and lessons learnt. GINA allows users to share implementation experience in order to identify overlaps and gaps, to foster discussion toward improved planning and to promote good practices. The aim of this article is to highlight the relevance of the GINA database in meeting the public health challenge of ending malnutrition and, therefore, to encourage users from different countries to enter programs and policies in the database.

Keywords

database, GINA, malnutrition, nutrition policies, WHO

Introduction

Malnutrition management remains a challenge despite worldwide attempts to combat it via policies and programs, which did not reach the expected impact, especially in some of the less developed countries. Likely challenges on scaling up nutrition management are (1) enabling environment, which includes knowledge and evidence; politics and governance; leadership, capacity, and financial resources; social, economic, political, and environmental context; (2) keeping pace with scale-up ambitions; and (3) the funding gap versus urgent resource mobilization and allocation. Several factors could be contributory toward this, and the GINA (Global Database on the Implementation of Nutrition Action) has been conceived with the idea of consolidating country experiences and sharing success stories on a global platform so that best practices and benefits could be available for concerned countries to adopt. Experience with national nutrition policies in the World Health Organization (WHO) European Region has shown the

¹Department of Public Health, Epidemiology and Health Economics, University of Liège, Liège, Belgium

Corresponding Author:

Fanny Buckinx, Department of Public Health, Epidemiology and Health Economics, WHO Collaborating Centre for Public Health Aspects of Musculoskeletal Health and Ageing, University of Liège, CHU-Sart-Tilman, B23, Quartier Hôpital, Avenue Hippocrate, 13, Liège 4000, Belgium.

Email: fanny.buckinx@uliege.be

intrinsic value of having shared or common tools and a focus on knowledge translation and transfer. The aim of this article is to highlight the relevance of the GINA database in meeting the public health challenge of ending malnutrition and, therefore, to encourage country users to enter programs and policies in the database.

Methodology

The GINA Database

The WHO has launched the GINA database. As indicated on the website,

The purposes of GINA are to collect key data on nutrition policy and action in a standard format, to visualize what is happening where, when, with whom and how, to compare policy commitments with implemented action, to map action and policy against nutrition indicators, to relate action data to the e-Library of Evidence for Nutrition Actions, to link with other databases and mapping tools, and to promote good practice. It can help planners overcome implementation obstacles by learning from other countries' best practices. GINA furthermore provides a repository of country policy commitments and implemented actions.¹

Description of GINA Database

The WHO provides an interactive platform for sharing standardized information on nutrition policies and action (ie, what are the commitments made and who is doing what, where, when, why, and how [including lessons learnt]). Users can apply this tool to map nutrition policies and action, link policies and action to nutrition status indicators, monitor implementation of key nutrition action, identify overlaps and gaps, or share experience on implementation practices (<http://www.who.int/nutrition/gina/en/>).

As you can read on the website,

The GINA policy section tracks commitments to ensuring good nutrition demonstrated in policy and legislative documents. The documents are sometimes specific to nutrition; e.g., national nutrition policies, vitamin A strategies, or codes of marketing of breast-milk substitutes. Other times they have a broader scope; e.g., health or agriculture sector strategies, or development plans. They include policies, strategies, action plans and legislation. **The GINA action section** tracks action taken to improve nutrition as implemented through programmes and interventions. The programmes are user-defined and can contain an unlimited number of predefined nutrition actions, including both nutrition-specific and nutrition-sensitive interventions. Pre-defined actions range, for instance, from feeding of low-birth-weight infants to implementation of maternity protection, and cover all age groups.

GINA contains information collected from a variety of sources and invites users to directly submit their data. GINA action data can be uploaded by those involved in nutrition interventions, for example, program planners, government officials, nongovernmental organization staff, research teams, or other stakeholders, through a wiki-type approach. Users can share information on how programs are implemented, including country adaptations and lessons learnt. The wiki approach means that contributors can either enter new data or propose edits to existing data, with each submission triggering a verification process.²

Data Collected

On October 15, 2016, the database included 1567 policies in 187 countries.

For each policy, information on national commitments related to the Global Nutrition Targets¹ 2025 and the Global Monitoring Framework was extracted to a spreadsheet: start date, end date,

Table 1. Number of Actions Implemented in Each Country That Has Submitted Data.

Action Implemented	n
School feeding programs	163
Dietary goals and food-based dietary guidelines	144
Vitamin A supplementation	125
Food distribution/supplementation for prevention of acute malnutrition	114
Breastfeeding promotion and/or counselling	112
Complementary feeding promotion and/or counselling	101
Iron supplementation	101
Implementation of legislation on marketing of unhealthy foods and beverages to children	99
Iron and folic acid supplementation	91
Growth monitoring and promotion	85

year of publication, publisher, the type of policy, the country, the partners in policy implementation, the goals, the strategies, the indicators, and the policy topics. The URL link and the PDF document were added.

Indicators related to Global Nutrition Targets were stunting (0-5 years), anemia, low birth weight, child overweight (0-5 years), exclusive breastfeeding (for 6 months), and wasting (0-5 years). In parallel, indicators related to Global Monitoring Framework for Nutrition were underweight in women (body mass index <18.5); complementary feeding: minimum acceptable diet, overweight and obesity in adults, overweight and obesity in school-age children and adolescents; iron folic acid supplementation to pregnant women; breastfeeding counselling; Baby-Friendly Hospital Initiative; nutrition professionals; International Code of Marketing of Breast Milk Substitutes; and maternity protection. Finally, additional diet-related Global Noncommunicable Disease Targets and indicators of the monitoring framework were encoded: raised blood pressure, raised blood glucose/diabetes, raised total cholesterol, saturated fat intake, salt/sodium intake, and fruit and vegetable intake.

The top 10 actions implemented are listed in Table 1. As can be seen, the actions are varied; a total of 163 school feeding programs have been implemented around the world.

Ghana, India, and Bangladesh are the 3 countries with the most actions published, whereas Costa Rica, Honduras, and Guatemala are the 3 countries with most policies published (Table 2).

Ethics

The Work Programme of the Nutrition Decade calls on Member States, regional political and economic communities, and the global community to translate the commitments made through the International Conference on Nutrition 2 Rome Declaration on Nutrition into SMART (specific, measurable, assignable, realistic, time-related) commitments for action, in the context of national nutrition and nutrition-related policies. The commitments are being made available in this publicly accessible repository managed by the joint Food and Agriculture Organization/WHO Secretariat. A single form is completed online by the users, and the encoded data are verified by a member of the WHO staff before being published in GINA.

Results

How to Enter Programs and Policies in GINA Database?

To submit data, the first step is to create a GINA account. To do this, WHO staff can use their usual username and password while non-WHO staff have to create an account. Non-WHO staff

Table 2. The 10 Countries With the Most Actions and Policies Published.

Countries	Number of Actions Published
Ghana	59
India	50
Bangladesh	49
Mexico	46
China	45
Thailand	45
Sri Lanka	44
The Philippines	44
Ethiopia	44
Tavulu	42

Countries	Number of Policies Published
Costa Rica	52
Guatemala	41
Honduras	40
El Salvador	38
United Republic of Tanzania	37
Nicaragua	36
Brazil	34
Zambia	30
Bolivia	30
Peru	29

need to provide name and affiliation and then to accept the terms and conditions of use for the GINA platform. Then, an administrator must approve the demand to enable contributors to submit new data, to edit/update any published information. As long as the information is not submitted it will remain a draft and is only accessible to the contributor. After submitting the data the regional approver, corresponding to the country to which the data refer, is automatically requested to review the new data.

Limitations

Website visitors do not have access to what is consulted and how the information of the GINA database is used by other users of the program or policy, which is the main limitation of the GINA database. The number of programs and policies uploaded in the database is only accessible to managers of the database (ie, WHO staff). Moreover, the adoption of policies is unclear. Obtaining this information would be an advantage for the public health challenge of ending malnutrition.

Conclusions

Continuing or widening of economic disparities results in the persistence of pockets of undernutrition in regions or neighborhoods characterized by poverty and poor access to resources. Increasingly, obesity is affecting low-income populations in urban centers, contributing to the challenges faced by national health care systems.

The GINA developed by the WHO is a tool that could help dealing with all forms of malnutrition, which is a public health priority.

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