NIPN AT A GLANCE

NIPN Responds To A Request From The Ministry of Health To Inform The Food And Nutrition Strategy

The Ethiopian Government developed the country's first Food and Nutrition Policy in November 2018 and is currently developing the Food and Nutrition Strategy to operationalize the policy.

To inform the strategy, the Ministry of Health (MoH) requested NIPN to conduct analyses of existing evidence and provide information on seven questions related to the implementation of the second phase of the National Nutrition Program (NNP II).

NIPN addressed these questions and submitted two reports to the MOH:
1) results from an analysis on the progress towards NNP II targets and 2) results from a rapid literature review to identify the effects of social and behavior change communication (SBCC) on infant and young child feeding (IYCF) practices in Ethiopia.

Progress towards NNP II targets. The NIPN team used data from nationally representative surveys, annual sectoral reports and administrative reports to analyze progress against NNP II targets between 2016 and 2019. The findings showed that progress has been made in the past four years, but more concentrated efforts are needed in several NNP II initiatives to reach their targets.

From six of the NNP II outcome indicators, exclusive breastfeeding (59%), exceeded the World Health Assembly target (50%) but did not reach the NNP II target (80%). For stunting, wasting and underweight in children and undernutrition among women, progress was observed, but targets were not met.

The indicator with the highest coverage of nutrition-specific interventions, was the availability of iodized salt in households (88%), although more work is needed to increase the percentage of women who take 90 or more iron/folate tablets during pregnancy.

For coverage of nutrition-sensitive interventions, the agricultural sector performed the best as it reached most of its targets. Coverage of access to safe drinking water and improved sanitation facilities saw an increase but targets were not met.

Data gaps related to, for instance, adolescent nutrition, women's diets, anemia, and non-communicable diseases, limited the scope of the analysis.

The review also assessed the challenges with multisectoral coordination which included: poor coordination and planning, insufficient collaboration among implementing sectors and a limited sense of ownership and accountability. Although efforts have been made towards multi-sectoral nutrition coordination, it is still not functioning as expected.

The effectiveness of SBCC interventions. The review looked at studies that were conducted for programs targeting children between 0-23.9 months and which included a nutrition and SBCC intervention. The studies were appraised using the Joanna Briggs Institute critical appraisal tools. (Continue to P5)

Message From The Coordinator

Aregash Samuel (PhD)
Deputy Director of FSNRD
and NIPN Coordinator

"The challenges gave us an opportunity to 'think out of the box' and to be innovative."

As the global COVID-19 pandemic continues to increase at an alarming rate, the government of Ethiopia has taken stringent measures to mitigate the spread and impact of the disease in Ethiopia. While the general public is taking precautions, the measures are often difficult to implement, and economic and social welfare challenges are hitting the low-income community the hardest.

For civil servants like us, the pandemic also challenges our way of working. Most offices limit the minimum number of staff at the office, and colleagues are encouraged to work from home. For most of us, home is home, a resting place away from work. With poor internet connection, power cuts, limited working space and office facilities, more social interaction and social gatherings at home, working from home is a daunting prospect. However, COVID-19 is changing all of this and working from home has become inevitable.

After an initial period of adjustment, most NIPN activities continued, and the team is working hard to deliver on its commitments.

Thanks to technology, virtual seminars, virtual meetings, WhatsApp, emails and phone conversations are used to implement activities.

For instance, during this quarter we conducted two virtual seminars bringing together 300 participants including researchers, policy makers, research institutions, implementing partners and donors.

The topics were timely and focused on the current global health challenge - COVID-19 - and its possible impacts on health, nutrition, economic and agricultural activities. Two additional webinars were held: one to obtain experts' opinion on the drivers of non-communicable disease (NCDs) and another, to present findings to the Ministry of Health (MoH) of analyses conducted by NIPN to inform the Food and Nutrition Strategy. We anticipate NIPN to continue this 'virtual' trend until the state of emergency is lifted.

We are very proud of policy-makers' recognition of the NIPN's role in analyzing existing data to respond to policy questions. This was evidenced by the MoH's request to NIPN to respond to additional policy questions and to inform the Food and Nutrition Strategy. The team responded swiftly, made presentations and submitted reports to the MoH's Nutrition Case Team and the special taskforce assigned to develop the strategy.

During this quarter, the NIPN

team continued to respond to the two previous policy questions related to WASH practices and nutrition and drivers of NCDs (i.e. overweight/obesity, hypertension and diabetes) in Ethiopia. Analysis of the first question was completed and a draft report submitted for internal review, whilst analysis for the second question is ongoing. Additionally, the team finalized the data mapping exercise, continued the initial processes for the data repository and activated the NIPN social media accounts. Seminar presentations, policy documents and other relevant information are now available online. This, we believe, will greatly increase NIPN's visibility and reach a larger audience.

Despite the setbacks and delays in implementation caused by COVID-19, I am proud of the NIPN team's achievements during this quarter. The challenges gave us an opportunity to 'think out of the box' and to be innovative.

The NIPN team will continue to work hard to implement the activities planned for this year and will continue to work towards better nutrition outcomes in Ethiopia.

Stay safe !

A Comprehensive NIPN Communication Strategy Finalized

In the first quarter of 2020, NIPN Ethiopia finalized its communication strategy which aims to establish effective communication among the stakeholders, including researchers, decisions makers, implementers and the general public.

The NIPN is the first national nutrition platform that links researchers with policy and programmatic decision makers. As a key platform supporting the implementation of the national Food and Nutrition Policy, the NIPN aims to deliver evidence to decision makers in a timely manner. Successful implementation of the NIPN is built on the assumption that all the stakeholders, including researchers, decisions makers, implementers and the general public, communicate successfully and contribute to the NIPN. However, communication between researchers and decision makers can be challenging.

As a first step to organize the NIPN communication strategy, a quick review carried out by the NIPN team, indicated that researchers and decision makers need to engage more with each other in order to make more evidence-informed decisions for nutrition.

Creating these linkages through effective communication is one focus of attention in NIPN. To enable a systematic approach of communication which encompasses all aspects and needs of NIPN, and to address existing communication challenges that hamper evidence-based decision making, it was im-

portant to have a coordinated and comprehensive NIPN communication strategy.

The NIPN communication strategy identifies the relevant communication challenges, maps out the NIPN activities which require communication, links those activities to specific audiences, defines the key messages and proposes the different communication channels for each audience.

This strategy is accompanied by a specific communication activity plan, incorporated into the NIPN communication annual plan, which describes the different communication channels, tools, and timelines of planned communication activities.

The strategy can be downloaded from the NIPN website - http://www.nipn.ephi.gov.et/resources

The NIPN Capacity Needs Assessment Report Launched

In 2019, the Ethiopian Public Health Institute (EPHI/NIPN) and the International Food Policy Research Institute (IFPRI) jointly conducted a NIPN Capacity Needs Assessment (CNA) to identify needs and recommend strategies to strengthen capacities for nutrition monitoring, evaluation, policy research, data, and knowledge sharing.

This assessment was carried out through a participatory process, and engaged various national institutions and universities involved in nutrition education, monitoring or research. The comprehensive assessment report was presented to the members of the national nutrition program

Monitoring, Evaluation and Research Steering Committee during a workshop in January 2020.

The NIPN CNA confirmed that sufficient nutrition-relevant data are being collected in Ethiopia, but the use of these data is not adequately exploited for further analysis. Additionally, nutrition data are collected and managed at different levels and administered by different authorities.

The management of nutrition-related data is often (Continue to P5)

Gaps in Adolescent Nutrition Service Delivery in Ethiopia
Contributed by Meron Girma (PhD)

In the past decade nutrition interventions in Ethiopia have focused on the 1000 days starting from a woman's pregnancy until her child is 2 years old. This time provides a critical window of opportunity to mitigate short and long-term consequences of malnutrition.

This focus has resulted in great success in the reduction of child undernutrition in Ethiopia. The second phase of Ethiopia's National Nutrition Program (NNP-II) will be completed by 2020. As we look to a new phase of nutrition programming in Ethiopia, the time has come to bring adolescents to the center stage. Focusing on adolescent nutrition in addition to 1000 days is an important step to address nutritional challenges before conception and child-bearing and to break the intergenerational cycle of malnutrition.

Adolescence is a period of rapid growth and high nutritional need. Optimal nutrition in this life stage has long-lasting consequences on nutrition and health. In Ethiopia 29% of adolescent girls aged 15-19 are thin (BMI < 18.5)[1], 20% are anemic and 28% are folate deficient[2]. Moreover, the median age at first birth is 19.2 years and 12.5% of teenage girls have begun child bearing[1]. Meeting nutritional needs of adolescents is especially critical in countries like Ethiopia where a significant portion of adolescent girls have their first pregnancy before the age of 18 years. Adolescent nutrition interventions provide an opportunity to improve the nutritional well-being of adolescent girls and their future offspring before conception.

Initiatives that are targeted to adolescent girls in NNP II are mainly focused on nutritional assessment, counseling and micronutrient supplementation at all contact points with health care providers. Ethiopia's National Adolescent, and Youth Health strategy (2016-2020) outlines three adolescent nutrition service delivery platforms: health facilities, schools, and youth centers.

However, contact points for adolescents within the health facilities are very limited and nutrition services provided do not uniquely target adolescents. Usually, the initial contact point for an adolescent girl with the health facility, is during her first pregnancy. Consequently, there are limited opportunities to conduct nutritional assessment and counseling for adolescents before conception. Schools are ideal contact points to reach adolescents. Although primary school enrollment is high in Ethiopia, the number of adolescent girls and older adolescents that are in secondary school is lower. Therefore, school initiatives need to be supplemented with interventions that can reach out-of-school adolescents.

Another major bottleneck to address adolescent nutrition is the lack of data on the nutrition situation of adolescents. Adolescents are not included in nationally representative health surveys such as the Ethiopia Demographic and Health Survey.
Thus, nationally representative outcome indicators for adolescent nutrition are not available.

Moreover, since adolescent nutrition indicators are not included in the Health Management Information System, data on service delivery is also very scarce. Despite initiatives such as the provision of nutrition services in youth centers included in the NNP II, data on coverage is not available. The overall lack of data makes the identification of effective delivery platforms and implementation modalities for adolescent nutrition very challenging.

If Ethiopia is to achieve global nutrition targets such as the Sustainable Development Goals and the World Health Assembly targets, nutrition programming needs to have a stronger focus on adolescent nutrition. Ongoing adolescent interventions in the health system need to be adolescent-friendly and nutrition should be included in such services. Other sectoral adolescent interventions need to be nutrition-sensitive. More attention should also be given to new ways of reaching adolescents such as mass media, social media, and peer groups. Finally, community nutrition interventions delivered through the Health Extension Program should specifically target adolescents.

References:
1. Central Statistical Agency (CSA) [Ethiopia] and ICF. 2016. *Ethiopia Demographic and Health Survey 2016*. Addis Ababa, Ethiopia, and Rockville, Maryland, USA: CSA and ICF.
2. Ethiopian Public Health Institute. 2016. Ethiopian National micronutrient survey. Addis Ababa, Ethiopia

Capacity Needs Assessment Report (Continued from P3)

hampered by the lack of a centralized data management system, the vertical nature of sectoral data collection and management mechanisms, the lack of uniformity across different monitoring systems, and inconsistent data quality.

The report explained that, overall, policy dialogue related to nutrition appears to function well, with frequent public and multi-stakeholder consultations.

Existing governance structures and coordination mechanisms facilitate interaction between researchers and policymakers. However, frequent changes in focal persons can affect this, and challenges persist in coordination of the national nutrition monitoring and research agenda.

The NIPN CNA recommended that the NIPN should play a key role in identifying, screening, and centralizing nutrition data. This would require primarily, a data-mapping exercise be done, which will provide an overview of the availability, accessibility and quality of data of interest for nutrition policy analysis. It also needs the establishment of a NIPN data and knowledge repository, which will be important to promote the access and utilization of existing nutrition relevant datasets in Ethiopia.

The NIPN CNA also highlighted the importance of defining job descriptions and education geared towards appropriate data management and influencing decision making. Universities are to strengthen their curricula related to data science, data analysis, policy research and evidence generation for policymaking.

To improve the policy dialogue between researchers and decision-makers, capacity needs to be strengthened on both sides. Research institutes and universities should

Alemayehu Hussein - presenting the CNA report

prioritize investment in nutrition monitoring, evaluation and policy research as well as improving infrastructure. Creative solutions are needed to make it easier and faster for research institutes to receive funds.

The National Food and Nutrition Policy underlines the importance of developing research and academic centers of excellence in food and nutrition, a recommendation supported by the findings of the NIPN CNA. Since one institution alone cannot provide the breadth of trainings needed for the multisectoral skill set required by nutrition researchers, collaboration among different institutions and at different levels will be essential.

The NIPN could facilitate collaboration between universities and national research institutes to ensure closer engagement with the policymaking process.

The CNA report can be downloaded from the NIPN website, www.nipn.ephi.gov.et

NIPN Responds to MoH's Request (Continued from P1)

Results from this review found that SBCC interventions were effective in improving IYCF practices and were more effective than traditional nutrition education interventions that focus on individual behavioral change.

SBCC interventions that were the most effective used multiple platforms, multiple communication channels,

reached different and segmented audiences, had multiple contact points, and used a multisectoral approach.

The two reports were shared with the MOH and findings presented to ministry staff and implementing partners.

NIPN Continues To Ensure Outreach of Evidence During the COVID-19 Crisis

Since its launch, NIPN has organized many successful Nutrition Research and Policy Seminars. During these events, various nutrition stakeholders are brought together to share policy relevant research to address malnutrition in the country. During the COVID-19 pandemic, NIPN continued this trend and in the second quarter of 2020, NIPN organized two virtual seminars.

The first, 'COVID-19 and its impact on Ethiopia's agri-food system, food security, and nutrition', was held on May 14, 2020 and was the results of the partnership between the Ethiopian Public Health Institute (EPHI), the International Food Policy Research Institute (IFPRI) and the Policy Studies Institute (PSI).

During this webinar, we looked at the impact of the COVID-19 measures, on food and nutrition security and the economy, and considered the feasibility and prospects of prevention measures for nutrition, health, and agriculture value chains.

The event included a panel of four speakers from IFPRI and Addis Ababa University (Kalle Hirvonen, Alemayehu Seyoum Taffesse, Kaleab Baye and Bart Minten) who presented their recent analysis. Various interesting points were discussed.

One of the speakers highlighted that in Addis Ababa, more than 50% of households reported a loss in income by mid- May, and about one-third reported being "extremely stressed".

The phone survey in Addis Ababa also revealed that diets were shifting away from several more nutrient dense products, but that overall food security situation was not yet alarming, possibly because most households have used their savings to buffer food consumption. However, it is expected that these savings may not last for long.

Another presenter showed how he used DHS data to identify which communication platforms are most likely to be most effective in providing guidance to all Ethiopians on how best to prevent COVID-19 transmission. He also reviewed to what extent the basic public health measures, such as hand washing and social distancing, can be adopted in different parts of Ethiopia.

Another presentation highlighted how some misconceptions about the transmission mode and COVID-19 related restrictions on movement also influence the diets of households. The experts further expanded on the consequences of the crisis on the economy and on the agriculture value chains, including milk and some animal sourced foods.

Following these short presentations, a question and answer session was organized, involving many different experts, sectors and institutions. Approximately 220 participants attended the webinar. You can find the recording of the event here and the presentations here.

The second webinar, 'the role of Vitamin D in treating COVID-19 patients', was organized by EPHI, in collaboration with the University of Saskatchewan, Canada and IFPRI on May 29, 2020. During the webinar, recent evidence on global research on vitamin D was presented. The potential benefit of Vitamin D with respect to its immunomodulatory, anti-inflammatory anti-fibrotic, and antioxidant actions was explained by Dr. Susan J. Whiting (Distinguished Professor Emeritus of Nutrition at College of Pharmacy and Nutrition from University of Saskatchewan). In addition, the association of the disease progression with respect to the excess or deficient concentrations of vitamin D was also discussed.

Dr. Susan concluded her presentation by highlighting the role of vitamin D in inflammation and immune response. She also stressed that vitamin D deficiency is common in Ethiopia and especially women and urban populations are most at risk. She concluded that the vitamin D status affects COVID-19 outcomes and requires the necessary attention.

Following the presentation, three panelists (Dr. Feyissa Regassa from EPHI, PHEM EOC, Dr Dawit Kebede, pulmonary and critical care subspecialist from Eka Hospital and Dr Tibebeselassie Seyoum Keflie from University of Hohenheim) provided their reflections, followed by questions from the participants. The presentation can be downloaded from our website -http://nipn.ephi.gov.et/research-seminar-presentation.

Identifying Drivers of Non-communicable Diseases in Ethiopia:
An Approach Using Causal Path Diagrams
Contributed by Tom Norris

On 5th June 2020, the NIPN team hosted an online webinar with a number of invited experts in the fields of nutrition, non-communicable diseases (NCDs), epidemiology and public health.

The purpose of the meeting was part of an on-going analysis the team is conducting which seeks to respond to a relevant policy need as identified by NIPN stakeholders, namely, *what are the drivers of non-communicable diseases (i.e. overweight/obesity, hypertension and diabetes) in Ethiopia?* The seminar represented an opportunity for the NIPN team to draw upon the expert knowledge of these collaborators which could then be incorporated into a set of *causal path diagrams* which have been constructed as part of the methodological framework underpinning the analysis.

What are causal path diagrams? Otherwise known as 'directed acyclic graphs' (DAGs), these are causal diagrams which provide a method for visualising relationships between variables (Moodie & Stephens 2010), thereby informing the process of building causal models (Bodnar & Nelson 2004). By identifying variables that confound the relationship between two variables, DAGs provide researchers with a set of variables for which adjustment is necessary (or unnecessary) in order to obtain unbiased (or less biased) estimates of the causal relationship between two variables.

The construction of these DAGs are based on a combination of a comprehensive literature review of the research topic (i.e. drivers of NCDs) alongside, crucially, specialist knowledge from experts in the fields related to the research topic (here nutrition, chronic disease epidemiology and public health).

Typically the causal path diagrams are drawn during these consultative meetings with the invited experts, however, in order to facilitate the process, the NIPN team had already prepared a set of preliminary causal diagrams based on a rapid literature review which they conducted. The search was conducted in Pubmed on 27th April 2020 and identified 3442 studies which had sought to identify any predictors of overweight/obesity, hypertension and diabetes in Sub-Saharan Africa.

Identified drivers were extracted and collated by four members of the team. Availability of these drivers were then checked in the datasets which have been identified for use (Ethiopia Demographic Health Survey and NCD STEPS survey).

With this set of identified drivers, the next step was to map out how these were all related to the respective outcomes, and importantly, related to each other. This was done using a piece of software called 'DAGitty' (www.dagitty.net) (Textor et al. 2016).

DAGitty applies graphical model theory to identify which variables you need to adjust for in your multivariable analysis in order to remove confounding. However, the user is the one who feeds the variables into the software and tells DAGitty which variables are (and are not related), i.e. the model is only as good as the things you put in.

Based on what the user tells it, DAGitty will then report back a set of adjustments that need to be made in the multivariable models in order to remove confounding from the model we have drawn and thus obtain unbiased (or less-biased) estimates of the association between any given exposure/predictor/driver and outcome variable. The reliance of the software on the information included by the user is why it is vital to have as many experts involved in the DAG-building process as possible.

For illustrative purposes, a hypothetical DAG can be seen overleaf (exploring the relationship between diet and diabetes). DAGs such as these are being used to inform the next stage of our analysis in which separate multivariable models relating individual drivers to the non-communicable outcomes will be run, with adjustment for the confounding variables identified by DAGitty.
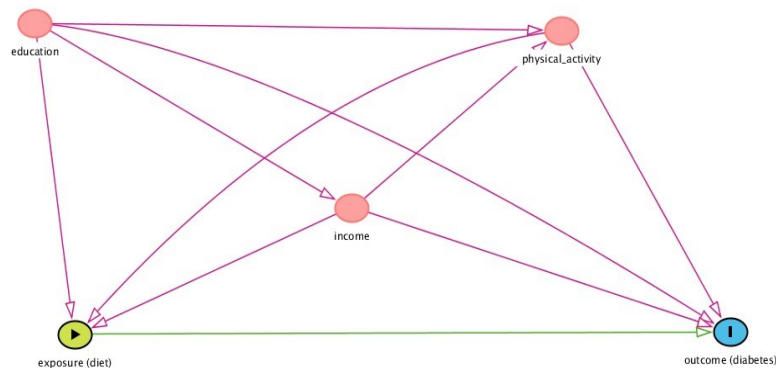
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