



# Assessment of Nutrition Competencies among Tutors Teaching Nutrition in Nursing, Midwifery, and Community Nutrition Programs

October 2013



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**Contact information:**

Director  
Human Resource for Health Development (HRHD)  
Ministry of Health  
P.O. Box M 44  
Ministries  
Accra, Ghana  
Email: [info@moh.gov.gh](mailto:info@moh.gov.gh)  
Telephone: +233 302 663810  
Fax: +233 302 665651

Deputy Director – Nutrition  
Nutrition Department  
Ghana Health Service  
P.O. Box M78  
Accra, Ghana  
Email: [nutrition@ghsmai.org](mailto:nutrition@ghsmai.org)  
Telephone: +233 (0) 302 604278,  
+233 (0) 302 665001  
Fax: +233 (0)302 -662 778

Food and Nutrition Technical Assistance III Project  
(FANTA)  
FHI 360  
1825 Connecticut Avenue, NW  
Washington, DC 20009-5721  
Tel: 202-884-8000  
Fax: 202-884-8432  
Email: [fantamail@fhi360.org](mailto:fantamail@fhi360.org)  
Website: [www.fantaproject.org](http://www.fantaproject.org)

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Dr. Gloria Quansha-Asare	GHS/Family Health Division
Ms. Wilhelmina Okwabi,	GHS/Nutrition Department
Mr. Michael A. Neequaye,	GHS/Nutrition Department
Ms. Kate Quarshie	GHS/Nutrition Department
Ms. Esi Amuoaful	GHS/Nutrition Department
Ms. Hannah Adjei	GHS/Nutrition Department
Ms. Josephine Asante	GHS/Nutrition Department
Ms. Gifty Donkor	GHS/Greater Accra Region
Ms. Ruby Dovlo	GHS/Greater Accra Region
Dr. Frank Nyonator	MOH/HRHD
Mr. Lawrence Lawson	MOH/HRHD
Ms. Ivy Efua Sackey	MOH/HRHD
Dr. Richmond Aryitee	University of Ghana, School of Public Health
Dr. Anthony K. Edusei	Kwame Nkurumah University of Science and Technology
Ms. Akosua Akwakye	WHO/Ghana
Ms. Gloria Obeng-Amoako	UNICEF/Ghana
Ms. Lillian Selenje	UNICEF/Ghana
Ms. Chantelle Allen	MCHIP/Jhpiego
Ms. Martha Appiagyei	MCHIP/Jhpiego
Ms. Dora L. K. Agbodza	MCHIP/Jhpiego
Ms. Etta Addo	MCHIP/Jhpiego
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## Contents

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Acknowledgments.....	i
Contents.....	ii
Abbreviations and Acronyms.....	iii
<b>1 Background .....</b>	<b>1</b>
<b>2 Assessment Design and Method.....</b>	<b>3</b>
2.1 Selection of Nursing and Midwifery Schools.....	3
2.2 Selection of Tutors to Participate in the Assessment.....	4
<b>3 Findings and Discussion.....</b>	<b>5</b>
<b>4 Recommendations.....</b>	<b>8</b>
<b>Annex 1: Content Updates for Ghana’s 2007 Nurses and Midwives Curriculum .....</b>	<b>9</b>
<b>Annex 2: Knowledge Assessment Tools .....</b>	<b>13</b>
<b>Annex 3: Skills Assessment Tools .....</b>	<b>22</b>

### TABLES AND FIGURES

<b>Table 1: List of Nursing and Midwifery Schools that Participated in the Assessment .....</b>	<b>3</b>
<b>Table 2: Classification of Tutor Scores .....</b>	<b>4</b>
<b>Table 3: Summary of Tutor Performance on the Assessed Nutrition Competencies .....</b>	<b>5</b>
<b>Table 4: Summary of Tutor’s Performance in the Demonstration Sessions.....</b>	<b>5</b>
<b>Figure 1: Comparison of Tutor’s Knowledge by Training Program.....</b>	<b>6</b>
<b>Figure 2: Comparison of Performance in Demonstration Sessions by Training Program.....</b>	<b>6</b>
<b>Figure 3: Comparison of Knowledge and Skills.....</b>	<b>7</b>

## Abbreviations and Acronyms

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CHNTC	community health nursing training college
CHN	community health nursing (certificate program)
CMAM	Community-Based Management of Acute Malnutrition
FANTA	Food and Nutrition Technical Assistance III Project
GHS	Ghana Health Service
HRHD	Human Resource for Health Development
IYCF	infant and young child feeding
MCHIP	Maternal and Child Health Integrated Program
MDW	midwifery
MOH	Ministry of Health
MTC	midwifery training college
MUAC	mid-upper arm circumference
NTC	nursing training college
RCN	community health nursing (diploma)
RGN	registered general nursing
RUTF	ready-to-use therapeutic food
SAM	severe acute malnutrition
USAID	U.S. Agency for International Development

# 1 Background

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The 2008 *Lancet* series on maternal and child undernutrition classified Ghana as among the 36 countries with the highest burden of childhood chronic undernutrition globally<sup>1</sup>. Undernutrition, especially among women of reproductive age and children, is a major public health and development challenge in Ghana. Undernutrition is characterized by high rates of stunting, underweight, wasting, and micronutrient deficiencies throughout the country, with some variation by region. The northern regions (Upper East, Upper West, and Northern) and Central Region have the highest rates of stunting and wasting, which are closely linked with disease and food insecurity. Concurrent with undernutrition, overnutrition, including overweight and obesity, has resulted in increasing rates of non-communicable diseases such as hypertension, diabetes, cardiovascular diseases, and gout, which are emerging health concerns in Ghana.

To address the high rates of malnutrition, which includes both undernutrition and overnutrition, the Ministry of Health/Ghana Health Service (MOH/GHS) and other Government of Ghana ministries have implemented a number of interventions to prevent and control these nutrition concerns. On-going nutrition-specific interventions include:

- Micronutrient supplementation and food fortification
- Management of moderate acute malnutrition in food insecure areas through targeted supplementary feeding
- Management of severe acute malnutrition (SAM)
- Promotion of optimal breastfeeding practices
- Appropriate infant and young child feeding (IYCF) practices
- Maternal health and nutrition

Additionally, nutrition-sensitive interventions such as actions to increase food security, provide adequate health care, control and treat disease, improve hygiene and sanitation, increase education, and reduce poverty are supported by relevant sectors and address underlying causes of malnutrition. Implementation strategies, guidelines, and protocols have been developed for both nutrition-specific and nutrition-sensitive interventions. However, many of these strategies, guidelines, and protocols have not been widely disseminated to pre-service training institutions.

The MOH/GHS has also conducted in-service training covering various topics such as: IYCF, management of SAM, Essential Nutrition Actions (ENAs), growth monitoring and promotion, Integrated Management of Neonatal and Childhood Illness (IMNCI), supplementary feeding, and nutrition assessment, counselling, and support (NACS). A major challenge associated with the in-service training has been the high rates of attrition among nurses, leading to the need for frequent repetitions of in-service training and reduced quality of service delivery<sup>2</sup>.

Nurses and midwives play a vital role as frontline health care providers and are often responsible for delivering nutrition services at the facility and community levels. It is essential that all nurses and midwives have the necessary knowledge and skills to deliver quality nutrition services and are abreast of the most recent policies, strategies, guidelines, and protocols on nutrition in Ghana.

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<sup>1</sup> Black R.E.; Allen, L.H.; Bhutta, Z.A.; et al. 2008. "Maternal and child undernutrition: global and regional exposures and health consequences." *The Lancet*. Vol. 371, pp. 243–60.

<sup>2</sup> Crommett. 2008. "The Effect of Nurse Migration on the Provision of Health Services in Ghana." *Georgetown Undergraduate Journal of Health Sciences*. Vol. 5, No. 1. Available at <https://blogs.commonsgorgetown.edu/journal-of-health-sciences/issues-2/previous-volumes/vol-5-no-1-april-2008/the-effect-of-nurse-migration-on-the-provision-of-health-services-in-ghana/>.

The recently developed National Nutrition Policy provides a comprehensive nutrition programming framework including relevant multi-sector linkages. The National Nutrition Policy aims to increase the coverage of high impact nutrition-specific and nutrition-sensitive interventions and create an enabling environment for nutrition by repositioning it as a priority multi-sectorial development issue. As part of strengthening the enabling environment, the nutrition policy identifies one key strategic measure as the need to build institutional and human capacity by enhancing nutrition in pre-service and continuous education among all nutrition service providers within the health and other relevant sectors.

In collaboration with MOH/GHS, FANTA and MCHIP are implementing a competency-based training approach to strengthen nutrition in pre-service training of nurses, midwives, and community nutrition officers. The process consists of eight steps:

1. Holding a stakeholders consultation to define tutor competencies in nutrition, standards, and means of verifying competencies
2. Designing and conducting an assessment of the current nutrition curricula and an assessment of tutor competencies
3. Analysing results and prioritizing gaps to focus on in technical updates and training of tutors
4. Using existing training and reference materials to refine technical updates for tutors
5. Conducting technical updates and training for tutors teaching nutrition in the various nursing and midwifery schools
6. Providing mentoring and supportive supervision to the schools
7. Conducting a post assessment of tutor competencies
8. Formulating and submitting recommendations to the Nurses and Midwives Council for inclusion in the revised curriculum

This report provides findings and recommendations of the assessment of tutor competencies (step 2), which was conducted within selected nursing and midwifery programs and within the Kintampo College of Health and Well-being.

## 2 Assessment Design and Method

The objective of the assessment was to assess the knowledge and skills of tutors teaching nutrition within selected nursing and midwifery programs and within the Kintampo College of Health and Well-being. The assessment was carried out over a period of seven days; the nursing and midwifery schools were assessed from May 20–25, 2013 and Kintampo College of Health and Well-being was assessed from August 12–13, 2013.

The assessment targeted tutors within the selected community and public health nursing, registered general nursing, and midwifery schools and the Kintampo College of Health and Well-being. All tutors teaching nutrition as a basic course or nutrition as an applied course were eligible for the assessment.

In selecting the nursing and midwifery schools to be assessed, a cluster sampling procedure was followed. The Kintampo College of Health and Well-being was purposely selected to participate in the assessment because it is the only MOH college that offers a community nutrition diploma.

### 2.1 Selection of Nursing and Midwifery Schools

Random sampling was used to select nine nursing and midwifery schools in Ghana. The criteria for selecting the schools were based on the location and type of school.

**Location.** Three schools were selected from each of the three main zones in Ghana:

1. The northern zone covered the Northern, Upper East, and Upper West regions
2. The middle zone covered Ashanti, Brong Ahafo, and Volta regions
3. The southern zone covered Central, Eastern, and Greater Accra and Western regions

**Type.** During the selection, considerations were made to ensure that at least one community health nursing training college (CHNTC), one nursing training college (NTC), and one midwifery training college (MTC) were represented among the selected schools. The following table provides a summary of the nursing and midwifery schools that participated in the assessment.

**Table 1: List of Nursing and Midwifery Schools that Participated in the Assessment**

Zone	Region	Selected School	Training Program
Northern	Northern	Tamale NTC	Registered General Nursing
	Upper East	Bolga MTC	Midwifery
	Upper West	Jirapa CHNTC	Community Health Nursing
Middle	Ashanti	Fomena CHNTC	Community Health Nursing
	Brong Ahafo	Breku MTC	Midwifery
	Volta	HO NTC	Registered General Nursing
Southern	Central	Cape Coast NTC	Registered General Nursing
	Western	Esiam CHNTC	Community Health Nursing
	Eastern	Koforudia MTC	Midwifery

## 2.2 Selection of Tutors to Participate in the Assessment

Each of the schools had at least one tutor teaching nutrition as a basic or applied course. All of the eligible tutors in each of the selected schools were included in the assessment. Names of the tutors participating in the assessment were not collected; a unique identification number was used to identify the tutors and schools participating in the assessment. Each tutor participating in the assessment was asked to consent to participation prior to conducting the assessment.

Three assessment teams each comprising at least two people, a nutritionist and an expert in pre-service training, assessed nutrition competencies of tutors under the following categories:

- Basic nutrition
- Nutrition assessment (anthropometry and clinical)
- Nutrition counselling on IYCF
- Outpatient care management of SAM without medical complications
- Inpatient care management of SAM with medical complications
- Maternal nutrition
- Breastfeeding and lactation management
- Complementary feeding
- Prevention of micronutrient deficiencies

To assess the tutor's nutrition knowledge, the assessors administered questions covering the above listed nutrition competencies. Each of the assessors completed a questionnaire checklist consisting of performance standards and verification criteria for the competency areas. See Annex 2 for the knowledge assessment tool.

In assessing the tutor's skills, case studies and simulations were designed in the form of Objective Structured Clinical Examinations (OSCE). Tutors were asked to demonstrate how to conduct and educate on nutrition assessment and nutrition counselling on IYCF. Tutors were scored based on observation of the tutor's performance using a checklist with nutrition competency performance standards and verification criteria. See Annex 3 for the skills assessment tool.

At the end of each assessment, the assessors compiled their scores into one final questionnaire which was used for the data analysis.

The assessors analysed data from the ten schools. Individual scores were entered into an Excel spreadsheet and tallies and averages were computed for each assessed competency area. Each tutor's total score was also computed and grouped by type of training program taught. The assessment team grouped the tutors' scores into three categories as shown below:

**Table 2: Grouping of Tutor Scores**

Score	Classification
0% to 33.3%	Poor
33.4% to 66.7%	Average
66.8% to 100%	Good

Assessors also analysed the qualitative data, which included additional responses on tutors' knowledge of what was currently taught in nutrition courses and identified curriculum gaps.

### 3 Findings and Discussion

Generally, tutors performed poorly on the assessed nutrition competencies, which is an indication of their limited capacity to adequately educate students on the priority nutrition competencies. Tables 3 and 4 provide a summary of performance for each competency area assessed.

**Table 3: Summary of Tutor Performance in Knowledge Assessment**

Competency Area	Average Score (%)	Classification
Basic nutrition	45%	Average
Nutrition assessment (anthropometry and clinical)	64%	Average
Outpatient care management of SAM without medical complications	0%	Poor
Inpatient care management of SAM with medical complications	7%	Poor
Breastfeeding and lactation management	22%	Poor
Complementary feeding	52%	Average
Maternal nutrition	11%	Poor
Prevention of micronutrient deficiencies	71%	Good

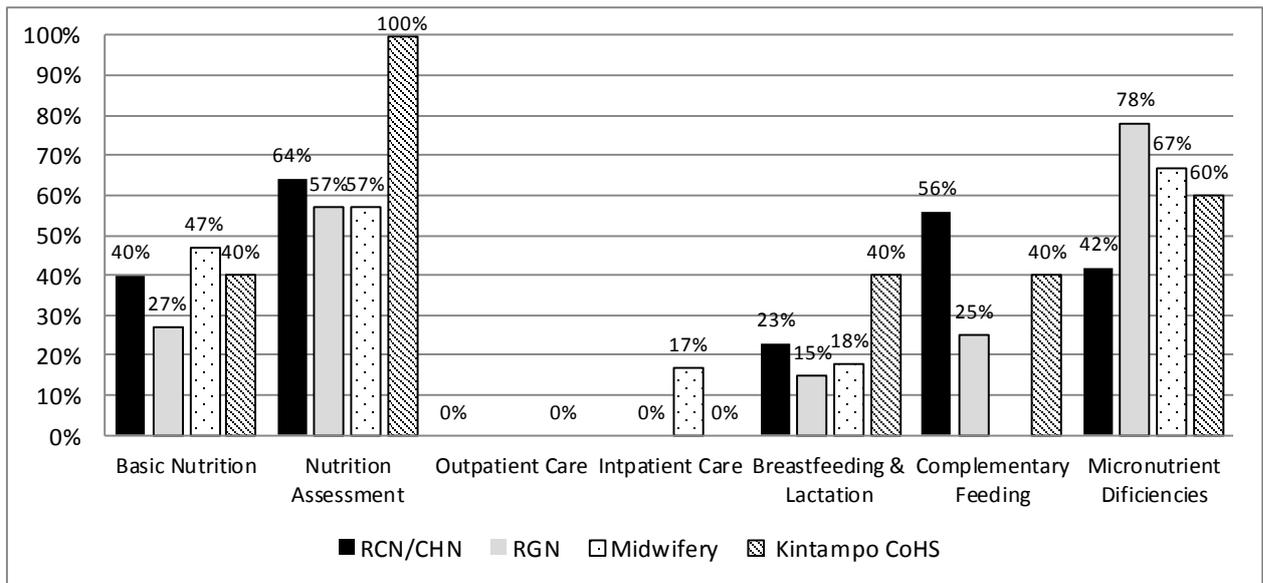
**Table 4: Summary of Tutor Performance in Skills Demonstration**

Competency Area	Average Score (%)	Classification
Nutrition assessment	20%	Poor
Nutrition counselling on IYCF	3%	Poor

As reflected in Table 3, tutors scored poorly in the management of SAM in outpatient and inpatient care, maternal nutrition, and breast feeding and lactation management. All of the tutors indicated that the management of SAM in outpatient care and inpatient care was a relatively new approach; they were aware of the approach but did not teach it in their courses because it was not included in the 2007 nurses and midwives curriculum. There was a general lack of knowledge about the link between poor maternal nutrition and malnutrition of infants and children. Although IYCF is part of the current curriculum, the majority of the tutors were not familiar with important issues relating to breastfeeding and lactation management such as common breastfeeding problems and managing them. The tutors also reported that they were unaware of the 2010 breastfeeding recommendations for HIV-positive mothers.

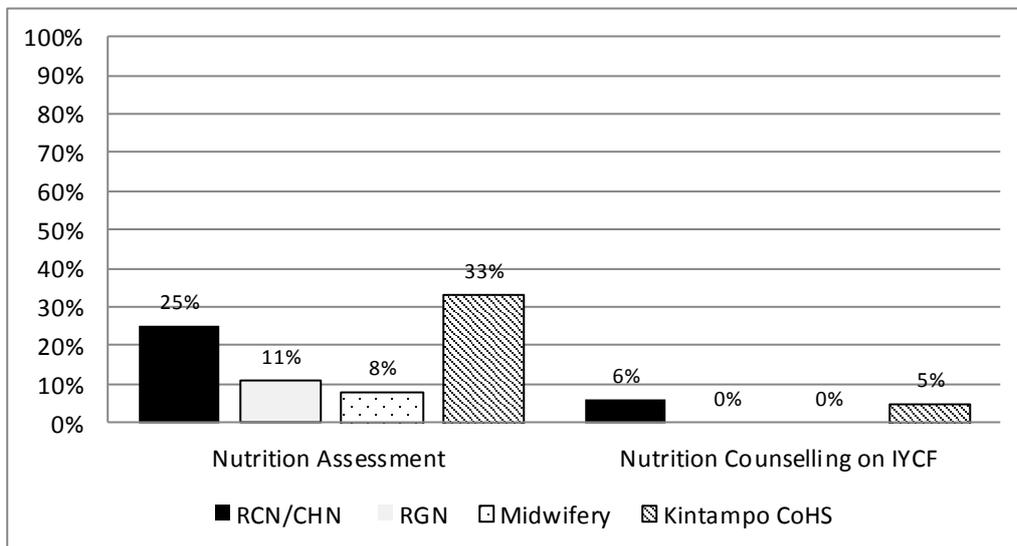
There was very little difference in the knowledge of tutors teaching nutrition in the community health nursing diploma/certificate (RCN/CHN) programs, midwifery (MDW) programs, registered general nursing (RGN) programs, and the community nutrition program at Kintampo College of Health and Well-being. The only notable difference was that tutors teaching at Kintampo College of Health and Well-being performed very well in nutrition assessment, and it was noted that the community nutrition program curriculum covered nutrition assessment in much more detail than the nursing and midwifery training schools. Figure 1 displays knowledge performance of tutors according to the training programs they teach.

**Figure 1: Comparison of Tutor’s Knowledge by Training Program**



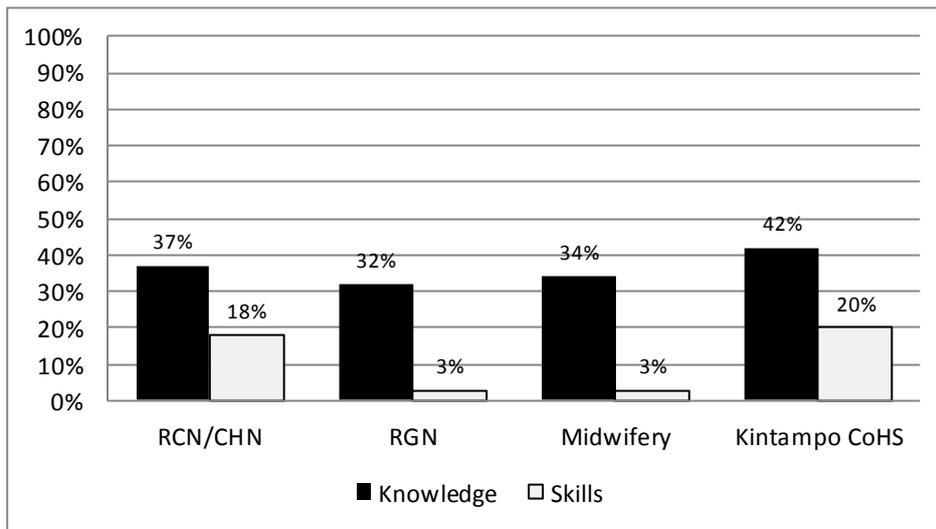
The skills assessment tested competencies in nutrition assessment and counselling on IYCF. As shown in Table 4, demonstration of these competencies were poorly performed, indicating a lack of appropriate skillsets in nutrition assessment and counselling. Figure 2 shows that the poor performance on the demonstration of nutrition assessment and counselling skills cuts across all tutors irrespective of the training program taught.

**Figure 2: Comparison of Performance in Demonstration Sessions by Training Program**



As seen in Figure 3, tutors’ scored higher on the knowledge assessment than on the skills demonstration. Many tutors confirmed that there were very few practical sessions conducted on nutrition within the four training programs and it is possible that if the tutors do not have the appropriate skills to conduct the nutrition assessment and counselling, they will not have the confidence to educate students on conducting nutrition assessment and counselling.

**Figure 3: Comparison of Knowledge and Skills**



The assessment also found that the 2007 nurses and midwives curriculum, which was used during the 2012/2013 academic year, did not contain updated nutrition content and tutors had not received any technical updates on the current nutrition policies, strategies, and approaches. Linkages between the basic nutrition course and the other courses in which nutrition was supposed to be applied (e.g., child health, paediatrics, obstetrics, and health promotion) were not clearly defined within the curriculum. Often different tutors taught the basic nutrition course and aspects of nutrition within courses in which nutrition was applied, leading to important aspects of nutrition not being adequately covered in the training program. It was also noted that some of the tutors teaching the basic nutrition course or applying nutrition in another course did not have a nutrition background and had not received any nutrition technical update or training.

There was also a lack of standardised reference materials to educate on nutrition; tutors reported using Google searches, newspapers, and sometimes collating information from the nearest GHS regional and district offices to supplement their teaching materials. Demonstration laboratories were also not adequately equipped. Schools were lacking electronic adult and baby weighing scales, mid-upper arm circumference (MUAC) tapes, body mass index (BMI) wheels, counselling tools, nutrition guidelines, and treatment protocols.

## 4 Recommendations

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Based on the results of the assessment of tutor knowledge and skills, the following recommendations were made.

1. Provide technical updates to tutors on the current nutrition policy issues, strategies, and approaches to address malnutrition.
2. Conduct a series of trainings covering competency areas where tutors performed poorly. The identified training courses include:
  - a. Integrated course on infant and young child feeding.
  - b. Community-Based Management of Acute Malnutrition.
  - c. Inpatient care management of severe acute malnutrition.
3. Provide tutors with standardized teaching guides and reference materials for teaching nutrition.
4. Equip schools with the required job aids and resources for teaching nutrition.
5. Update the 2007 nurses and midwives curriculum to reflect current nutrition policy issues in Ghana. Annex 1 provides a summary of recommendations for updates to the RCN, CHN, RGN, and MDW training curriculums.
6. Institutionalise a system for providing regular updates to tutors on global and Ghana-specific nutrition policies and other issues in between curriculum reviews and updates.

## Annex 1: Content Updates for Ghana’s 2007 Nurses and Midwives Curriculum

The following table provides a summary of nutrition content updates that have been identified for courses for the following training programs: Registered General Nursing (RGN), Midwifery (MDW), Community Health Nursing (diploma) (RCN), and Community Health Nursing (certificate) (CHN).

Course Title	Nutrition Content Updates	Diploma Training Program			Certificate Training Program
		RGN Course Code	MDW Course Code	RCN Course Code	CHN Course Code
Anatomy & physiology II	Explain how nutrients are digested and absorbed	H RGN 020	H MDW 020	H RCN 020	
Psychology in nursing	Human growth and development: growth cycle, factors influencing growth, and development	H RGN 028	H MDW 017	H RCN 026	
Nutrition and dietetics	1. Nutrition and health: explanation of nutrition and relation of nutrition to health	H RGN 033	H MDW 040	H RCN 033	H CHN 028
	2. Nutrients, food sources, and functions: three food groups				
	3. Nutrition needs throughout the lifecycle: pregnancy, lactation, infancy, childhood, adolescent, adulthood, aged				
	4. Nutritional status assessment of individuals and communities: anthropometry, clinical, dietary, biochemical				
	5. Types of malnutrition, causes, and consequences; conceptual framework of malnutrition; and nutrition situation in Ghana				
	6. Undernutrition: signs, symptoms, causes, management, and prevention: stunting, acute malnutrition, underweight, micronutrient deficiencies (vitamin A, iron, and iodine)				
	7. Overnutrition and diet-related diseases: causes, management, and prevention (diabetes, hypertension, gastric and duodenal ulcers, obesity)				
	8. Factors that influence food consumption and habits: food security (availability, access, and utilisation), food habits, and storage; planning and budgeting a menu				

Course Title	Nutrition Content Updates	Diploma Training Program			Certificate Training Program
		RGN Course Code	MDW Course Code	RCN Course Code	CHN Course Code
	9. Nutrition interventions and policies in Ghana: promotion of optimal breastfeeding practices; promotion of appropriate complementary feeding; improved hygienic practices; vitamin A supplementation; zinc supplements for diarrhoea management; deworming; iron and folic acid supplementation for pregnant women; salt iodization; fortification of staple foods such as oil and flour; prevention and treatment of moderate acute malnutrition with special foods; treatment of severe acute malnutrition (SAM) with ready-to-use therapeutic food (RUTF); promotion of consumption of diversified diets; promotion of healthy lifestyle  10. Approaches used to implement nutrition interventions in Ghana: use of Essential Nutrition Actions at various health contact points; Integrated Management of Neonatal and Childhood Illness; community and facility-based infant and young child feeding; community and facility-based growth monitoring and promotion; child health weeks and mass campaigns; school health education programs  11. The role of the dietician and/or nutritionist in the health team  12. Nutrition education and counselling: the role of the nurse/midwife and dietician in nutrition education and counselling				
Principles of disease management and control I	Principles of prevention and control: use of zinc for diarrhoea management			H RCN 040	H CHN 050
Medical nursing I/II	Prevention of mother-to-child transmission of HIV: nutrition care for people living with HIV and TB patients; nutrition, care, and support in the context of HIV and/or TB; new recommendations for HIV-positive mothers	H RGN 040	H MDW 031	H RCN 050	H CHN 080
Principles of disease management and control II	Nutrition management of diet-related non-communicable diseases (hypertension and diabetes)	H RGN 060	H MDW 031		
Intro to pharma & therapeutics	Therapeutic feeding and preparation: RUTF, F-100, F-75, Rehydration Solution for Malnutrition, combined mineral and vitamin mix	H RGN 037	H MDW 039	H RCN 062	

Course Title	Nutrition Content Updates	Diploma Training Program			Certificate Training Program
		RGN Course Code	MDW Course Code	RCN Course Code	CHN Course Code
Obstetric nursing/physiology & management of normal puerperium and the neonate	Antenatal care: iron/folate supplementation, dietary intake, and dietary diversity; new iron and folic acid regime and counselling	H NUR 051	H MDW 042	H RCN 062	H CHN 031
	Postnatal care: vitamin A, iron and folic acid supplementation, dietary intake, and dietary diversity				
	Neonatal care: early initiation and exclusive breastfeeding				
	New recommendations for prevention of mother-to-child transmission of HIV				
Traditional medicine and gerontology	Physical care: feeding and nutrition	H RGN 055		H RCN 066	
Paediatric nursing/child health	Growth and development	H RGN 064		H RCN 060	H CHN 026
	Assessment of growth using new World Health Organisation standards; assessment of development (using anthropometric measurements); plotting and interpreting weight				
	Infant and young child feeding (IYCF); and HIV and infant feeding				
	Integrated Management of Neonatal and Childhood Illness (IMNCI)				
	Community-based Management of Acute Malnutrition: outpatient care				
	Severe acute malnutrition: inpatient care				
	Health education of parents and other caretakers in relation to feeding				
	Nutrition disorders: kwashiorkor, marasmus, scurvy, etc.				
Advanced nursing	Nursing care for children with severe acute malnutrition with medical complications (inpatient care)	H RGN 031			
Personal and environmental health	Exercise and food hygiene			H RCN 022	H CHN 015
Principles & practice of community nursing & admin I/child health	School meals	H RGN 068		H RCN 070	H CHN 026
Primary eye care and oral health	Xerophthalmia; oral care (sugar/dental caries/toothpaste)			H RCN 057	

Course Title	Nutrition Content Updates	Diploma Training Program			Certificate Training Program
		RGN Course Code	MDW Course Code	RCN Course Code	CHN Course Code
Social science	Sociocultural considerations; prolonged breastfeeding; food taboos				H CHN 013
Community health nursing 1	Home visits: identification, referral, and follow-up of children with severe acute malnutrition; conducting community IYCF counselling			H RCN 070	H CHN 010
Health promotion	Counselling on IYCF using the “3 A’s” (assess, analyse, and act)	H RGN 024	H MDW 037	H RCN 024	H CHN 022
	Listening and learning skills, confidence building, and support-giving skills				

## Annex 2: Knowledge Assessment Tools

### A. Basic Nutrition

Performance Standard	Verification Criteria	Y/N	Comment
1. Tutor defines malnutrition	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Defines <b>malnutrition</b> as undernutrition and overnutrition		
2. Tutor lists the four forms of undernutrition	Explains the <b>four forms of undernutrition</b> as: 1) stunting, 2) acute malnutrition, 3) underweight and 4) micronutrient deficiencies:		
3. Tutor lists the two forms of overnutrition	Explains the <b>two forms of overnutrition</b> as: 1) overweight and 2) obesity		
4. Tutor explains the causes of malnutrition using the conceptual framework of malnutrition	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Explains the <b>immediate causes</b> of malnutrition as: <ul style="list-style-type: none"> <li>Inadequate food intake</li> <li>disease/infections</li> </ul>		
	Explains the <b>underlying causes</b> of malnutrition as: <ul style="list-style-type: none"> <li>Inadequate and inappropriate caring practices</li> <li>Food insecurity</li> </ul>		
	<ul style="list-style-type: none"> <li>Poor access to health care and water, sanitation and hygiene practices</li> </ul>		
	Explains the <b>basic causes</b> of malnutrition as: <ul style="list-style-type: none"> <li>Political, economic, cultural and ideological structure</li> </ul>		
5. Tutor explains the consequences malnutrition	Explains the <b>consequences</b> of malnutrition <ul style="list-style-type: none"> <li>Death</li> <li>Disease</li> <li>Disability</li> </ul>		

### B. Nutrition Assessment (Anthropometry)

Performance Standard	Verification Criteria	Y/N	Comment
6. Tutor describes how to weigh using a hanging scale	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Hangs up the scale on firm support and at eye level		
	Standardizes the scale using an object of known weight and ensures that the arrow is at zero (always standardizes after weighing 10-15 children)		
	Asks mother to remove the child's clothing leaving only light under clothing		
	Assists the mother to place the child in weighing pants, puts the loop of the pant over the hook of the scale and lets the child hang freely touching nothing with one arm in-front and the other behind the straps to help maintain balance		
	Reads the child's weight at eye level when the arrow is steady		
	Records the child's weight to the nearest 0.1kg (e.g. 4.7kg)		

**C. Nutrition Assessment (Clinical)**

Performance Standard	Verification Criteria	Y/N	Comment
7. Tutor explains how to recognize signs and symptoms of <b>wasting</b>	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	<b>Provides at least three signs/symptoms of marasmus:</b>		
	<ul style="list-style-type: none"> <li>Child has an “old man” look - loss of fat on the face</li> </ul>		
	<ul style="list-style-type: none"> <li>Has baggy pants (loose skin around the buttock)</li> </ul>		
	<ul style="list-style-type: none"> <li>Loss of fat and muscle around the ribs</li> </ul>		
8. Tutor explains how to recognize signs and symptoms of <b>kwashiorkor</b>	<b>Provides at least two signs/symptoms of kwashiorkor:</b>		
	<ul style="list-style-type: none"> <li>Child looks swollen with puffy face</li> </ul>		
	<ul style="list-style-type: none"> <li>Bilateral pitting oedema of both feet (bilateral pitting oedema)</li> </ul>		
9. Tutor explains how to recognize signs and symptoms of <b>Vitamin A Deficiency</b>	<b>Provides at least three signs/symptoms of eye signs of vitamin A deficiency:</b>		
	<ul style="list-style-type: none"> <li>Superficial foamy white spots on the conjunctiva (bitot’s spots)</li> </ul>		
	<ul style="list-style-type: none"> <li>Opaque appearance of the cornea (corneal clouding)</li> </ul>		
	<ul style="list-style-type: none"> <li>A break in the surface of the cornea (corneal ulceration)</li> </ul>		
10. Tutor explains how to recognize signs and symptoms of <b>Iron Deficiency Anemia</b>	<b>Provides at least three signs/symptoms of iron deficiency anemia:</b>		
	<ul style="list-style-type: none"> <li>Pale conjunctivae (inner eyelid)</li> </ul>		
	<ul style="list-style-type: none"> <li>Pale nail beds, gums, tongue, lips and skin</li> </ul>		
	<ul style="list-style-type: none"> <li>Tiredness</li> </ul>		
	<ul style="list-style-type: none"> <li>Headaches</li> </ul>		
11. Tutor explains how to recognize signs and symptoms of <b>IDD</b>	<b>Provides at one signs/symptoms of iodine deficiency:</b>		
	<ul style="list-style-type: none"> <li>Goitre (visibly enlarged thyroid)</li> </ul>		
12. Tutor describes how to conduct an Ready to Use Therapeutic Food (RUTF) appetite test	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Explains the procedure as follows: Explains to the caregiver the procedure		
	<ul style="list-style-type: none"> <li>Washes hands with soap under running water and asks caregiver and child to wash hands with soap and water</li> </ul>		
	<ul style="list-style-type: none"> <li>Administers RUTF</li> </ul>		
	<ul style="list-style-type: none"> <li>Provides safe drinking water to client</li> </ul>		
	<ul style="list-style-type: none"> <li>Observes the child eating the RUTF for about 20-30 minutes</li> </ul>		
	<ul style="list-style-type: none"> <li>Determines whether child passes appetite test if they consume 1/3 of a packet in 30 minutes</li> </ul>		
<ul style="list-style-type: none"> <li>Refers if child fails appetite test(Unable to eat at least 1/3 of RUTF)</li> </ul>			

**D. Outpatient Care Management of Severe Acute Malnutrition (SAM) without Medical Complications**

Performance Standard	Verification Criteria	Y/N	Comment
13. Tutor outlines recommended criteria for admitting a child into outpatient care	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Explains the recommended criteria for admission in outpatient care		
	<ul style="list-style-type: none"> <li>Bilateral pitting oedema +, ++</li> </ul>		
	<ul style="list-style-type: none"> <li>MUAC &lt;11.5 cm</li> <li>Child clinically well, alert and has a good appetite</li> </ul>		
14. Tutor outlines the recommended criteria for discharging a child from outpatient care	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Explains the recommended criteria for discharge in outpatient care		
	<ul style="list-style-type: none"> <li>No bilateral pitting edema for more than two consecutive weeks</li> </ul>		
	<ul style="list-style-type: none"> <li>Child has a MUAC &gt;12.5cm for two consecutive weeks (three times)</li> <li>Child is clinically well and alert</li> </ul>		
15. Tutor outlines routine medications and schedule for administration based on treatment protocol	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Outlines types of routine medications and the schedule for administration based on treatment protocol		
	<ul style="list-style-type: none"> <li>Antibiotics (preferably Amoxicillin) on first visit</li> </ul>		
	<ul style="list-style-type: none"> <li>De-wormers on 2nd visit (For children above 24 months)</li> <li>Antimalarial on the first visit (during admission)</li> <li>Measles vaccination on the fourth visit</li> </ul>		
16. Tutor explains when to use outpatient action protocol	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Explains when to use the outpatient care action protocol		
	<ul style="list-style-type: none"> <li>To decide when to conduct follow up home visits</li> <li>To decide when to refer a child to the inpatient:</li> </ul>		

**E. Inpatient Care Management of Severe Acute Malnutrition (SAM) with Medical Complications**

Performance Standard	Verification Criteria	Y/N	Comment
17. Tutor explains recommended criteria for admitting children into the inpatient care	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Explains the recommended criteria for admission in inpatient care		
	<ul style="list-style-type: none"> <li>Severe bilateral pitting oedema (+++)</li> </ul>		
	<ul style="list-style-type: none"> <li>Marasmus-kwashiorkor: any grade of bilateral oedema (+, ++, +++) and (MUAC &lt;11.5cm)</li> </ul>		
	<ul style="list-style-type: none"> <li>MUAC &lt;11.5cm or bilateral pitting oedema + or ++ with any of the following medical complication: Anorexia, no appetite, Intractable Vomiting, Lethargic /not alert, Unconsciousness, High fever, Hypothermia, Hypoglycaemia, Severe dehydration, Severe Anaemia, Lower respiratory tract infection, Moderate to severe skin lesions, Eye signs of Vitamin A deficiency</li> </ul>		
	<ul style="list-style-type: none"> <li>Referred from outpatient care according to Action Protocol</li> </ul>		
	<ul style="list-style-type: none"> <li>Malnourished infants &lt;6 months and infant ≥ 6 months of age and &lt; 4kg</li> </ul>		

18. Tutor explains recommended criteria for discharging children from the inpatient care	<b>Assess tutor mentions the following:</b>	<b>Knowledge</b>
	Explains the recommended criteria for discharge and referral from inpatient care : <ul style="list-style-type: none"> <li>• <b>Children 6-59 months:</b> Referred to outpatient care if MUAC is &gt;12.5 cm and bilateral pitting oedema reducing and/or medical complication resolving, and clinically well and alert</li> </ul>	
	<ul style="list-style-type: none"> <li>• <b>Special cases 6-59 months:</b> Discharge is &gt;12.5cm and/or oedema free for 2 consecutive visits and clinically well and alert</li> </ul>	
	<ul style="list-style-type: none"> <li>• <b>Infants &lt; 6 months:</b> Discharge when successful re-lactation and appropriate weight gain (minimum 20 g weight gain per day on breastfeeding alone for 5 days)</li> </ul>	
19. Tutor list the ten steps for the successful management of SAM	<b>Assess or mentions the following:</b>	<b>Knowledge</b>
	• Treat/prevent hypoglycaemia	
	• Treat/prevent hypothermia	
	• Treat/prevent dehydration	
	• Correct electrolyte imbalance	
	• Treat/prevent infection	
	• Correct micronutrient deficiencies	
	• Start cautious feeding	
	• Provide tender loving care	
	• Sensory stimulation	
• Prepare for follow up		
20. Tutor explains the three phases of management of SAM with medical complications in inpatient care	<b>Assess if the tutor mentions the following:</b>	<b>Knowledge</b>
	<ul style="list-style-type: none"> <li>• <b>Initial treatment (Stabilization):</b> life threatening problems are treated in 24 hour facility, specified deficiencies are corrected, metabolic abnormalities reversed and feeding begun.</li> </ul>	
	<ul style="list-style-type: none"> <li>• <b>Transition:</b> prepares child for outpatient care, RUTF is gradually introduced.</li> </ul>	
	<ul style="list-style-type: none"> <li>• <b>Rehabilitation and follow up:</b> intensive feeding is given to recover most of lost weight, emotional and physical stimulation is increased. In most cases, Rehabilitation will take place in outpatient care.</li> </ul>	

## F. Maternal Nutrition

Performance Standard	Verification criteria	Y/N	Comment
21. Tutor explains the importance of adequate nutrition intake of women during pregnancy	<b>Assess if the tutor mentions the following:</b>	<b>Knowledge</b>	
	Explains as follows: <ul style="list-style-type: none"> <li>• When a woman is malnourished, the next generation may also suffer from malnutrition and poor health</li> </ul>		
22. Tutor explains on the intergenerational cycle of malnutrition	<b>Assess if the tutor mentions the following:</b>	<b>Knowledge</b>	
	<b>Malnourished women are more likely to have been:</b>		
	• Girls that were low birth weigh		
	• Girls that were underweight and stunted		
	• Girls that had their first pregnancy during adolescence		
• Women who are undernourished, have close spaced pregnancies, and have heavy workloads during pregnancy and breastfeeding periods			

23. Tutor can mention ways of preventing intergenerational malnutrition	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	<ul style="list-style-type: none"> <li>Increased food intake of adolescents, pregnancy and lactation</li> </ul>		
	<ul style="list-style-type: none"> <li>Delayed first pregnancy until after 20 years</li> </ul>		
	<ul style="list-style-type: none"> <li>Prevent and treat infections e.g, Malaria, Worms, Tetanus, STIs including HIV</li> </ul>		
	<ul style="list-style-type: none"> <li>Prevention of micronutrient deficiencies (Iron, Vitamin A and Iodine)</li> </ul>		
	<ul style="list-style-type: none"> <li>Family planning - birth spacing</li> </ul>		
	<ul style="list-style-type: none"> <li>Early initiation of breastfeeding (within first hour after birth)</li> </ul>		
	<ul style="list-style-type: none"> <li>Exclusive breastfeeding 0- &lt; 6 months</li> <li>Timely initiation of complementary foods at 6 months with continuation of breastfeeding up to 2 years</li> </ul>		

### G. Breastfeeding and Lactation Management

Performance Standard	Verification Criteria	Y/N	Comment
24. Tutor explains the advantages of breastfeeding	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	<b>Gives four advantages</b> of exclusive breast feeding for the infants first six months of life:		
	<ul style="list-style-type: none"> <li>Gives natural immunity,</li> </ul>		
	<ul style="list-style-type: none"> <li>Is easily and efficiently digested,</li> </ul>		
	<ul style="list-style-type: none"> <li>Prevents pregnancy by delaying menstrual cycle (LAM),</li> </ul>		
	<ul style="list-style-type: none"> <li>Safe and costs less,</li> </ul>		
	<ul style="list-style-type: none"> <li>Helps bonding between baby and mother,</li> <li>Prevents breast infection</li> <li>Promotes development of baby</li> </ul>		
25. Tutor explains the disadvantages of formula/replacement feeding	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	<b>Gives three disadvantages</b> of formula /replacement feeding:		
	<ul style="list-style-type: none"> <li>Increases incidence of diarrhea</li> </ul>		
	<ul style="list-style-type: none"> <li>Increases chance of Respiratory Tract Infections due to low immunity</li> </ul>		
	<ul style="list-style-type: none"> <li>Is expensive</li> <li>May cause milk allergy/intolerance</li> <li>Interferes with bonding</li> <li>Pre-disposes the mother to early return of menstrual cycle/fertility</li> </ul>		
26. Tutor describes how to manually express breast milk	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Describes procedure as:		
	<ul style="list-style-type: none"> <li>Washes hands thoroughly</li> </ul>		
	<ul style="list-style-type: none"> <li>Sits or stand comfortably and hold a clean container underneath the breast</li> </ul>		
	<ul style="list-style-type: none"> <li>Puts first finger and thumb on either side of the areola, behind the nipple</li> </ul>		
	<ul style="list-style-type: none"> <li>Presses slightly inward toward the chest, expressing milk, until the milk flow becomes slow</li> </ul>		
	<ul style="list-style-type: none"> <li>Repeats the same with the other breast, alternating breasts for 20 to 30 minutes</li> <li>Stores expressed milk in the container with a well-fitting lid or cover</li> </ul>		

27. Tutor identifies and describes four common breast conditions	<b>Assess if the tutor mentions the following:</b>	<b>Knowledge</b>
	Correctly identifies <b>four common conditions</b> which may interfere with breastfeeding:	
	<ul style="list-style-type: none"> <li>• Inverted nipples,</li> </ul>	
	<ul style="list-style-type: none"> <li>• Sore and cracked nipples</li> </ul>	
	<ul style="list-style-type: none"> <li>• Breast engorgement</li> </ul>	
28. Tutor describes how to manage inverted nipples	<b>Assess if the tutor mentions the following:</b>	<b>Knowledge</b>
	Describes management of <b>inverted nipples</b>	
	<ul style="list-style-type: none"> <li>• Ensuring that the baby attaches to areola not the nipple</li> </ul>	
	<ul style="list-style-type: none"> <li>• Use a syringe to assist with getting nipples to protrude before feeding</li> </ul>	
29. Tutor describes how to manage cracked nipples	<b>Assess if the tutor mentions the following:</b>	<b>Knowledge</b>
	Describes management of <b>cracked nipples:</b>	
	<ul style="list-style-type: none"> <li>• Apply hind milk to nipple and expose breast to the air</li> </ul>	
	<ul style="list-style-type: none"> <li>• Continued breast feeding on the less affected breast</li> </ul>	
	<ul style="list-style-type: none"> <li>• Ensuring correct attachment</li> </ul>	
30. Tutor describes how to manage breast engorgement	<b>Assess if the tutor mentions the following:</b>	<b>Knowledge</b>
	Describes management of <b>breast engorgement</b>	
	<ul style="list-style-type: none"> <li>• Applying warm compresses</li> </ul>	
	<ul style="list-style-type: none"> <li>• Continued breast feeding ,</li> </ul>	
	<ul style="list-style-type: none"> <li>• Extracting milk</li> </ul>	
31. Tutor describes how to manage mastitis and breast abscess	<b>Assess if the tutor mentions the following:</b>	<b>Knowledge</b>
	Describes management of <b>mastitis or breast abscess</b>	
	<ul style="list-style-type: none"> <li>• Applying warm compresses</li> </ul>	
	<ul style="list-style-type: none"> <li>• Providing medication for pain relief and refer</li> </ul>	
	<ul style="list-style-type: none"> <li>• Refer women with <b>breast abscess</b> for further medical care</li> </ul>	
32. Tutor explains the new (2010) breastfeeding recommendations for HIV+ women	<b>Assess if the tutor mentions the following:</b>	<b>Knowledge</b>
	Explains the breastfeeding option for HIV-positive women:	
	<ul style="list-style-type: none"> <li>• All mothers HIV+ on ARV or not, who exclusively breastfeed their infants should do so for 6 months.</li> </ul>	
	<ul style="list-style-type: none"> <li>• HIV positive mothers on ARVS should introduce appropriate complementary foods at 6 months and continue breastfeeding for the first 12 months of life.</li> </ul>	
	<ul style="list-style-type: none"> <li>• Mothers who are HIV+ and not on ARV, who decide to stop breastfeeding at any time should do so gradually during one month as the baby continues to receive daily NVP and should continue for one week after all breastfeeding has stopped.</li> </ul>	
33. Tutor explains how to feed a low birth weight baby	<b>Assess if the tutor mentions the following:</b>	<b>Knowledge</b>
	Gives at least <b>three</b> points to follow when feeding a low birth weight baby	
	<ul style="list-style-type: none"> <li>• Breastfeed frequently to get the baby used to the breast and keep the milk flowing</li> </ul>	
	<ul style="list-style-type: none"> <li>• Breastfeed the baby on demand day and night</li> </ul>	
	<ul style="list-style-type: none"> <li>• Feed long enough to empty one breast</li> </ul>	
	<ul style="list-style-type: none"> <li>• As much as possible use the cross cuddles and underarm positions for the low birth weight baby.</li> </ul>	

34. Tutor explains how to feed a sick child < 6moths of age	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Gives at least <b>two</b> points to follow when feeding a sick child < six months of age:		
	<ul style="list-style-type: none"> <li>Breast feed more frequently during illness including diarrhea to help the baby recover quickly</li> </ul>		
	<ul style="list-style-type: none"> <li>Give only breast milk and medicines recommended by the health care provider</li> </ul>		
	<ul style="list-style-type: none"> <li>If the child is too weak to suckle, express breast milk and give to the baby</li> </ul>		

## H. Complementary Feeding

Performance Standard	Verification Criteria	Y/N	Comment
35. Tutor explains the risks of starting complementary feeding too early	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Provides at least <b>three</b> risks to starting complementary foods too early (before six months) which are:		
	<ul style="list-style-type: none"> <li>Replaces breast milk making it difficult to meet the child's nutritional needs</li> </ul>		
	<ul style="list-style-type: none"> <li>Result in a diet that is low in nutrients</li> </ul>		
	<ul style="list-style-type: none"> <li>Increases the risk of illness because less of the protective factors in breast milk are consumed</li> </ul>		
	<ul style="list-style-type: none"> <li>increases the risk of diarrhoea because the complementary foods may not be as clean or as easy to digest as breast milk</li> </ul>		
	<ul style="list-style-type: none"> <li>Increases the risk of wheezing and other allergic conditions</li> </ul>		
36. Tutor explains the risks of starting complementary feeding too late	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Provides at least <b>two</b> risks to starting complementary foods too late(after six months) which are:		
	<ul style="list-style-type: none"> <li>The child does not receive the extra food required to meet his/her growing needs</li> </ul>		
	<ul style="list-style-type: none"> <li>The child grows and develops slower</li> </ul>		
	<ul style="list-style-type: none"> <li>May not receive the nutrients to avoid malnutrition and deficiencies such as anaemia from lack of iron.</li> </ul>		
37. Tutor explains nutritional care of infants and children with diarrhea	<b>Assess if the tutor mentions the following:</b>		<b>Knowledge</b>
	Explains the importance of:		
	<ul style="list-style-type: none"> <li>Continued breastfeeding for breastfeeding children with diarrhea</li> </ul>		
	<ul style="list-style-type: none"> <li>Ensuring that the child does not get dehydrated by providing oral rehydration salts (ORS)</li> </ul>		
	<ul style="list-style-type: none"> <li>Providing Zinc tablets to the child in addition to the ORS</li> </ul>		

38. Tutor lists the key complementary feeding messages	Assess if the tutor mentions the following:		Knowledge
	Explains at least <b>five</b> key complementary feeding messages:		
<ul style="list-style-type: none"> <li>Breastfeeding for two years of age or longer helps a child to develop and grow strong and healthy.</li> </ul>			
<ul style="list-style-type: none"> <li>Starting other foods in addition to breast milk at 6 months helps a child to grow well.</li> </ul>			
<ul style="list-style-type: none"> <li>Foods that are thick enough to stay in the spoon give more energy to the child.</li> </ul>			
<ul style="list-style-type: none"> <li>Animal-source foods are especially good for children, to help them grow strong and lively.</li> </ul>			
<ul style="list-style-type: none"> <li>Peas, beans, lentils, and nuts and seeds, are good for children.</li> </ul>			
<ul style="list-style-type: none"> <li>Dark-green leaves and yellow-coloured fruits and vegetables help the child to have healthy eyes and fewer infections.</li> </ul>			
<ul style="list-style-type: none"> <li>A growing child needs 3 meals and snacks: give a variety of foods</li> </ul>			
<ul style="list-style-type: none"> <li>A growing child needs increasing amounts of food</li> </ul>			
<ul style="list-style-type: none"> <li>A young child needs to learn to eat: encourage and give help...with lots of patience.</li> </ul>			
<ul style="list-style-type: none"> <li>Encourage the child to drink and to eat <u>during</u> illness and provide extra food <u>after</u> illness to help them recover quickly.</li> </ul>			

#### I. Prevention of Micronutrient Deficiencies

Performance Standard	Verification Criteria	Y/N	Comment
39. Tutor explains <b>three</b> ways of preventing vitamin A deficiency	Assess if tutor explains on the prevention as follows:		Knowledge
	<ul style="list-style-type: none"> <li>Consumption of nutritionally adequate vitamin A rich foods such as:                             <ul style="list-style-type: none"> <li>Plant sources such as dark green leafy vegetables, palm oil, carrot, orange flesh sweet potato, mango, papaya, locust bean fruit (dawadawa),</li> <li>Animal sources: Liver, egg yolk, margarine, fortified vegetable oil and fortified wheat flour including fortified complementary foods.</li> </ul> </li> </ul>		
	<ul style="list-style-type: none"> <li>Explains on vitamin A supplementation for different target groups</li> </ul>		
	<ul style="list-style-type: none"> <li>Explains on fortification of food vehicles such as flour, oil, salt and sugar.</li> </ul>		

40. Tutor explains <b>three</b> ways of preventing iron deficiency Anemia	<b>Assess if tutor explains on the prevention as follows:</b>	<b>Knowledge</b>
	<ul style="list-style-type: none"> <li>• Consumption of nutritionally adequate foods rich in iron, folic acid, protein, vitamins B such as:                             <ul style="list-style-type: none"> <li>○ Animal sources of Iron sources: liver, red meats, offals, kidney, fish and fish powder, shrimps, crab, snails, eggs,</li> <li>○ Plant sources: Dark green leafy vegetables which should be consumed in combination with vitamin C rich foods e.g. oranges, tomatoes, tangerines, guava, pineapple, mango, boabob fruit, soursop etc...</li> </ul> </li> </ul>	
	<ul style="list-style-type: none"> <li>• Explains the importance of eating vitamin C rich foods with meals to enhance iron absorption</li> </ul>	
	<ul style="list-style-type: none"> <li>• Iron and folic acid supplementation for women in fertile age (adolescent, pregnant women, lactating etc...)</li> </ul>	
	<ul style="list-style-type: none"> <li>• Ensuring pregnant, lactating women and children sleep under insecticide treated net (ITN) to prevent malaria</li> </ul>	
41. Tutor explains how to prevent iodine deficiency	<b>Assess if tutor explains on the prevention as follows:</b>	<b>Knowledge</b>
	<ul style="list-style-type: none"> <li>• Explains on the consumption of iodized salt</li> </ul>	

## Annex 3: Skills Assessment Tools

### A. Nutrition Assessment (Anthropometry)—PRACTICE

Performance Standard	Verification Criteria	Y/N	Comment											
1. Tutor educates how to establish rapport with the caregiver	<b>Observe if the tutor does the following:</b>		<b>Skill</b>											
	<ul style="list-style-type: none"> <li>• Greets and welcomes the caregiver with respect</li> </ul>													
	<ul style="list-style-type: none"> <li>• Introduces oneself to the caregiver</li> </ul>													
	<ul style="list-style-type: none"> <li>• Explains to the client the procedures that will be undertaken on the child</li> </ul>													
2. Tutor demonstrates how to weigh a mother and baby using an electronic scale to way	<b>Observe if the tutor does the following:</b>		<b>Skill</b>											
	<ul style="list-style-type: none"> <li>• Asks someone to hold the baby for the mother as the mother’s reading is taken</li> </ul>													
	<ul style="list-style-type: none"> <li>• Presses the tare key to activate function if weighing mother and baby</li> </ul>													
	<ul style="list-style-type: none"> <li>• Ensures that the scale stores the mother’s weight and returns to zero.</li> </ul>													
	<ul style="list-style-type: none"> <li>• Gently give’s the child to the mother, waits for the baby’s weight to be displayed</li> </ul>													
3. Tutor demonstrates how to plots weight in a child growth chart	<b>Observe if the tutor does the following:</b>		<b>Skill</b>											
	<ul style="list-style-type: none"> <li>• Identifies the appropriate growth chart with respect to the sex of the child</li> </ul>													
	<ul style="list-style-type: none"> <li>• Determine and locate the child’s age in completed months on the horizontal axis of the child growth chart</li> </ul>													
	<ul style="list-style-type: none"> <li>• Locates the child’s weight on the vertical axis of the child growth chart</li> </ul>													
	<ul style="list-style-type: none"> <li>• Makes a clear and heavy dot where the two lines (weight and age) meet, draws the growth curve by joining two weights with in ink using a straight line</li> </ul>													
4. Tutor explains how to interpret the results of the child’s growth using the weight for age growth curve	<b>Observe if the tutor does the following:</b>		<b>Skill</b>											
	<p>Reviews the direction of the growth curve and determines if the child is; growing well, in danger or very dangerous</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="3">Watch’s the direction of the line showing the child’s growth</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>Good Child is growing well Praise and counsel</td> <td>Danger Not growing well Find out why</td> <td>Very Dangerous Losing weight Refer to Hospital</td> </tr> <tr> <td colspan="3">Refers the child for further medical care if the weight is the same for more than 2 consecutive times</td> </tr> </table>	Watch’s the direction of the line showing the child’s growth						Good Child is growing well Praise and counsel	Danger Not growing well Find out why	Very Dangerous Losing weight Refer to Hospital	Refers the child for further medical care if the weight is the same for more than 2 consecutive times			
Watch’s the direction of the line showing the child’s growth														
														
Good Child is growing well Praise and counsel	Danger Not growing well Find out why	Very Dangerous Losing weight Refer to Hospital												
Refers the child for further medical care if the weight is the same for more than 2 consecutive times														
5. Tutor demonstrates how to take the Mid-Upper Arm Circumference (MUAC) of a child who is children	<b>Observe if the tutor does the following:</b>		<b>Skill</b>											
	<ul style="list-style-type: none"> <li>• Selects the left arm for the MUAC measurement</li> </ul>													
	<ul style="list-style-type: none"> <li>• Locates the mid upper arm (from the tip of the shoulder to tip of the elbow) while arm is at right angle and marks the midpoint</li> </ul>													
	<ul style="list-style-type: none"> <li>• Relaxes the arm by letting the arm to lye alongside the body</li> </ul>													

	<ul style="list-style-type: none"> <li>Wraps the MUAC tape around the mark at the midpoint of the upper arm ensuring it is in contact with skin, neither too tight nor too loose</li> </ul>										
	<ul style="list-style-type: none"> <li>Reads the measurement on the larger window of the MUAC tape where the arrows point inwards</li> </ul>										
	<ul style="list-style-type: none"> <li>Reads the MUAC measurement to the precision of 0.1 cm or 1 mm</li> </ul>										
	Correctly interprets MUAC readings as below: <table border="1" data-bbox="437 474 1168 604"> <thead> <tr> <th>Group</th> <th>Severe acute malnutrition</th> <th>Moderate acute malnutrition</th> <th>Normal</th> </tr> </thead> <tbody> <tr> <td>Children (6–59 months)</td> <td>&lt; 11.5 cm</td> <td>≥ 11.5 to &lt; 12.5 cm</td> <td>≥ 12.5 cm</td> </tr> </tbody> </table>	Group	Severe acute malnutrition	Moderate acute malnutrition	Normal	Children (6–59 months)	< 11.5 cm	≥ 11.5 to < 12.5 cm	≥ 12.5 cm		
Group	Severe acute malnutrition	Moderate acute malnutrition	Normal								
Children (6–59 months)	< 11.5 cm	≥ 11.5 to < 12.5 cm	≥ 12.5 cm								

## B. Nutrition Assessment (Clinical)—PRACTICE

Performance Standard	Verification Criteria	Y/N	Comment
6. Tutor demonstrates how to assess for bilateral pitting Odema (kwashiorkor)	<b>Assess or observe if the tutor does the following:</b>		<b>Skill</b>
	Applies thumb pressure on both feet for three seconds and also checks on the upper limbs, hands and the face		
	Grades of bilateral pitting oedema severity correctly: <ul style="list-style-type: none"> <li>Absent (0)</li> <li>Grade + (mild): Both feet/ankles</li> <li>Grade ++ (moderate): Both feet, plus lower legs, hands or lower arms</li> <li>Grade +++ (severe): Generalized bilateral pitting oedema, including both feet, legs, arms and face</li> </ul>		

## C. Nutrition Counselling on IYCF -Complementary Feeding—PRACTICE

Performance Standard	Verification Criteria	Y/N	Comment
7. Tutor educates how to establish rapport with the caregiver	<b>Observe if the tutor does the following:</b>		<b>Skill</b>
	<ul style="list-style-type: none"> <li>Greets the client with respect</li> </ul>		
	<ul style="list-style-type: none"> <li>Introduces oneself</li> </ul>		
	<ul style="list-style-type: none"> <li>Shows interest in the child and caregiver</li> </ul>		
	<ul style="list-style-type: none"> <li>Maintains professional contact</li> </ul>		
8. Tutor educates on how to assess the child's growth and Infant and Young Child Feeding (IYCF) practices	<b>Observe if the tutor does the following:</b>		<b>Skill</b>
	<ul style="list-style-type: none"> <li>Find's out the child's age</li> </ul>		
	<ul style="list-style-type: none"> <li>Checks if the child has had any recent illness</li> </ul>		
	<ul style="list-style-type: none"> <li>Checks if the caregiver understands the child's growth curve</li> </ul>		
	<ul style="list-style-type: none"> <li>Assess the current breastfeeding status</li> </ul>		
	<ul style="list-style-type: none"> <li>Checks what complementary foods are provided to the child</li> </ul>		
	<ul style="list-style-type: none"> <li>Checks if the child has any feeding difficulties</li> </ul>		
	<ul style="list-style-type: none"> <li>Checks on hygiene practices related to feeding</li> </ul>		
9. Tutor educates on how to analyse the information provided	<b>Observe if the tutor does the following:</b>		<b>Skill</b>
	<ul style="list-style-type: none"> <li>Compares information provided with age appropriate feeding recommendations</li> </ul>		
	<ul style="list-style-type: none"> <li>Identifies and prioritizes difficulties</li> </ul>		
	Feeding requirement of children 6-9 months old: <ul style="list-style-type: none"> <li>Breastfeed as often as the child wants, at least 8 times during the day and night</li> </ul>		
	<ul style="list-style-type: none"> <li>Give adequate serving of a variety of foods without pepper 3 times a day</li> </ul>		
	<ul style="list-style-type: none"> <li>Also give 1-2 snack a day between main meals</li> <li>Give fruit every day, wash the fruit in clean water, mash or squeeze the juice</li> </ul>		

	<ul style="list-style-type: none"> <li>• Feed new foods patiently</li> </ul>		
	<ul style="list-style-type: none"> <li>• Do not give water or other foods just before breastfeeding</li> </ul>		
	<ul style="list-style-type: none"> <li>• Serve the child food in a separate bowl</li> </ul>		
	<ul style="list-style-type: none"> <li>• Start with thick porridge or finely mashed foods, continue with family foods</li> </ul>		
	<ul style="list-style-type: none"> <li>• Start with 2-3 tablespoons per feed increasing gradually to ½ of a 250ml cup at each meal</li> </ul>		
	<ul style="list-style-type: none"> <li>• Wash your hands and the child's hands with soap and running water before feeding</li> </ul>		
10. Tutor educates on how to act on the information provided by the caregiver	<b>Observe if the tutor does the following:</b>		<b>Skills</b>
	Praises the caregiver for following recommended practices		
	Discusses limited information depending on the analysis of the information provided		
	Reaches an agreement/negotiation with the caregiver		
	Asks the caregiver to repeat the agreed-upon- action		
	Suggests where to find additional support (e.g. mother support group, health facility etc...)		
	Agrees upon a date/time for follow-up session		
	Refers the caregiver if necessary		

#### D. Nutrition Counselling on IYCF - Breastfeeding—PRACTICE

Performance Standard	Verification Criteria	Y/N	Comment
11. Tutor demonstrates how to establish rapport with the caregiver	<b>Observe if the tutor does the following:</b>		<b>Skill</b>
	<ul style="list-style-type: none"> <li>• Greets the client with respect</li> </ul>		
	<ul style="list-style-type: none"> <li>• Introduces oneself</li> </ul>		
	<ul style="list-style-type: none"> <li>• Shows interest in the child and caregiver</li> </ul>		
	<ul style="list-style-type: none"> <li>• Maintains professional contact</li> </ul>		
12. Tutor educates on how to assess the child's growth and breastfeeding practices	<b>Observe if the tutor does the following:</b>		<b>Skill</b>
	<ul style="list-style-type: none"> <li>• Find's out the baby's age</li> </ul>		
	<ul style="list-style-type: none"> <li>• Checks if the baby has had any recent illness</li> </ul>		
	<ul style="list-style-type: none"> <li>• Checks if the caregiver understands the baby's growth curve</li> </ul>		
	<ul style="list-style-type: none"> <li>• Assess the current breastfeeding status</li> </ul>		
	<ul style="list-style-type: none"> <li>• Checks for breastfeeding difficulties</li> </ul>		
	<ul style="list-style-type: none"> <li>• Observes a breastfeed if necessary</li> </ul>		
	<ul style="list-style-type: none"> <li>• Checks on hygiene practices related to feeding</li> </ul>		
13. Tutor educates on how to analyze the information provided	<b>Observe if the tutor does the following:</b>		<b>Skill</b>
	<ul style="list-style-type: none"> <li>• Compares information provided with age appropriate feeding recommendations</li> </ul>		
	<ul style="list-style-type: none"> <li>• Identifies and prioritizes difficulties</li> </ul>		
	<b>Ensure that tutor demonstrates on appropriate positioning and attachment</b>		
	<ul style="list-style-type: none"> <li>• Encourages the mother sit to upright in a comfortable position while keeping the baby's head and body in a straight line (ear, shoulder and hip)</li> </ul>		
	<ul style="list-style-type: none"> <li>• Ensures the baby is facing the breast with the baby's nose opposite her nipple</li> </ul>		
	<ul style="list-style-type: none"> <li>• Ensures that the mother supports the breast if necessary – four fingers under the breast and the thumb positioned on top of the breast</li> </ul>		
	<ul style="list-style-type: none"> <li>• Supports the mother to fix the baby to the breast - touching the baby's lips with her nipple, waiting until the baby opens the mouth wide and then moving the baby quickly to the breast</li> </ul>		

	<ul style="list-style-type: none"> <li>• Ensure the baby is properly fixed with more areola visible above the baby’s upper lip, lips turned outwards, and baby’s chin touching the breast</li> </ul>		
14. Tutor educates on how to act on the information provided by the caregiver	<b>Observe if the tutor does the following:</b>		<b>Skills</b>
	<ul style="list-style-type: none"> <li>• Praises the caregiver for following recommended practices</li> </ul>		
	<ul style="list-style-type: none"> <li>• Discusses limited information depending on the analysis of the information provided</li> </ul>		
	<ul style="list-style-type: none"> <li>• Reaches an agreement/negotiation with the caregiver</li> </ul>		
	<ul style="list-style-type: none"> <li>• Asks the caregiver to repeat the agreed-upon- action</li> </ul>		
	<ul style="list-style-type: none"> <li>• Suggests where to find additional support (e.g. mother support group, health facility etc...)</li> </ul>		
	<ul style="list-style-type: none"> <li>• Agrees upon a date/time for follow-up session</li> </ul>		
	<ul style="list-style-type: none"> <li>• Refers the caregiver if necessary</li> </ul>		