

**Addis Ababa University  
College of Health Sciences**

**Sub-thematic project title: Knowledge, Attitude and Practice of Health Care  
Providers on Adult Vitamin D Deficiency in Ethiopia**

**INFORMATION SHEET**

Good Morning/Good Afternoon/ Good Evening.

My name is \_\_\_\_\_ and I am working for the College of Health Sciences in Addis Ababa University project on the assessment of Knowledge, Attitude and Practice of Health Care Providers on Adult Vitamin D Deficiency in Ethiopia

The main aim of this study is to have a baseline assessment on the level of knowledge, attitude and practice on vitamin D deficiency among health care providers, design an intervention to enhance the knowledge, attitude and practice of adult vitamin D deficiency among health care providers; and assess the impact of such intervention in selected ecological zones.

You are randomly chosen as an interviewee for this study. The information you will be providing will be kept strictly confidential. No information identifying you or the organization in which you are working will ever be released to anyone outside of this information-collection activity. Your name will not be written on the questionnaire and won't be in the report either. Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. You may also stop the interview completely at any time without any consequences at all. However, we hope that you will participate in this survey since the results will help health care providers and the health care delivery system to improve services for the wider public.

Participating in this study will never have any harm to you except the valuable time that you will be spending answering to our queries. The information you will be providing will be aggregated to give an overall picture. The study team will not also give an remuneration or direct benefits for study participants. We will ensure your privacy when we conduct the interview and the information you will be sharing shall be kept confidential.

At this time, do you want to ask me anything about the purpose or content of this interview? In case you wanted more clarifications, you can ask Dr Wubegzier Mekonnen, the principal investigator of this sub-thematic project whose contact address is given below:

Tele: 0911668606

Email: [wubegziern@gmail.com](mailto:wubegziern@gmail.com)

Skype: wubmek

May I begin the interview now?

## CONSENT FORM

After the objectives of the project are clearly and unambiguously described to me in the language I understand or are read to me, without any interference in my decision to participate or not to participate in this study:

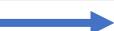
<input type="checkbox"/>	Agreed to be interviewed	<input type="checkbox"/>	Do not agree to be interviewed
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## I. IDENTIFICATION PARTICULARS

No	Questions	Possible Answers	Skip rules
101	Region	1. Amhara 2. Oromia 3. Afar	
102	Zone		
103	District/Wereda		
104	Name of town/Kebele		
105	Name of Health Facility		
106	Type of Health Facility	1. Hospital 2. Health Center 3. Other	
107	Agroecology types	1. Lowland 2. Midland 3. Highland	
108	Study round	1. Baseline 2. Endline	
109	Date of Visit	DD/MM/YYYY / / / /	
110	Name of data collector	Name	Signature
111	Name of supervisor	Name	Signature
112	Completion status		

## II. CHARACTERISTICS OF THE RESPONDENTS

201	Sex of the respondent	1. Male 2. Female	
202	How old are you in completed full years?	____ Years	
203	What is your field of study?	2. Medicine 3. Nursing 4. Health officer 5. Other	
204	What is your role in this health facility?	1. Medical director 2. Clinician 3. Other	
205	How long have you served this facility in this capacity?	____ Years ____ Months	
206	Did you have specialization?	1. Yes 0. No 	

207	What is your broader area of specialization?	<ol style="list-style-type: none"> <li>1. Child health</li> <li>2. Adult health</li> <li>3. General</li> <li>4. Other</li> </ol>	
208	Do you remember any special focus on vitamin D in your University/College Training?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>0. No </li> </ol>	
209	<p>What was the focus of the training on Vitamin D in your University/College training?</p> <p>MULTIPLE ANSWERS</p>	<ol style="list-style-type: none"> <li>1. Measuring Vit D level</li> <li>2. Diagnosis of Vit D deficiency</li> <li>3. Management Vit D deficiency</li> <li>4. Treatment of Vit D deficiency</li> <li>5. Food fortification on Vit D</li> <li>6. Food supplementation</li> <li>7. Other(specify)</li> </ol>	
210	Did you receive an in-service training on Vitamin D?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No </li> </ol>	
211	<p>Which organization gave you the in-service training on Vitamin D?</p> <p>MULTIPLE ANSWERS</p>	<ol style="list-style-type: none"> <li>1. MOH/RHB</li> <li>2. EPHI</li> <li>3. Local NGO</li> <li>4. International NGO</li> <li>5. The UN system</li> <li>6. Other(specify)</li> </ol>	
212	What was the focus of the in-service training on Vitamin D?	<ol style="list-style-type: none"> <li>1. Measuring Vit D level</li> <li>2. Diagnosis of Vit D deficiency</li> <li>3. Management Vit D deficiency</li> <li>4. Treatment of Vit D deficiency</li> <li>5. Food fortification on Vit D</li> <li>6. Food supplementation</li> <li>7. Other(specify)</li> </ol>	
213	Was the in-service training instrumental to improve your understanding and skill in measuring vitamin D level, diagnosis of deficiency and its management and treatment?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>0. No </li> </ol>	

214	How did the in-service training improve your understanding and skill in Vitamin D level measurement, diagnosis, management and treatment of deficiency?	<ol style="list-style-type: none"> <li>1. Very poorly</li> <li>2. Poorly</li> <li>3. Fair</li> <li>4. Good</li> <li>5. Very good</li> </ol>	
<b>III. KNOWLEDGE OF HEALTH CARE PROVIDERS ON VITAMID D DEFICIENCY</b>			
301	How do you define vitamin D deficiency?	<ol style="list-style-type: none"> <li>1. Commonly results from inadequate sunlight exposure with adequate ultraviolet B rays</li> <li>2. Caused by inadequate nutritional intake of vitamin D</li> <li>3. Disorders limiting vitamin D absorption</li> <li>4. Conditions impairing vitamin D conversion into active metabolite</li> <li>5. Impairs bone mineralization</li> <li>6. Other</li> </ol>	
302	What is the importance of Vitamin D?	<ol style="list-style-type: none"> <li>1. For absorption of dietary calcium</li> <li>2. For absorption of dietary phosphorus</li> <li>3. For promoting healthy bone growth</li> <li>4. Prevent osteoporosis</li> <li>5. For prevention of rickets</li> </ol>	

		6. Other specify 7. Do not know	
303	What are the sources of vitamin D among adult population?	1. Foods 2. Intake of food fortified with vitamin D, 3. Sunlight exposure. 4. Vitamin D supplement 5. Other 6. Do not know	
304	What is the best source of Vitamin D?	1. Foods 2. Intake of food fortified with vitamin D, 3. Sunlight exposure. 4. Vitamin D supplement 5. Other 6. Do not know	
305	Which foods are reach in vitamin D?	1. Oil fish 2. Fortified foods 3. Egg yolk 4. Red meat 5. Chicken 6. Other specify 7. Do not know	

306	What are the Side effects of Vitamin D deficiency?	<ol style="list-style-type: none"> <li>1. Vitamin D deficiency can lead to hypocalcaemia</li> <li>2. Vitamin D deficiency can lead to hypophosphatemia</li> <li>3. Leads to osteomalacia</li> <li>4. leading to osteoporosis</li> <li>5. Led to rickets</li> <li>6. Other specify</li> <li>7. Do not know</li> </ol>	
307	What are the factors affecting synthesis of vitamin D from sun light?	<ol style="list-style-type: none"> <li>1. Season</li> <li>2. Skin pigment</li> <li>3. Sunscreen use</li> <li>4. Time of day</li> <li>5. Pollution</li> <li>6. Other specify</li> <li>7. Do not know</li> </ol>	
308	What is the best time of day to get vitamin D from the sun?	<ol style="list-style-type: none"> <li>1. Morning</li> <li>2. Mid-day</li> <li>3. Afternoon</li> <li>4. Evening</li> </ol>	
309	What is the optimal duration of sun exposure per day for adult to get vitamin D?	_____Minutes	
310	Which age groups are at more risk of vitamin D deficiency?	<ol style="list-style-type: none"> <li>1. Under five children</li> <li>2. Teenagers</li> <li>3. Adults</li> <li>4. Elderly people</li> </ol>	
311	Which individual groups are at risk of vitamin D deficiency?	<ol style="list-style-type: none"> <li>1. Those who spent most of their time indoor</li> </ol>	

		<ol style="list-style-type: none"> <li>2. Individual who cover their skin when out</li> <li>3. Dark skin individual</li> <li>4. White skin people</li> <li>5. Old age</li> <li>6. Other specify</li> <li>7. Do not know</li> </ol>	
312	What is the recommended daily allowance of Vitamin D for adult?		
313	Where do you get a knowledge regarding Vitamin D?	<ol style="list-style-type: none"> <li>1. Pre-service education</li> <li>2. In-service education</li> <li>3. Journals/Periodicals</li> <li>4. Online resources</li> <li>5. Other (specify)</li> </ol>	
314	How do you rate your knowledge on measuring vitamin D level, vitamin D deficiency diagnosis, management and treatment?	<ol style="list-style-type: none"> <li>1. Very poor</li> <li>2. Poor</li> <li>3. Fair</li> <li>4. Good</li> <li>5. Very good</li> </ol>	
<b>IV. ATTITUDE OF HEALTH CARE PROVIDERS ON VITAMIN D DEFICIENCY</b>			
401	Do you think there should be a screening for vitamin D deficiency when adults come to health facilities?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	
402	There is an adequate laboratory investigation to diagnose vitamin D	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	

	deficiency among adult population in Ethiopia?		
403	There is adequate Vitamin D supplementation	1. Yes 2. No	
404	Healthcare practitioners are adequately aware of prevention and treatment of vitamin D deficiency in adults	1. Yes 2. No	
405	Familiarization of the community on deficiency of vitamin D as a societal problem would help in preventing vitamin D deficiency	1. Yes 2. No	
406	The Ethiopian government gave an adequate attention to vitamin D deficiency among adults	1. Yes 2. No	
407	Vitamin D deficiency needs an easy and less costly intervention	1. Yes 2. No	
408	Health care providers are adequately trained on measuring level, diagnosing, managing and treating problems related to Vitamin D deficiency during in-service training	1. Yes 2. No	
V. PRACTICE OF HEALTH CARE PROVIDERS ON ADULT VITAMID D DEFICIENCY			
501	Have you ever diagnosed adult patients for vitamin D deficiency?	1. Yes 2. No	

502	If yes how many patients of any age do you diagnose per month?	_____ Number of patients	
503	How do you diagnose your patients for deficiency of Vitamin D?	<ol style="list-style-type: none"> <li>1. Clinically</li> <li>2. With investigation (by measure concentration of 25 OH vitamin D)</li> </ol>	
504	Do you measure concentration of 25 OH vitamin D to assess vitamin D status of an adult?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	
505	Do you prescribe vitamin D supplement for adults?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	
506	Do you prescribe vitamin D supplement for pregnant women?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	
507	What is the adult dose of vitamin D?		
508	Is there any guideline to recommend vitamin D supplementation?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	
509	If yes what is your reference guideline _____?	Please write the title of the guideline _____	
510	Have you ever given calcium supplement for adults to prevent the ill consequences of vitamin D deficiency?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	
511	Do you usually counsel your adult patients about the importance of vitamin D?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	

512	If yes, what are the main points that you have been using in the counseling of adult patients about vitamin D?	<ol style="list-style-type: none"> <li>1. For absorption of dietary calcium</li> <li>2. For absorption of dietary phosphorus</li> <li>3. For promoting healthy bone growth</li> <li>4. Prevent osteoporosis</li> <li>5. For prevention of rickets</li> <li>6. Other (specify)</li> </ol>	
513	Do you advise patients about the source of vitamin D?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	
514	What sources of vitamin D do you usually advice?  (more than 1 answer possible)	<ol style="list-style-type: none"> <li>1. Foods</li> <li>2. Intake of food fortified with vitamin D</li> <li>3. Sunlight exposure.</li> <li>4. Vitamin D supplement</li> <li>5. Other (specify)</li> </ol>	
515	Do you ask your adult patients about sunlight exposure?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	
516	Do you counsel your adult patients on the need of sunlight exposure for vitamin D?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	
517	Do you ever attend any on job training, conference/workshop on vitamin D deficiency in adult?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	