

Supplementary File 1: Detailed training content and session procedures

Section 1: Peer Supporter Training Program for Diabetes Peer educators at Ayder comprehensive specialized Hospital, Tigray, Ethiopia, 2025.

<i>Training Day</i>	<i>Session Title</i>	<i>Learning Objectives</i>	<i>Content Areas Covered</i>	<i>Training Methods</i>	<i>Responsible body</i>	<i>Duration (hrs.)</i>
Day 1	Introduction to Peer Support	Understand peer role	Roles, ethics, confidentiality	Lecture	PI/facilitator	2
	Basics of Diabetes	Build foundational knowledge	Definition, types, symptoms	Lecture	Nurse from the DM center	2
	Medication Adherence	Support adherence	Drug use, barriers	Discussion	Pharmacist	2
	Self-care I	Lifestyle management	Diet, exercise	Demonstration	Nurse from the DM center	2
Day 2	Self-care II	Monitoring skills	SMBG, foot care	Practical	Nurse from the DM center	2
	Glycemic Control	Interpret glucose	Targets, HbA1c, FBG	Lecture	Internist	1.5
	Insulin Management	Safe insulin use	Storage, injection	Demonstration	Pharmacist and Nurse from the DM center	1.5
	Communication Skills	Facilitation skills	Counseling, group dynamics	Role play	PI/Facilitator	2
	Documentation and Fidelity	Recording & reporting	Attendance, checklists	Practical	Facilitator	1

Total Training Duration: 16 hours (2 business days)

Section 2: Peer Support Intervention Delivery Framework Structure and Content of the Peer Support Intervention Provided to the intervention group Participants on follow up at ACSH, 2025.

<i>Intervention Domain</i>	<i>Sub-component</i>	<i>Session Content Description</i>	<i>Delivery Method</i>	<i>Materials/Tools Used</i>	<i>Expected Participant Outcome</i>
<i>Medication adherence</i>	Adherence counseling	Importance of adherence, dosing schedules, missed dose management	Group discussion	Flipcharts, leaflets	Improved adherence behavior
<i>Self-care practice</i>	General diet	Healthy eating principles	Lecture + discussion	Dietary charts	Dietary awareness
	Specific diet	DM-specific meal planning	Practical examples	Food models	Meal planning skills
	Physical exercise	Exercise types, frequency	Demonstration	Exercise guide	Exercise adoption
	Glucose monitoring	SMBG technique & frequency	Demonstration	Glucometer	Monitoring skills
	Foot care	Inspection & hygiene	Practical demo	Foot care kit	Foot complication prevention
	Medication use	Proper administration & storage	Counseling	Drug charts	Safe medication practice
	Foot care follow-up	When to seek care	Case scenarios	IEC materials	Early care-seeking
<i>Knowledge of diabetes</i>	Definition	Disease overview	Lecture	Visual aids	Conceptual understanding
	Triggering factors	Hyper/Hypoglycemia causes	Discussion	Posters	Risk awareness
	Glycemic measurement	HbA1c & glucose targets	Teaching	Charts	Monitoring literacy
	Insulin effect	Action & storage	Demonstration	Insulin devices	Insulin literacy
	DM management	Lifestyle + medication integration	Group session	Booklets	Self-management competence

Section 3: Session Attendance and Fidelity Monitoring Checklist

A. Attendance Monitoring

Session ID	Date	Peer Supporter ID	Group No.	Participants Planned	Participants Attended	Attendance Rate (%)	Session Duration (min)

B. Intervention Component Delivery

Session ID	Medication Adherence	Self-care practice						DM Knowledge
		Diet (General)	Diet (Specific)	Exercise	SMBG	Foot Care	Health care provider Recommendations	

C. Fidelity Assessment

Fidelity Domain	Assessment Item	Score (1=Yes / 0=No)
Content coverage	All planned topics delivered	
Curriculum adherence	Followed training manual	
Time management	Within planned duration	
Participant engagement	Interactive delivery	
Demonstration quality	Practical sessions conducted	
Material utilization	IEC tools used properly	
Documentation	Attendance recorded	
Total Fidelity Score/7		
Fidelity Interpretation <i>Score Rating</i> 6–7 <i>High fidelity</i> 4–5 <i>Moderate fidelity</i> ≤3 <i>Low fidelity</i>		