



DEDER GENERAL HOSPITAL

HEALTHCARE QUALITY IMPROVEMENT PROJECT

Improving Hand Hygiene Compliance in the Neonatal Intensive Care Unit (NICU)

By: NICU QI TEAM

March 2017E.C,

Deder, Eastern Ethiopia

Quality Improvement Team Members

S/N	Full Name	Status	Role
1.	Dr.Taju Abdi (MD, Senior)	GYN/OBS Coordinator	Chairperson
2.	Abdi Baker	NICU head	Secretary
3.	Abdi Tofik	Quality Director	D/Secretary
4.	Ibrahim Tahir	IPC f/P	Member
5.	Usmail Abraham	NICU Nurse	Member
6.	Derartu Abdulaziz	NICU Nurse	Member
7.	Abdurahman said	NICU Nurse	Member
8.	Ashenafi Negash	Biomedical Technician	Member
9.	Rehma Kadir	Cleaning Staff Rep.	Member
10.	Nuredin Yigazu	CEO	Member
11.	Dr. Derese Gosa	Medical Director	Member

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INTRODUCTION

Healthcare-associated infections (HAIs) are a significant threat to neonates, especially in the NICU where premature and critically ill infants are highly vulnerable. Hand hygiene is the single most effective measure in preventing HAIs. However, hand hygiene compliance in the NICU of Deder General Hospital remains suboptimal. This QI initiative aims to improve hand hygiene adherence among all healthcare workers (HCWs) in the NICU using evidence-based interventions.

ORGANIZATION'S MISSION, AND VISION

Mission:

- ✍ To provide safe, quality, and compassionate neonatal care through prevention of infections and promotion of hygienic practices.

Vision:

- ✍ To be a model neonatal care unit with zero tolerance for preventable HAIs.

PRIORITIZATION MATRIX

S/N	Problems	Magnitude	Severity	Feasibility	Gov't Concern	Community Concern	Total	Rank
1	Low hand hygiene	5	5	5	5	5	25	1st
2	Stock-out of hand	4	4	4	4	3	19	2nd
3	Poor awareness on	4	3	4	3	3	17	3rd
<i>Rating scale: Min 5, Max 25</i>								

3. PROBLEM STATEMENT

A baseline observational audit conducted in **March 2017 E.C** showed that only **42%** of NICU healthcare workers practiced proper hand hygiene according to the **WHO Five Moments for Hand Hygiene**. This non-compliance contributes to increased neonatal infection rates and prolonged hospital stays.

AIM STATEMENT

✎ To improve hand hygiene compliance among healthcare workers in the NICU from **40% to 90%** between **April 1, 2017 E.C** and **June 30, 2017 E.C**.

FISHBONE DIAGRAM

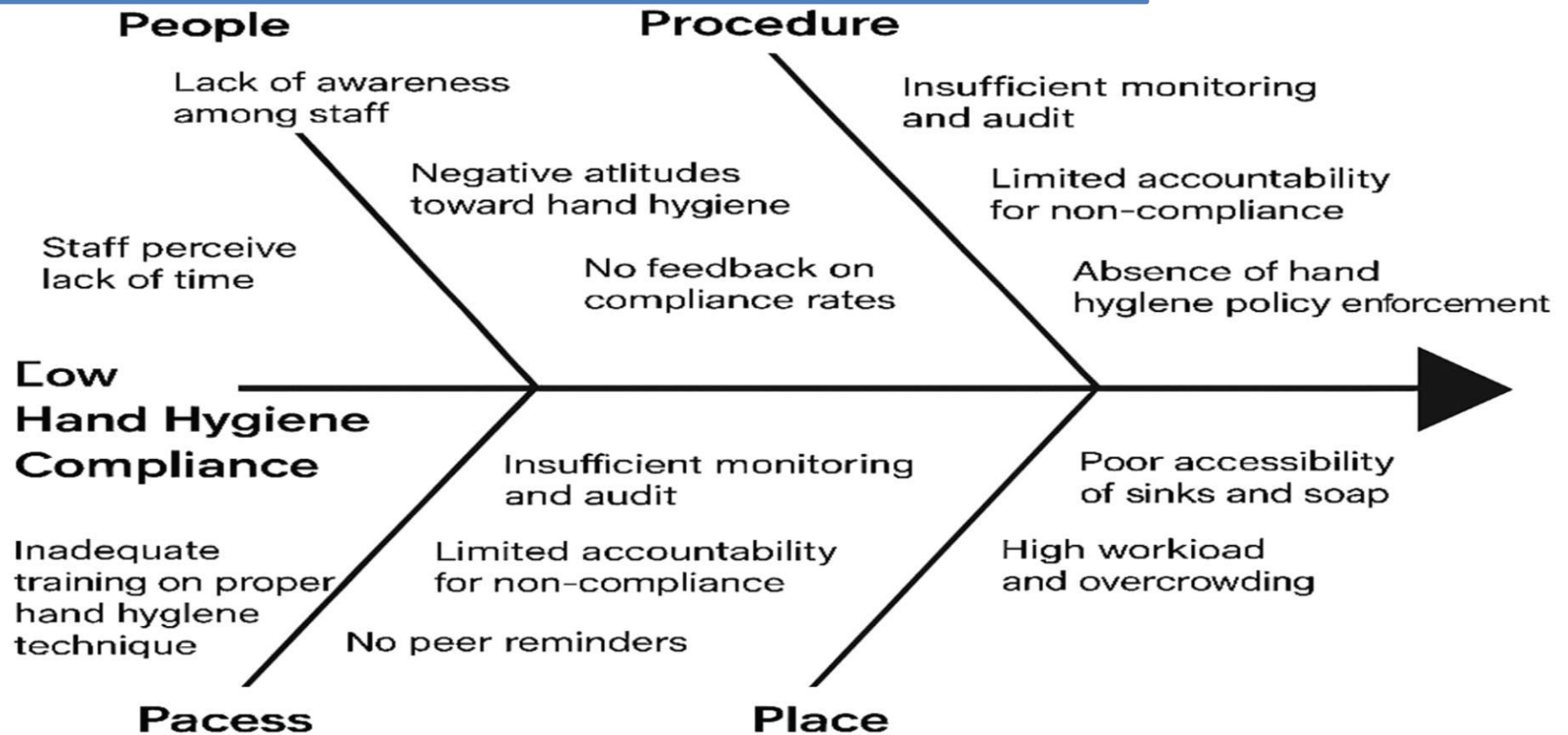
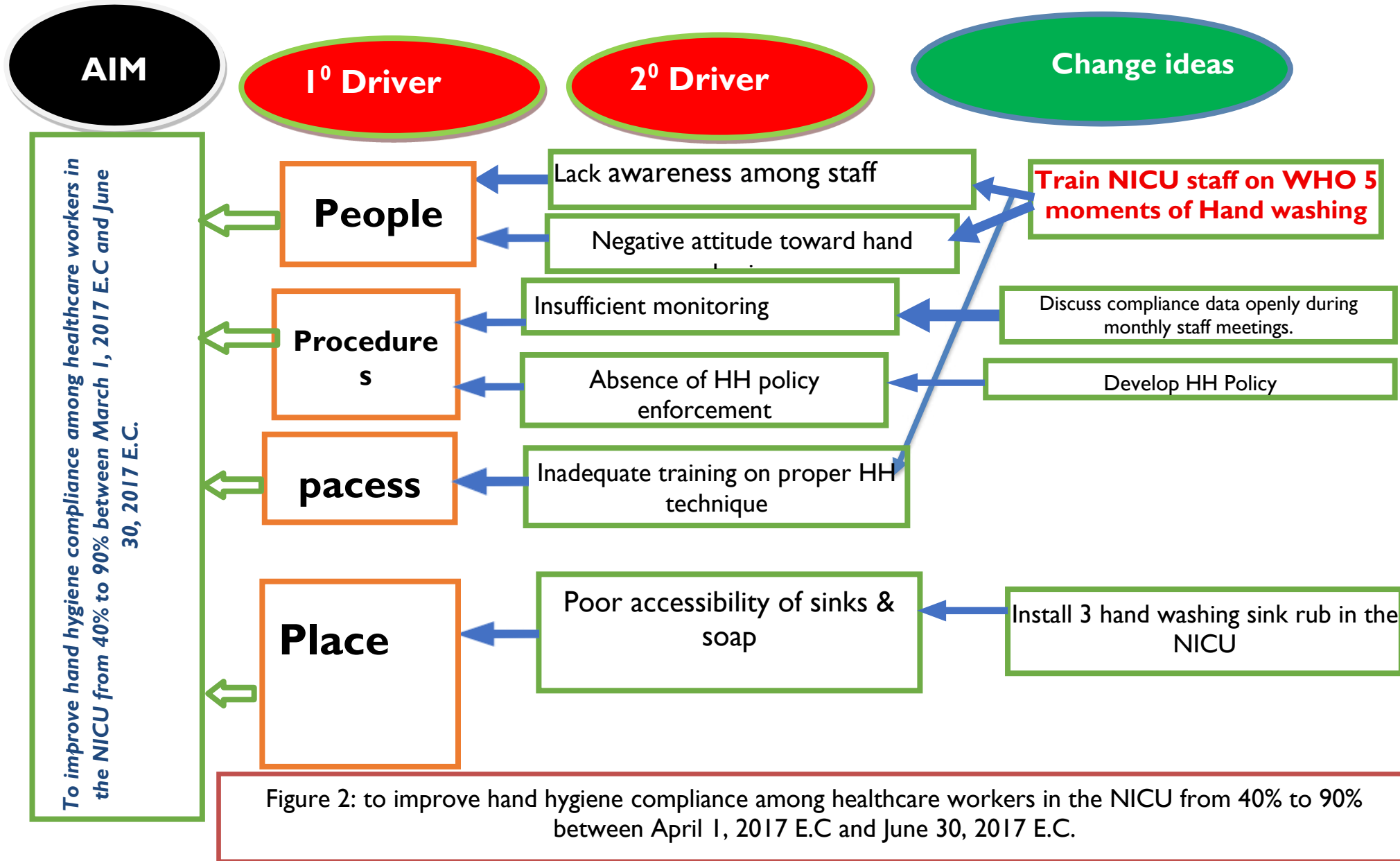


Figure 1: fishbone diagram to improve hand hygiene compliance among healthcare workers in the NICU from 40% to 90% between April 1, 2017 E.C and June 30, 2017 E.C.

DRIVER DIAGRAM



LIST OF PRIORITIZED NTERVENTIONS/CHANGE IDEAS

- ✍ Organize WHO Five Moments hand hygiene training for all NICU staff.
- ✍ Install 3 hand washing sink in the NICU
- ✍ Post laminated WHO hand hygiene posters at key care locations.
- ✍ Initiate peer observation checklists and feedback during each shift.
- ✍ Discuss compliance data openly during monthly staff meetings.

MEASURES

Outcome Measure:

- ✍ % of observed hand hygiene compliance

Process Measures:

- ✍ % of NICU staff trained on WHO 5 Moments
- ✍ % of functional hand hygiene stations available
- ✍ % of shifts with reminders or feedback given

Measures/Indicators

Table 1: Outcome Indicator

Indicator	Numerator	Denominator	Data Source	Responsible
% of observed HH compliance	# of correct HH observed	Total HH opportunities	Observation checklist	IPC focal

Table 2: Process Indicator

Indicator	Numerator	Denominator	Data Source	Responsible
% of staff trained	# trained	Total staff	Training sheet	Quality/HR
% of functional HH stations	# stations working	Total planned stations	Maintenance log	Biomedical/IPC
% of shifts with reminders	# shifts with reminders	Total shifts	Shift reports	NICU head

Table 3: IMPLEMENTATION PLAN (Plan of PDSA)

Change Idea	How	Who	When	Where
Train NICU staff on WHO 5 Moments	Conduct training sessions using WHO job aids and demonstrations	Quality Officer, IPC focal	April 1-21, 2017E.C	Hospital training hall
Install 3 hand washing sinks	Coordinate with engineering team and place sinks near patient care areas	CEO, Biomedical Tech	April 22- May15, 2017E.C	NICU
Post laminated HH posters	Print and place WHO posters above sinks and entrance	IPC focal	May 16 - June 07, 2017E.C	NICU
Peer observation checklists	Initiate peer HH monitoring each shift with feedback	NICU head	June 08-30, 2017E.C	NICU

Table 4: Process Indicator Performance Tracking Sheet

S.No	Change Ideas/ Interventions				Remark
		Number/session on planned	Number/session performed	% of achievement	
1.	Train NICU staff on WHO 5 Moments	1			
2.	Install 3 hand washing sinks	3			
3.	Post laminated HH posters	5			
4.	Peer observation checklists	12			

OUTCOME INDICATOR TRACKING TABLE

Do of PDSA

Table 5:: Outcome Indicators Performance Tracking Sheet

	OUTCOME INDICATOR 1												
AIM	Numerator, Denominator & outcome Indicator		Time: Weekly										
		7-Apr-17	14-Apr -17	21-Apr -17	30-Apr -17	7-May-17	14- May -17	21-May -17	30-May -17	7-Jun-17	14- Jun -17	21- Jun -17	30-Jun -17
To improve hand hygiene compliance among healthcare workers in the NICU from 40% to 90% between April 1, 2017 E.C and June 30, 2017	Numerator: Correct HH Actions												
	Denominator: Total HH Opportunities												
	Indicator: % HH Compliance												

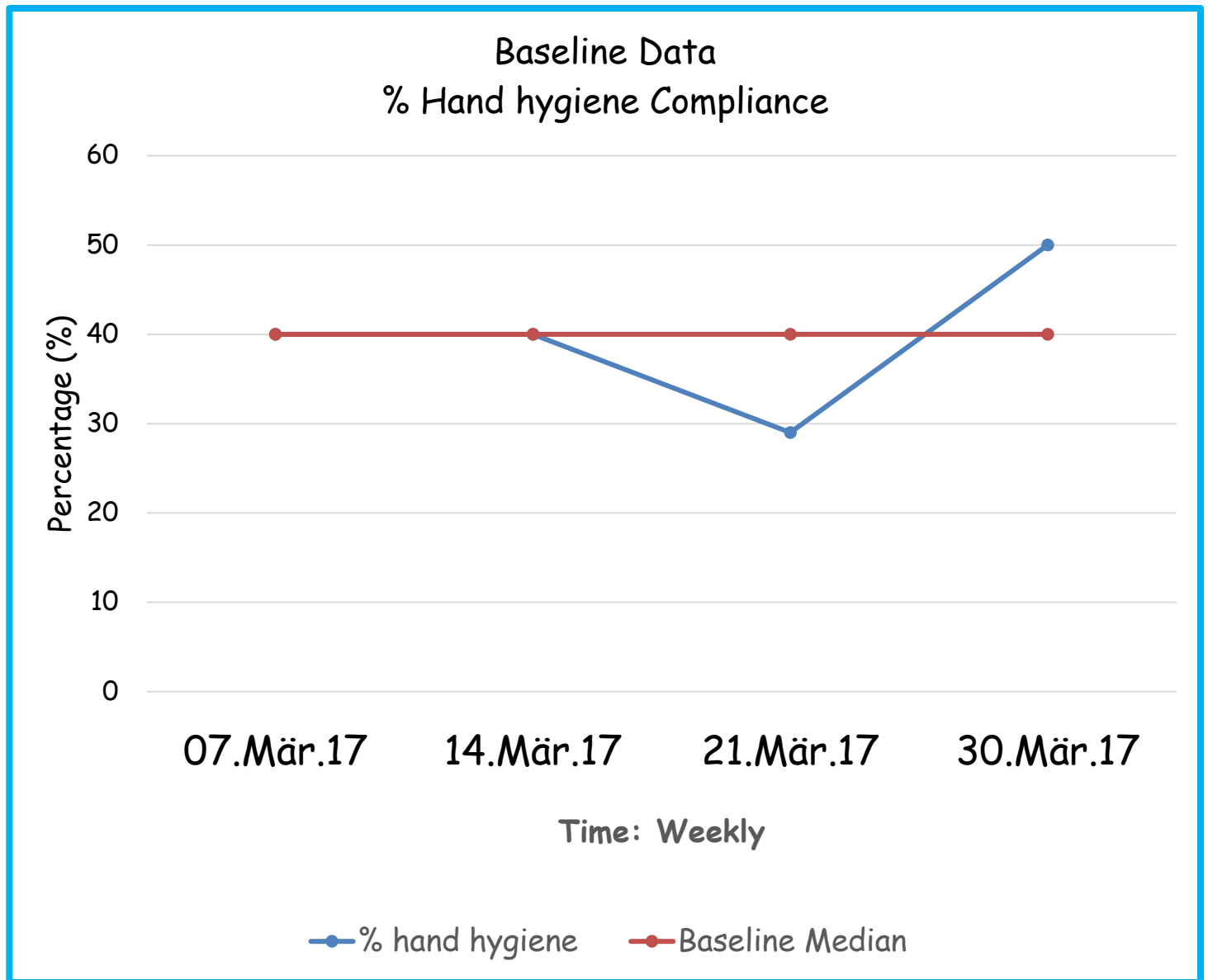


Figure 3: Baseline data to improve hand hygiene compliance among healthcare workers in the NICU from 40% to 90% between April 1, 2017 E.C and June 30, 2017 E.C.

References

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