



# DEDER GENERAL HOSPITAL

## OUTPATIENT DEPARTMENT (OPD)

Clinical Audit to Improve the Quality of Clinical Care

Provided to Diabetic Routine Care Patients

By: Outpatient Department Clinical Audit/QI Team

Audit Cycle: Re-Audit 3

*Deder, Oromia*

*June 2017E.C*

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## **ABSTRACT**

**Introduction:** Diabetes mellitus is a leading cause of morbidity and mortality worldwide, particularly in low-resource settings where access to specialized care is limited. Effective diabetes management requires prompt evaluation, adherence to standardized protocols, and regular follow-up to prevent complications. This clinical audit evaluates the quality of care provided to diabetic patients in the Outpatient Department of Deder General Hospital.

**Objective:** The study aims to assess compliance with healthcare standards, identify gaps in service delivery, and recommend strategies for improvement to achieve 100% adherence across all measured criteria.

**Methodology:** A retrospective review was conducted using a predefined set of 11 performance criteria, including patient identification, clinical examinations, laboratory investigations, treatment provision, counseling, and documentation. Actual performance data were compared against target benchmarks, and deviations were analyzed to determine areas requiring intervention.

**Result:** The overall performance score was **90%**, with notable successes in **blood glucose control (100%)** and **diagnosis accuracy (90%)**, exceeding targets. Minor deficiencies were observed in **laboratory investigations (95%)**, **provider documentation (95%)**, and **counseling (98%)**, indicating opportunities for refinement.

**Conclusion:** While the healthcare system demonstrates strong compliance with most standards, targeted improvements in documentation, laboratory follow-up, and counseling consistency can further enhance service quality. Implementing structured protocols, staff training, and regular audits will help achieve full adherence and sustain high-quality patient care.

## INTRODUCTION

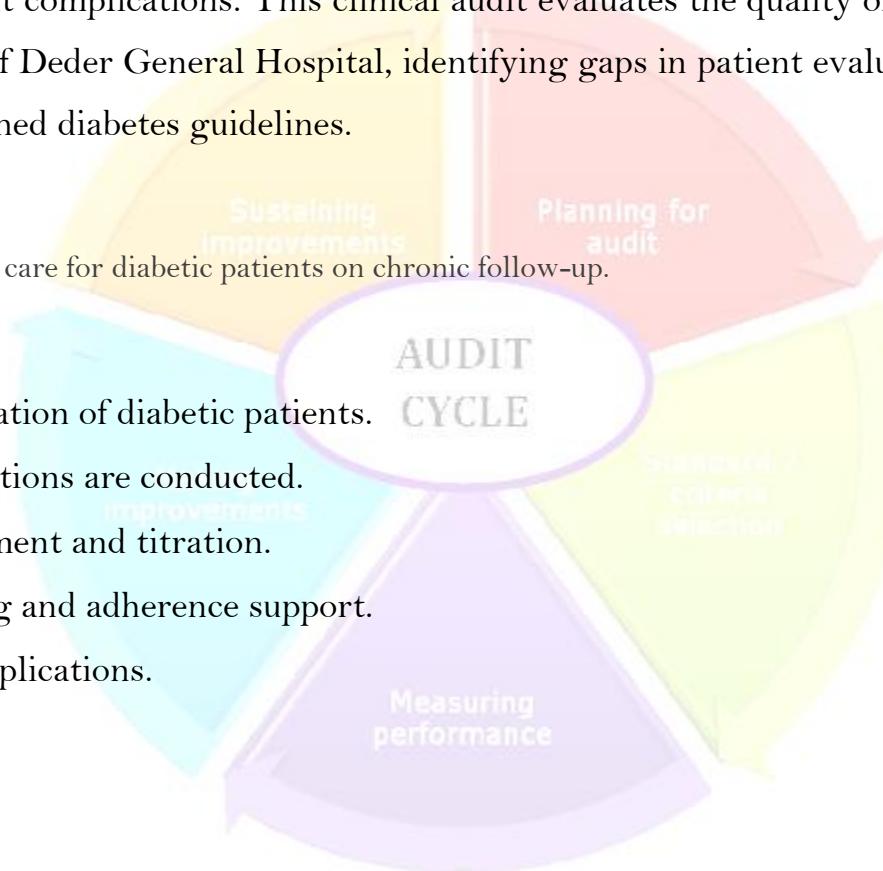
Diabetes mellitus is a leading cause of morbidity and mortality worldwide, particularly in low-resource settings where access to specialized care is limited. Effective diabetes management requires prompt evaluation, adherence to standardized protocols, and regular follow-up to prevent complications. This clinical audit evaluates the quality of care provided to diabetic patients in the Outpatient Department of Deder General Hospital, identifying gaps in patient evaluation, treatment, and follow-up to ensure compliance with established diabetes guidelines.

## AIM

To improve the quality of clinical care for diabetic patients on chronic follow-up.

## OBJECTIVES

- Ensure appropriate evaluation of diabetic patients.
- Ensure relevant investigations are conducted.
- Ensure appropriate treatment and titration.
- Provide proper counseling and adherence support.
- Monitor and address complications.



## METHODOLOGY

## **Study Design:**

- ❖ Retrospective cross-sectional study.

## **Study Period:**

- ❖ **December 21, 2017 E.C. to June 20, 2017 E.C.**

## **Study Population:**

- ❖ Diabetic patients aged  $\geq 18$  years on follow-up for  $\geq 1$  year.

## **Inclusion Criteria:**

- ❖ Patients with a diagnosis of Type 1 or Type 2 diabetes.
- ❖ At least one follow-up visit in the audit period.

## **Exclusion Criteria:**

- ❖ Patients with acute complications of diabetes.
- ❖ Patients with diabetes associated with other endocrinopathies.
- ❖ Pediatric diabetic patients.

## **Sampling Technique:**

- ❖ Systematic random sampling of 19 medical records.

## **Data Collection:**

- ❖ Adapted from the national clinical audit tool.

**Data Analysis: Manual verification and entry into SPSS version 25 for analysis.**

## **RESULTS**

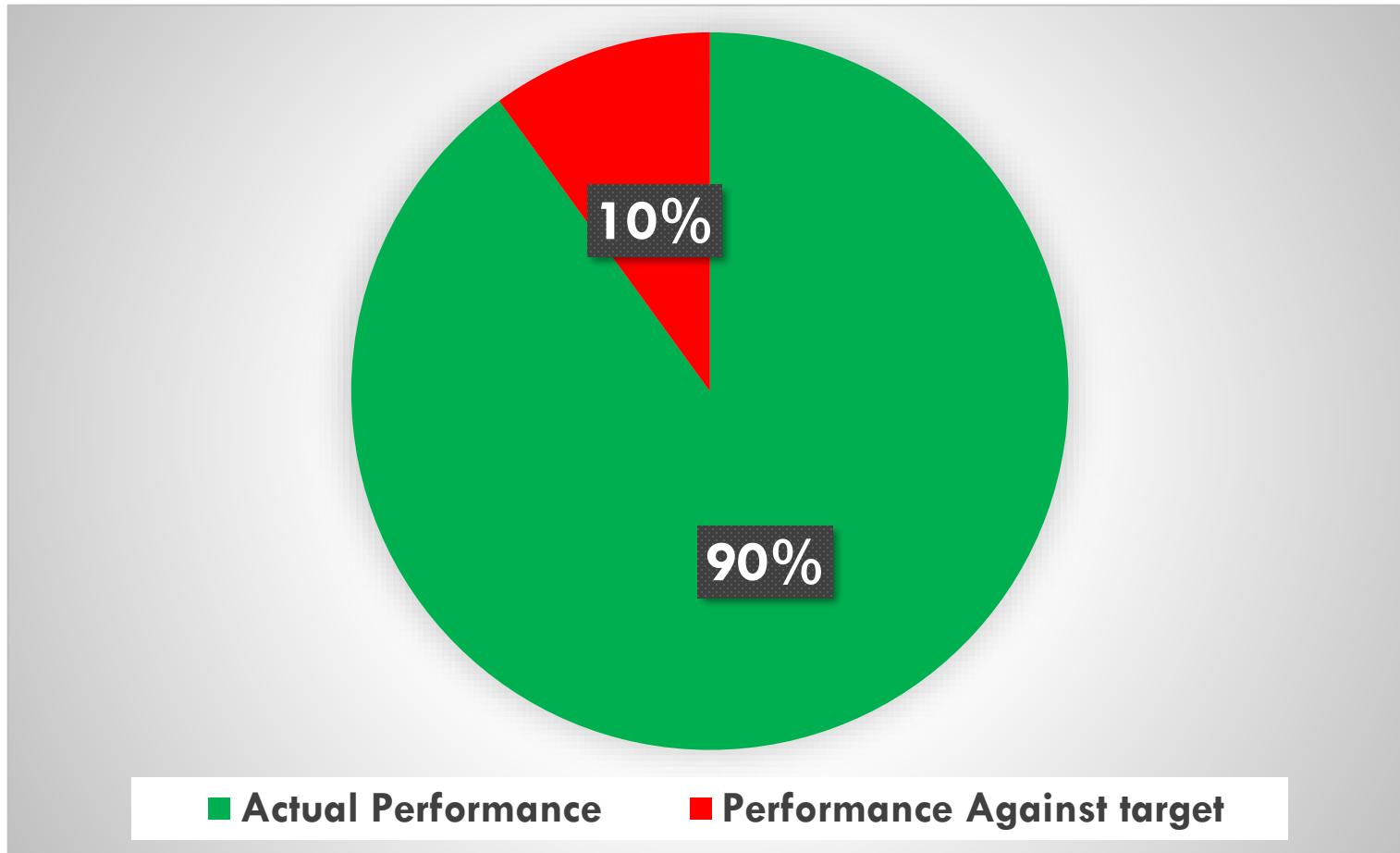
The overall performance of the healthcare services, as indicated by the table, is strong, with a total percentage score of **90%** against the target of 100%. This demonstrates a high level of adherence to the established criteria and standards, with most targets either met or exceeded. Notably, the actual performance surpassed the target in two key areas: "Appropriate Diagnosis and Classification" (90% vs. 85%) and "Blood Glucose Control" (100% vs. 70%), highlighting exceptional outcomes in clinical accuracy and patient management.

However, there are minor areas where performance fell slightly short of the 100% target. For instance, "Relevant Laboratory Investigations Done" and "Provider Identification Documented" both achieved 95%, indicating room for improvement in documentation and diagnostic processes. Additionally, "Proper Counseling Provided" scored 98%, suggesting that while counseling is consistently delivered, there may be occasional lapses that need addressing to ensure complete compliance.

Despite these minor gaps, the results reflect a robust healthcare system that effectively meets most patient care standards. The high performance in critical areas such as treatment, follow-up history, and adherence monitoring underscores a commitment to quality care. Focusing on the few underperforming criteria could further enhance the overall effectiveness and consistency of the services provided.



## Overall Performance of DM routine cares Clinical Audit Result



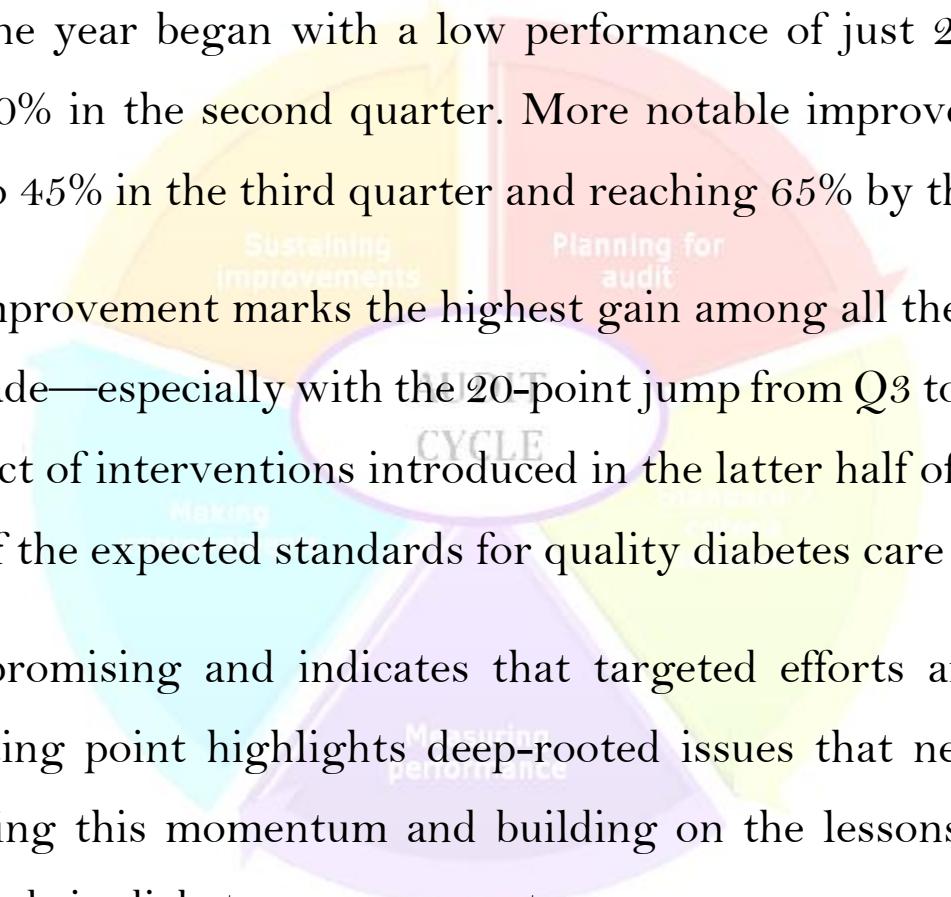
*Figure 1: Overall of Performance of DM ROUTINE CARE Clinical Audit, June 2017E.C*

**Table 1: Overall of Performance of DM routine cares Clinical Audit, June 2017E.C**

#	Criteria/Standard	Target (%)	Actual Performance (%)
<b>1</b>	Identification Information Recorded	100	100
<b>2</b>	Appropriate Follow-Up History Taken	100	100
<b>3</b>	Physical Examination Performed	100	100
<b>4</b>	Relevant Laboratory Investigations Done	100	95
<b>5</b>	Appropriate Diagnosis and Classification	85	90
<b>6</b>	Appropriate Treatment and Care Provided	100	100
<b>7</b>	Proper Counseling Provided	100	98
<b>8</b>	Referral to Specialist (if Indicated)	100	100
<b>9</b>	Adherence Monitoring	100	100
<b>10</b>	Provider Identification Documented	100	95
<b>11</b>	Blood Glucose Control (FBG 80–130 mg/dL, HbA1c <7%)	70	100
	<b>Total Percentage (%)</b>	<b>100</b>	<b>90%</b>

## Trends of DM clinical audit performance

Based on the 2017 E.C. DM clinical audit results, there has been encouraging progress, though much work remains. The year began with a low performance of just 25% in the first quarter, increasing slightly to 30% in the second quarter. More notable improvements came later, with performance climbing to 45% in the third quarter and reaching 65% by the fourth (**Figure 3**).



This 40-point overall improvement marks the highest gain among all the audits shared, showing that real strides were made—especially with the 20-point jump from Q3 to Q4. While these results reflect the positive impact of interventions introduced in the latter half of the year, the final score of 65% still falls short of the expected standards for quality diabetes care (**Figure 3**).

The upward trend is promising and indicates that targeted efforts are making a difference. However, the low starting point highlights deep-rooted issues that need continued attention. Going forward, sustaining this momentum and building on the lessons learned will be key to achieving higher standards in diabetes management.

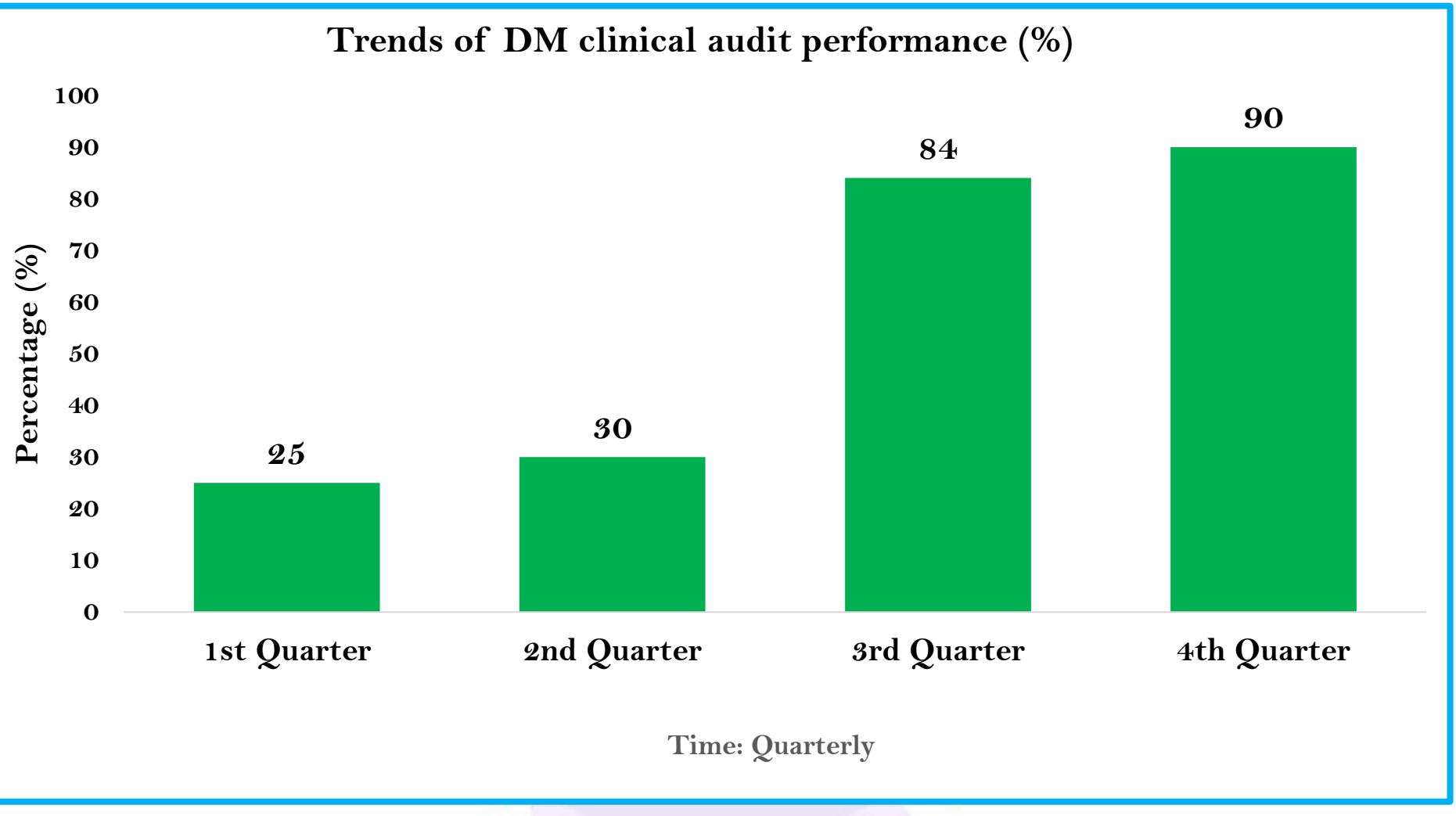


Figure 2: Trends of DM clinical audit performance 2017E.C

## DISCUSSION

The results indicate a high level of compliance with healthcare standards, achieving an overall performance score of 90%. The most notable successes include "**Blood Glucose Control**" (100% vs. 70% target) and "**Appropriate Diagnosis and Classification**" (90% vs. 85% target), demonstrating effective clinical decision-making and patient management. These outcomes suggest that providers are well-trained in diagnosing and managing conditions, particularly diabetes, as evidenced by the excellent glycemic control results. Additionally, key processes such as "**Identification Information Recorded**," "**Appropriate Treatment and Care**," and "**Adherence Monitoring**" all met 100% compliance, reinforcing the reliability of basic care protocols.

However, slight deficiencies were observed in "**Relevant Laboratory Investigations Done**" (95%) and "**Provider Identification Documented**" (95%), indicating minor gaps in documentation and diagnostic follow-through. While these deviations are small, they could impact continuity of care and accountability if left unaddressed. The near-perfect score in "**Proper Counseling Provided**" (98%) suggests that counseling is consistently delivered, but occasional oversights may occur. Strengthening standardized checklists or staff training in these areas could further improve compliance.

Overall, the findings reflect a well-functioning healthcare system with strong adherence to clinical and administrative standards. The high performance in critical areas underscores effective protocols and skilled providers. To achieve full compliance, targeted interventions—such as enhanced documentation practices and periodic audits—could help bridge the remaining gaps, ensuring even greater consistency in patient care.

## RECOMMENDATIONS

- ☒ Update Serum electrolytes for patients
- Provide Medication adherence counseling

**Table 2:** Improvement plan to improve clinical care of DM routine care, June 2017E.C

Priority Area	Action Item	Responsible Party	Timeline
Update Serum electrolytes for patients	Give written feedback for OPD physicians	OPD Director & OPD Nursing head	0-3 months
Provide Medication adherence counseling	Give written feedback for OPD physicians & Nursing staff	OPD Director & OPD Nursing head	1-3 months

**Table 3:** Implementation Status of previous Improvement Plan for improving clinical care of DM routine care patient, June 2017E.C

Priority Area	Action Item	Implementation status
Monitoring & Evaluation	Monthly progress reviews with QI team.	Fully implemented
	Re-audit BP control and process metrics at 6 and 12 months.	Fully implemented

## REFERENCES

1. **World Health Organization (WHO).** (2018). *DM routine cares Fact Sheet*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/DM routine cares>
2. **American DM routine care Association (ABA).** (2016). *Guidelines for the Management of DM routine care Injuries*. Retrieved from <https://www.amerIDM routine care.org>
3. **Ethiopian Federal Ministry of Health (FMOH).** (2015). *Emergency Surgical Care Clinical Audit Tool*. Addis Ababa: FMOH.
4. **Forjuoh, S. N.** (2006). *DM routine cares in Low- and Middle-Income Countries: A Review of Available Literature on Descriptive Epidemiology, Risk Factors, Treatment, and Prevention*. *DM routine cares*, 32(5), 529-537.
5. **Latenser, B. A., & Kowal-Vern, A.** (2009). *Critical Care of the DM routine care Patient*. *Journal of Intensive Care Medicine*, 24(3), 179-191.
6. **National Institute for Health and Care Excellence (NICE).** (2017). *DM routine care Injury Assessment and Initial Management*. Retrieved from <https://www.nice.org.uk>
7. **Deder General Hospital.** (2016). *Emergency Department Protocols for DM routine care Care*. Unpublished internal document.
8. **Cuttle, L., & Pearn, J.** (2010). *First Aid for DM routine cares: A Time-Critical Intervention*. *DM routine cares*, 36(8), 1193-1197.
9. **Kagan, R. J., & Peck, M. D.** (2012). *DM routine care Care in Resource-Limited Settings*. *Clinics in Plastic Surgery*, 39(4), 577-589.