



HEALTH HOLDING

HAFA ALBATIN HEALTH
CLUSTER
MATERNITY AND
CHILDREN HOSPITAL

Department:	Pediatrics		
Document:	Multidisciplinary Policy and Procedure		
Title:	Blood Glucose Monitoring in Pediatric Patient		
Applies To:	All Pediatric Staffs		
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1. PURPOSE:

- 1.1 To evaluate episodes of hyperglycemia and hypoglycemia in order to determine appropriate treatment.
- 1.2 To monitor blood glucose levels enabling to take necessary treatment to maintain within normal and or acceptable range.
- 1.3 To assess glucose excursion after meals.
- 1.4 To determine glucose response to exercise regimen.
- 1.5 To evaluate effectiveness of the medications.

2. DEFINITIONS:

- 2.1 **Blood Glucose Monitoring** – is a method of assessing the concentration of glucose in the blood. Tests are performed rapidly and easily by using a reagent strip (e.g. glucose test strip) where a minute drop of capillary blood is obtained from the client's digits (Finger or toe), or heel.

3. POLICY:

- 3.1 This policy serves as a guideline in checking blood glucose using portable glucose meter. Accurate determination of capillary blood glucose assists patient in the control and daily management of alteration in blood glucose and has to be performed by staff nurse who passed the competency assessment on blood glucose checking.
- 3.2 Standard precaution is applied during procedure.
- 3.3 Blood contaminated items should be disposed according to infection control policy.
- 3.4 Calibration of the glucometer should be verified before use.
- 3.5 Point of care testing device should be handled by staffs that have knowledge about operating the device.
- 3.6 Patients are not allowed to use their own glucometer during their hospitalization.
- 3.7 Blood glucose result will be documented in diabetic chart.

4. PROCEDURE:

- 4.1 Check the physician's order for monitoring frequency.
- 4.2 Identify patient correctly using two identifiers (4 names for the Saudi and complete name for the Non – Saudi and the Medical Record Number) and verify with another staff.
- 4.3 Assemble the equipments needed:
 - 4.3.1 Always use the test strips that are specific to your blood glucose meter to ensure compatibility.
 - 4.3.2 Some strips are physically but not chemically compatible with other meters.
 - 4.3.3 Make sure that the meter is calibrated and ready for use.
- 4.4 Perform hand hygiene and wear unsterile gloves to maintain standard precaution.
- 4.5 Explain procedure to obtain patient cooperation to allay fear and anxiety.
- 4.6 Choose the puncture site.
 - 4.6.1 For adults and children fingertips can be used. The ring finger or thumbs are areas with easy blood flow and puncture just to side of the finger pad because there are more blood vessel and fewer nerve endings.

- 4.6.2 For infants, the tips of the great toe or heel can be the site of puncture.
- 4.6.3 Alternative sites for obtaining blood sample are forearm, upper arm, and base of the thumb are less considered because results may differ from fingertip when blood glucose levels change rapidly.
- 4.7 Wipe the finger to be pricked with alcohol swab to cleanse and remove microorganisms that is present in the site. Dry thoroughly.
- 4.8 Prepare lancet, or needle if unavailable.
- 4.9 Take glucose test strip from the container; ensure strips are not out of date.
- 4.10 Turn on the glucometer. Ensure that the code number on the meter display matches that on the test strip to ensure meter is correctly calibrated. Check expiry dates of test strips.
- 4.11 Wait until the glucometer is ready for testing blood glucose. Some meters require that the glucose strip be inserted at this time.
- 4.12 Insert glucose strips into the glucometer.
- 4.13 Massage side of finger.
- 4.14 Prick at appropriate site. Prick the patient's finger lateral (at the side of the site) to the fingertip using lancet or needle.
 - 4.14.1 Ensure that the site of piercing is rotated.
 - 4.14.2 Avoid frequent use of the index finger and thumb.
 - 4.14.3 Allow five (5) seconds to elapse after lancing or piercing the site.
- 4.15 Obtain enough drop of blood. Insufficient blood samples result to inaccurate reading.
 - 4.15.1 Don't squeeze the puncture site to prevent diluting the sample with fluids from tissues. Rather, milk the blood down the hand towards the finger.
- 4.16 Place clean gauze/cotton over the punctured area and briefly apply pressure until the bleeding stops. Do not use alcohol wipes.
- 4.17 Read blood glucose results. Inform Physician of results.
- 4.18 Turn off glucometer.
- 4.19 Remove blood glucose test strip and discard to the yellow (biohazardous) bags/bins.
- 4.20 Dispose sharps into the sharp container.
- 4.21 Remove gloves and discard to the yellow (biohazardous) bags/bins.
- 4.22 Perform hand hygiene.
- 4.23 Record results in diabetic chart/blood glucose monitoring chart.
- 4.24 Recognize normal and abnormal reading of blood glucose.
- 4.25 Do urine tests each void for sugar and ketones if patient is still or if the blood glucose level is greater than 240mg/dl.
- 4.26 Notify the physician immediately for abnormal reading and carry out treatment as ordered.
- 4.27 Write nursing care plan according to identified patient's problems through nursing process approach. Refer to nursing clinical practice guidelines.
- 4.28 Document reading and patient response to procedure as well as health teaching given in the nurse's notes and diabetic chart.

5. MATERIALS AND EQUIPMENT:

- 5.1 Glucometer
- 5.2 Glucometer Test Strip
- 5.3 Lancet/Needle
- 5.4 Alcohol Swab
- 5.5 Disposable Gloves
- 5.6 2 X 2 Gauze

6. RESPONSIBILITIES:

- 6.1 Physician
- 6.2 Nurses

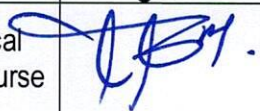

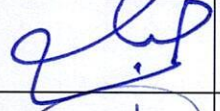
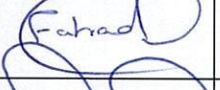

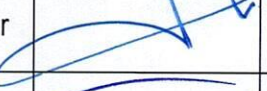

7. APPENDICES:

7.1 Diabetic Monitoring Record Form

8. REFERENCES:

8.1 Kingdom of Saudi Arabia, Ministry of Health Baish General Hospital, 2018.

9. APPROVALS:

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