

International Virtual Congress on PEDIATRICS

July 07, 2021 | Webinar

Incidence and predictors of diabetic Ketoacidosis among diabetes children at east and west gojjam zone referral hospitals, north west ethiopia, 2019

Birtukan Assefa, Haymanot Zeleke , Mrs. Rajalakshmi Murugan and Kalkidan Wondwossen

¹ School of Nursing, College of Health Sciences, Debreworkos University, Debreworkos, Ethiopia

² school of Nursing and Midwifery, College of Allied Health Sciences, Addis Ababa University, Addis Ababa, 1 Ethiopia

Background

Recurrent diabetic ketoacidosis in patients with known diabetes mellitus remains a relevant problem in paediatrics with an incidence of 1–10% per patient. It has a significant mortality (24%) and morbidity (35%)

Death is majorly due to cerebral edema

Objective

We assessed the incidence and predictors of diabetic ketoacidosis among diabetes children at East and West Gojjam zone referral hospitals, North West Ethiopia, 2019.

Methods

An institution-based retrospective follow up study was conducted on children who were registered from January 1, 2014, to January 1, 2019.

Epi data version 3.1 & Stata 14 were used for data entering and analysis respectively

Result 01

Out of 354 children included in the study, 207 (58.5%) developed diabetic ketoacidosis.

The overall incidence rate of diabetic ketoacidosis was 2.27/100 children/month of observation.

Result 02

Age < 5 years (AHR: 3.52, 95% CI (2.25, 5.49)

Non-adherence (AHR: 1.54, 95% CI (1.11, 2.14)

inappropriate insulin storage (AHR: 1.36, 95% CI (1.008, 1.85)

Presence of upper respiratory tract infections during diabetic ketoacidosis diagnose (AHR: 2.22, 95% CI (1.11, 4.45)

Preceding gastroenteritis (AHR: 2.18, 95% CI (1.07, 4.44) were significant predictors

Conclusion 01

- High incidence of Diabetic ketoacidosis was observed
- The significant predictors were
- Age < 5 years old,
- non-adherence,
- inappropriate insulin placement at home,
- preceding gastroenteritis, and
- presence of upper respiratory tract infections at the time of diabetic ketoacidosis development.

Conclusion 02

Hence, assessing and close monitoring as well as strengthened diabetic education should be given for patients with the above predictors.

birtukanassefa19@gmail.com