Title

- Incidence and predictors of diabetic ketoacidosis among diabetes children at East and West Gojjam zone referral hospitals, North West Ethiopia, 2019.

Authors

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Abstract

Background

- ✓Recurrent diabetic ketoacidosis in patients with known diabetes mellitus remains a relevant problem in pediatrics
- ✓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.