

PAEDIATRIC TYPE 1 DIABETES MELLITUS IN THE GAMBIA, WEST AFRICA - PRESENTATION AND OUTCOME.

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INTRODUCTION

In 2010 non-communicable diseases were shown to be the most important cause of mortality worldwide on the WHO global status report, with diabetes the 4th most common disease causing death.¹ The International Diabetes Federation (IDF) estimated the worldwide prevalence of diabetes in children aged 0-14 years to be 497,100 in 2013 with an incidence of 79,100 children per year.²

Almost 80% of deaths from non-communicable diseases are occurring in low and middle income countries.¹ With the annual rise in incidence of diabetes estimated to be 3% this lifelong condition is set to become an increasing burden on the already fragile healthcare systems in these regions.²

The Gambia, situated in West Africa, has a population of 1.849 million and is classified as a low income country according to the World Bank.³ Life expectancy at birth in The Gambia is 59 years with the under 5 child mortality at a high level of 74 children per 1,000 live births in 2013 (compared to the UK under 5 mortality rate of 5 per 1,000 live births).^{4,5}

Type 1 diabetes Mellitus (T1DM) is the most common form of diabetes in children and young people.² There is a paucity of data regarding T1DM in children in West Africa, in particular in The Gambia.



AIM: To explore the clinical presentation and outcome of children with T1DM admitted to The Edward Francis Small Teaching Hospital (EFSTH) in The Gambia, West Africa.

METHOD: Retrospective case note review of patients admitted to EFSTH over a four year period from January 2009 to December 2012.



RESULTS:

- Total 19 patients
- 15 were first presentations of diabetes

Presentation:

- Most common presenting symptoms - Abdominal Pain, Polyuria, Fever
- Other symptoms included - Restlessness, Chest pain, Hallucinations
- Only 2 patients with typical T1DM symptom triad

	New Diagnosis (n=15)	Known T1DM (n=4)
DKA	9	3
Non-DKA	6	1

Investigations:

- Blood glucose measured in all patients
- Urine ketones measured in 11 of the 19 patients

Outcome:

	Discharged	Died
DKA	11	1
Non-DKA	7	0

CONCLUSION:

Although the incidence of T1DM in developing countries is known to be increasing the numbers in this study are small. This gives a glimpse into how varied and vague the presentation of T1DM is in The Gambia and how minimal the clinical resources are. Further study is needed on a wider scale to assess the true incidence and prevalence of the disease.

References

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