

Diabetic Emergencies in Nepal

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Diabetic Emergencies in Nepal

- Diabetes related admission frequently occurs in Emergency Department, however its prevalence in Nepal is not known.
- In this retrospective study, we analysed characteristics of Diabetes Emergency presented to Emergency Department of Tribhuvan University Teaching Hospital between November 2010 to October 2011.
- 285 cases (160 males) were admitted with diabetes related complication that was 0.6% of the total admissions.

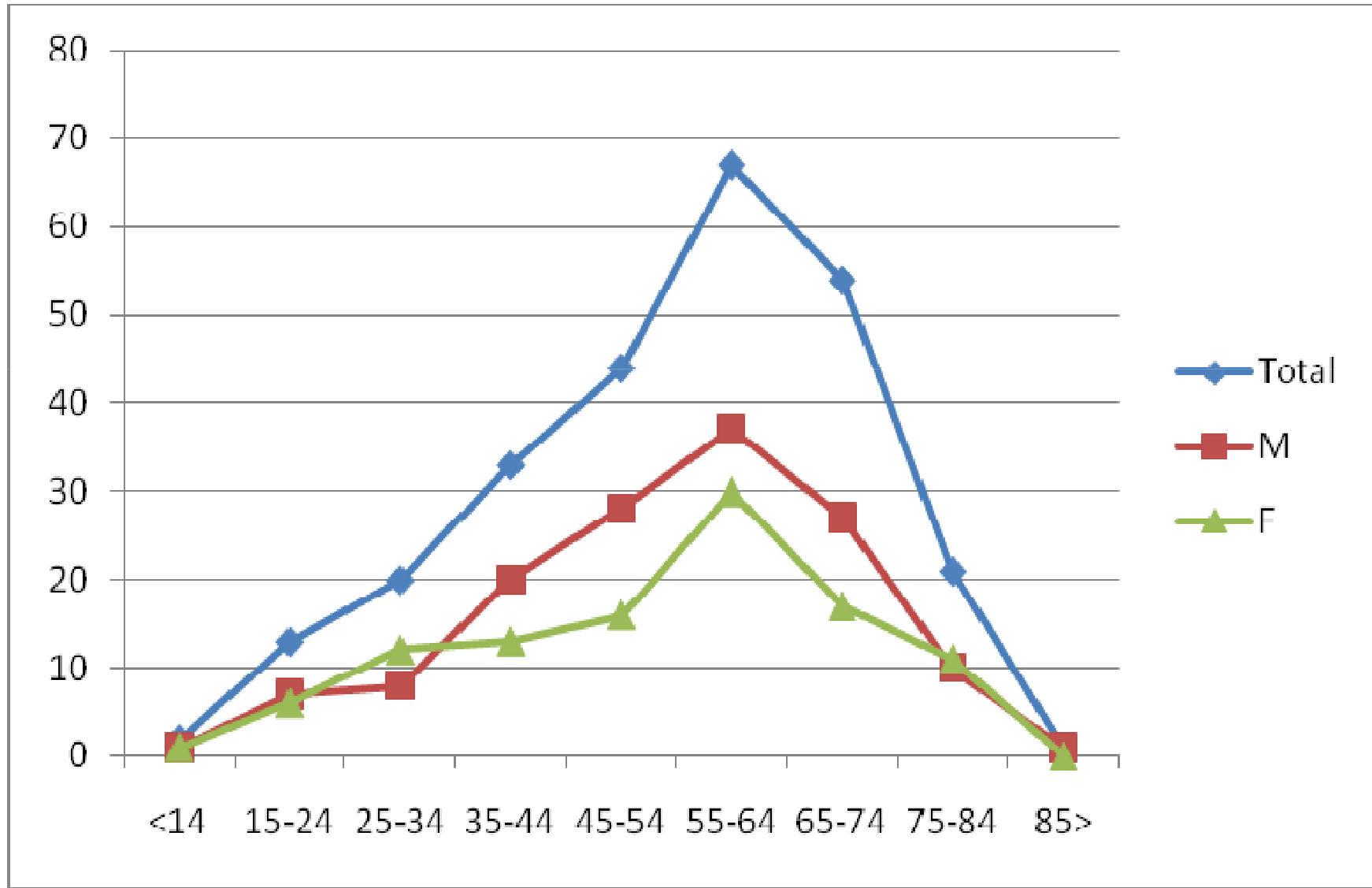
The most common Diabetic Emergencies

- Sepsis in 23.5%
- Diabetes Ketoacidosis (DKA) in 22.1%,
- Uncontrolled blood sugar in 14.4%,
- Chronic Renal Failure in 14%,
- Hypoglycaemia in 8.4%,
- Diabetic Foot in 5.6%,
- Hypertension in 4.6%,
- Stroke in 4.2%,
- Trauma in 1.8%
- Myocardial Infarction in 1.4%.

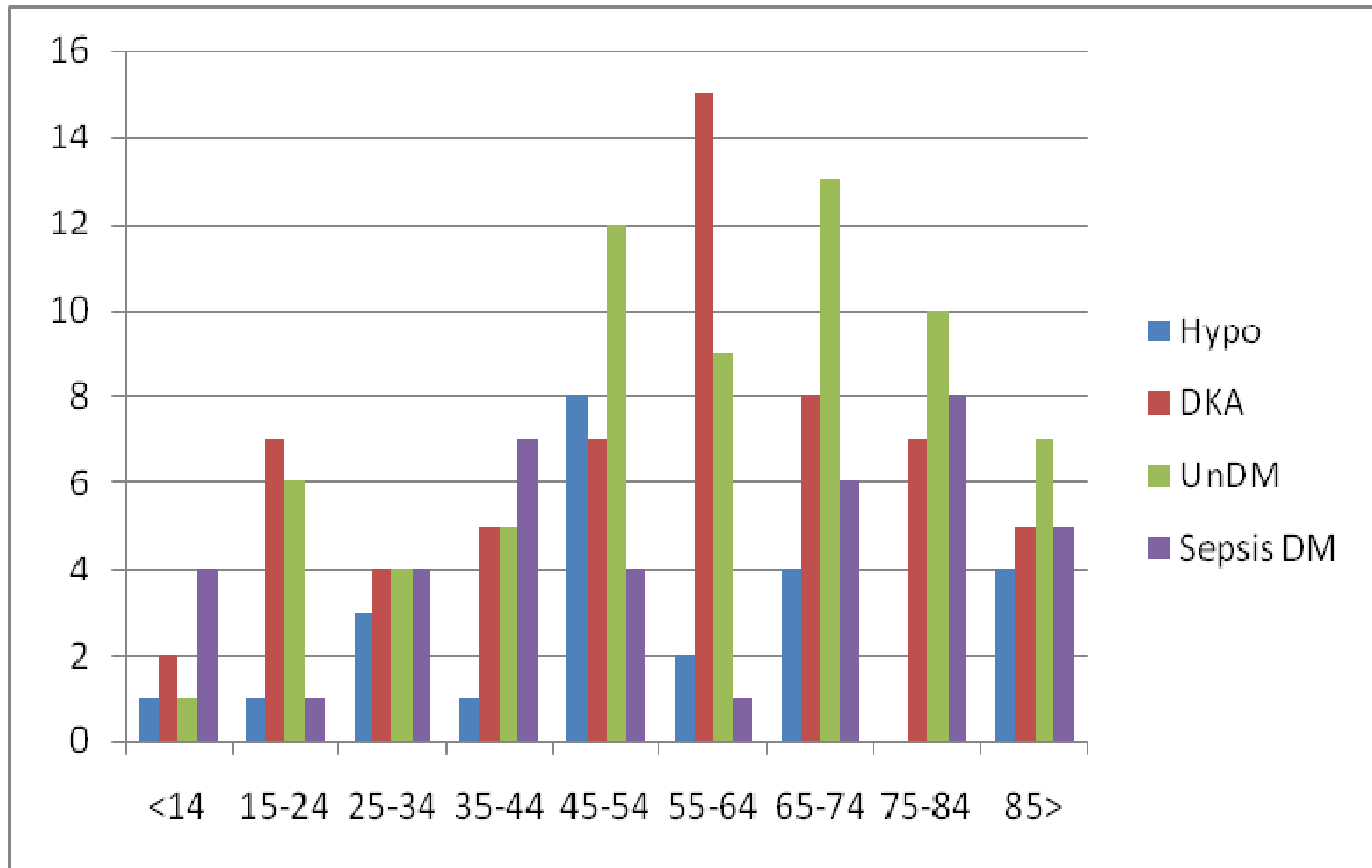
Diabetic Emergencies cases

DM Emergency	%	No. Of Pts	Male	Female	M / F
Sepsis in	23.5	67	32	35	1/1.09
DKA in	22.1	63	32	31	1.03/1
Uncontrolled BS	14.4	41	27	14	1.9/1
CRF in	14	40	25	15	1.7/1
Hypoglycaemia	8.4	24	11	13	1.2/1
Diabetic Foot in	5.6	16	12	4	3/1.0
HTN in	4.6	13	5	8	1/1.6
Stroke in	4.2	12	8	4	2/1.0
Trauma in	1.8	5	4	1	4/1.0
MI in	1.4	4	4	0	4/0
Total	100	285	160	125	1.28/1

Diabetic Emergencies cases with age distribution



Diabetic Emergencies among....



Diagnostic Criteria for DKA in this study

	Clinical features	1 st time diagnosed DM	Diagnosed DM	Total
A	Abdominal pain Nausea / vomiting	80% 44%	41.8% 60%	53.8% 55%
B	Breathing difficulty	8%	20%	16.3%
C	Chest pain Cough	4% 12%	10.9% 21.8%	8.8% 18.8%
D	Diarrhoea Dysurea	0% 0%	9.1 25.5%	6.3% 17.5%
E	Evidence of Thirsty, Polyurea, polyphagia	84%		
F	Fever	24%	54.5%	42.5%
G	GCS Abnormal i.e. Impaired mental status	24%	18.2%	20%

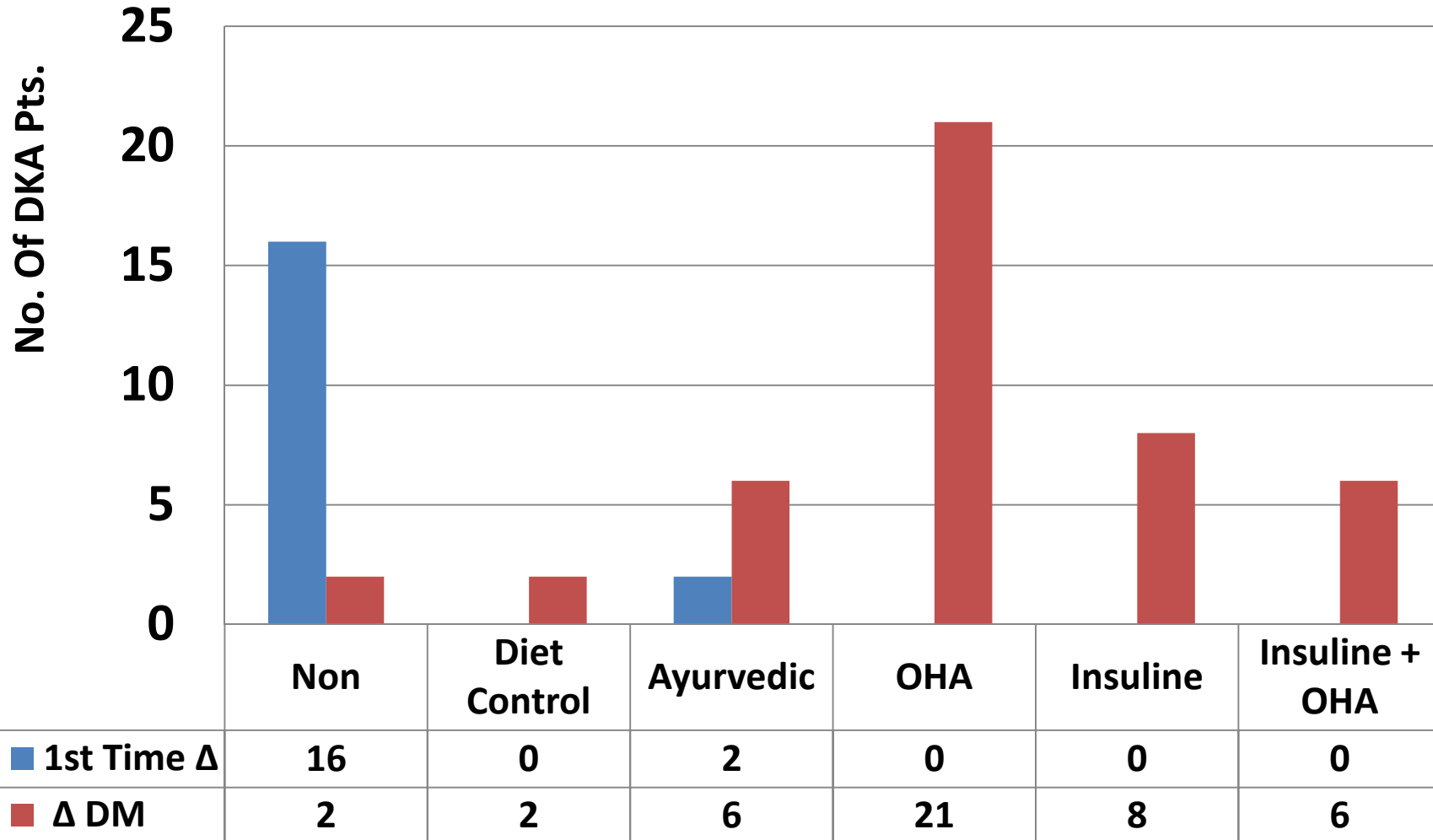
Random Blood Sugar > 13.9 mmol/L, Urine acetone +ve, with 1/> C/F of DKA
(Less supportive of ABG Reports) with other investigation support for 'DM with other diagnosis'.

DKA with

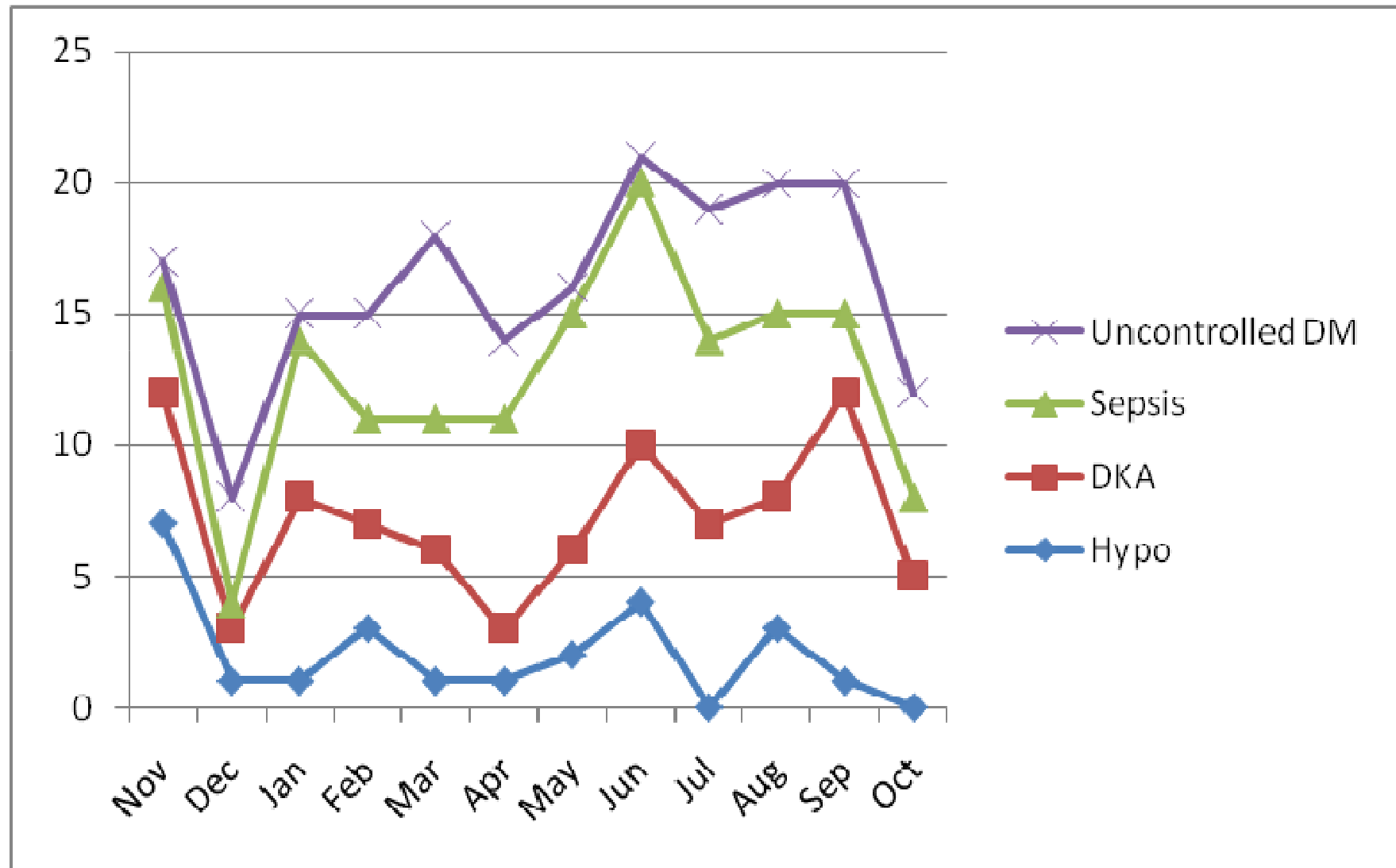
	1st Time Δ	Δ DM
Only DKA	48%	18.20%
<i>(DKA without any precipitating factors 27.5% in total, Odds Ratio 4.15, RR 2.43, p 0.01)</i>		
With Chest Infection	20%	29.10%
With UTI	20%	30.90%
With CI + UTI	0%	9.10%
<i>(Infection 60% in total, Odds Ratio 3.35, RR 1.49, p 0.02)</i>		
With Pancreatitis	8%	3.60%
With IHD	4%	5.50%
With CRF	0%	3.60%

DKA under Medication, $n=63$

**Oral Hypoglycemic Agent (RR 2.29, p 0.00) &
Insulin (RR 1.57, p 0.01)**



Diabetic Emergencies cases with seasonal distribution



Diabetic Emergencies in Nepal

- The mortality rate of these admissions was 0.7%.
- This is an adult Emergency Department and had very few cases of <14 years patients.
- Despite type 1 diabetes being very rare in Nepal, our study showed that DKA was common and highest in 55-65 age group and lesser among <44 years of age.
- There was no case with Hyperosmolar Hyperglycemic Nonketotic Syndrome.
- Hypoglycemic was commonly seen in 45-54 age group than older group which may be due to Nepali culture of taking care of elderly people in joint family.

Thank you!

