

High Prevalence Of Pre-diabetes And Diabetes In Psychiatric Inpatients

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BACKGROUND

- Atypical anti-psychotics have been attributed to the development of pre-diabetes and diabetes in psychiatric patients.^(1,2)
- However, the role of other factors has been less studied.

AIM

- We aimed to determine the prevalence, the characteristics and outcomes of psychiatry inpatients with pre-diabetes and diabetes.

METHODS

- Included were inpatients aged >30 years at the Austin psychiatry unit (February-2014 to April-2015)
- HbA1c measurements through the Diabetes Discovery Initiative.
- Patients were divided into three groups -diabetes (HbA1c≥6.5%, 48mmol/mol), pre-diabetes (HbA1c 5.7-6.4%, 39mmol/mol-46mmol/mol) and no diabetes (HbA1c≤5.6%, 38mmol/mol).
- Data on baseline characteristics, co-morbidities, psychiatric illnesses and treatment were collected.

RESULTS:

- The distribution of 335 psychiatry inpatients is shown in Figure 1.
- The distribution of baseline psychiatric diagnosis and psychotropic medications are shown in Figure 2 and 3.

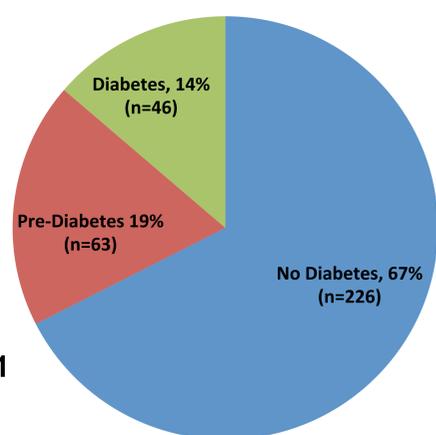


Figure 1

Table 1: Multivariable association of risk factors with diabetes status.

Diabetes vs No diabetes and Pre-diabetes			
Clinical Characteristics	Odds Ratio	95% Confidence Interval	P-value
Age	1.04	1.01 to 1.07	0.02
Schizoaffective disorder	0.18	0.02 to 1.36	0.1
Substance Abuse	2.13	1.03 to 4.43	0.04
Aripiprazole	4.4	1.51 to 12.83	0.01
Hypertension	1.26	0.46 to 3.45	0.65
Hyperlipidemia	2.88	1.14 to 7.26	0.03
Obesity	1.96	0.90 to 4.26	0.09
Employed	0.57	0.20 to 1.59	0.28

- Patients with diabetes and pre-diabetes were older (median age 49 and 46 versus 40, $p < 0.001$) compared to patients without diabetes.
- Patients with diabetes were at least twice as likely to have hypertension, obesity and hyperlipidaemia (all $p \leq 0.002$).
- Multivariable analysis revealed the significant variables associated with diabetes to be age, substance abuse, hyperlipidemia and aripiprazole use.
- Patients with diabetes also had a longer inpatient stay (Incidence Rate Ratio-1.7, 95%CI:1.2-2.3; $p = 0.001$).

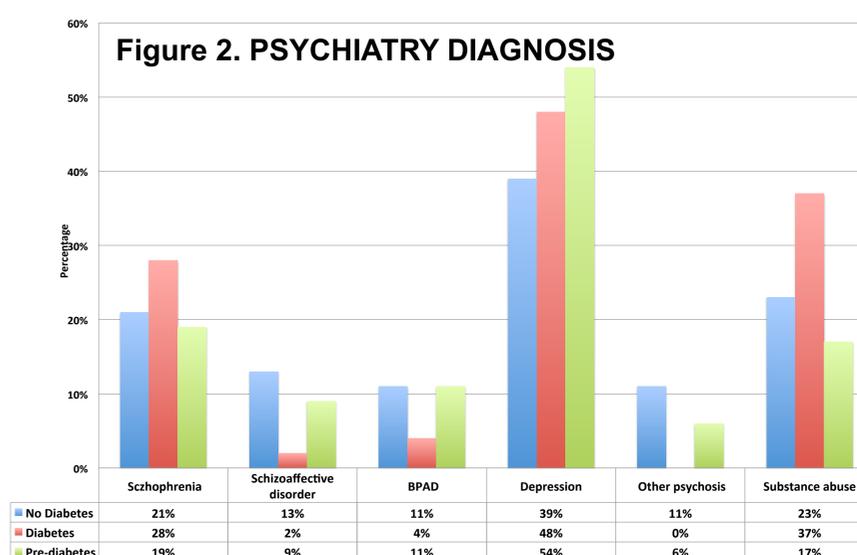
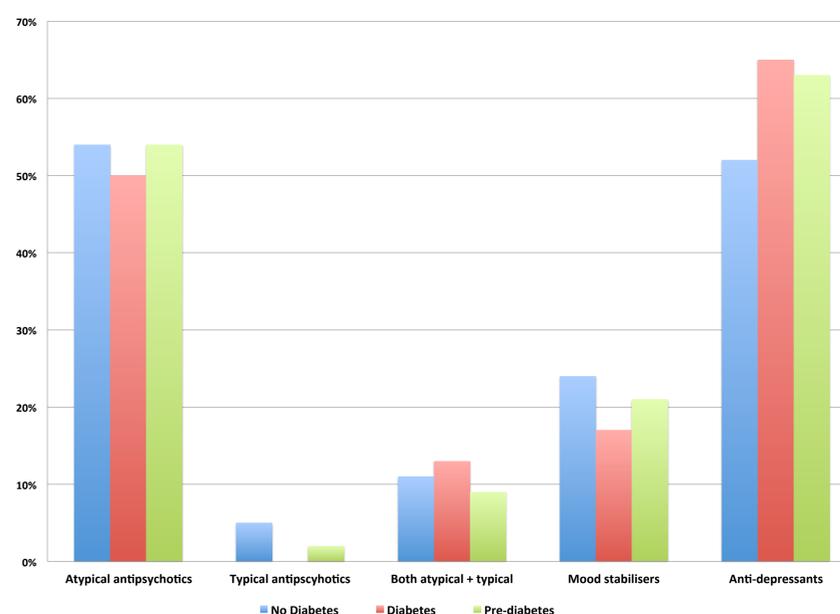


Figure 3: PSYCHOTROPIC MEDICATIONS



CONCLUSION:

Despite relative youth, one third of all psychiatric inpatients have diabetes or pre-diabetes. Presence of diabetes in psychiatric inpatients is associated with older age, substance abuse and longer hospital admission. The management of glycaemic status in psychiatric inpatients following discharge is difficult and hence routine HbA1c measurement as an inpatient presents an opportunity to address glycaemic management.

REFERENCES:

- People living with Psychotic Illness 2010, Australian Government, 2011
- Diabetes, Psychotic Disorders and Antipsychotic therapy- A consensus statement, A /Prof Tim Lambert Dr Leon Chapman, 2004