

Use of anti-psychotic medication in children and adolescents

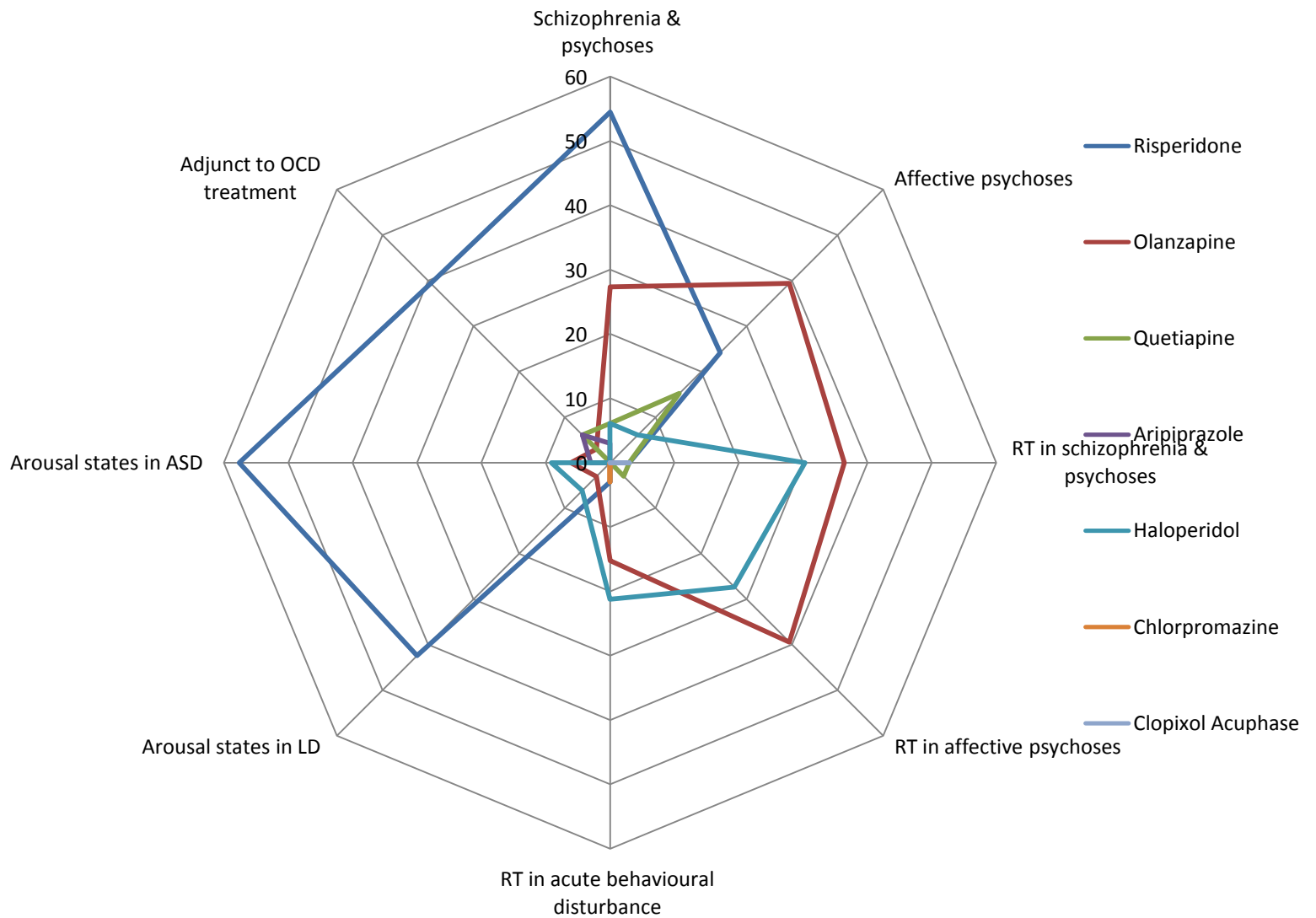
Recapitulating evidence and reflecting on current practice

Review of prescribing practices in UK adolescent mental health settings

- A postal survey of UK in-patient adolescent mental health settings
- Second generation antipsychotics drug of first choice
- Dose ranges for all medication within BNF limits
- Lower dose ranges used for non-psychotic conditions more often

Table 1. Clinicians' response rates for antipsychotic of first choice

	Risperidone %	Olanzapine %	Quetiapine %	Aripiprazole %	Haloperidol %	Chlorpromazine %	Clopixol Acuphase %
Schizophrenia & psychoses	54.5	27.3	6.1	3.0	6.1	0	0
Affective psychoses	24.2	39.4	15.2	0	6.1	0	0
RT in schizophrenia & psychoses	3	36.4	3	0	30.3	0	3
RT in affective psychoses	0	39.4	3	0	27.3	0	0
RT in acute behavioural disturbance	3	15.2	0	0	21.2	3	0
Arousal states in LD	42.4	3	0	0	6.1	0	0
Arousal states in ASD	57.6	6.1	0	3	9.1	0	0
Adjunct to OCD treatment	39.4	3	6.1	6.1	0	0	0



Recapitulating evidence

In the past decade

- Increase in the use of antipsychotic medication in C & A (Vitiello et al., 2009)
- A switch from first line use of FGA to SGA (UK: Clark, 2004, Otasowie et al., 2010 & US: Patel et al., 2005)
- 90% SGA prescriptions shown in the recent POMH-UK study of antipsychotic medication in C & A (Prescribing Observatory for Mental Health, 2010).

Recapitulating evidence

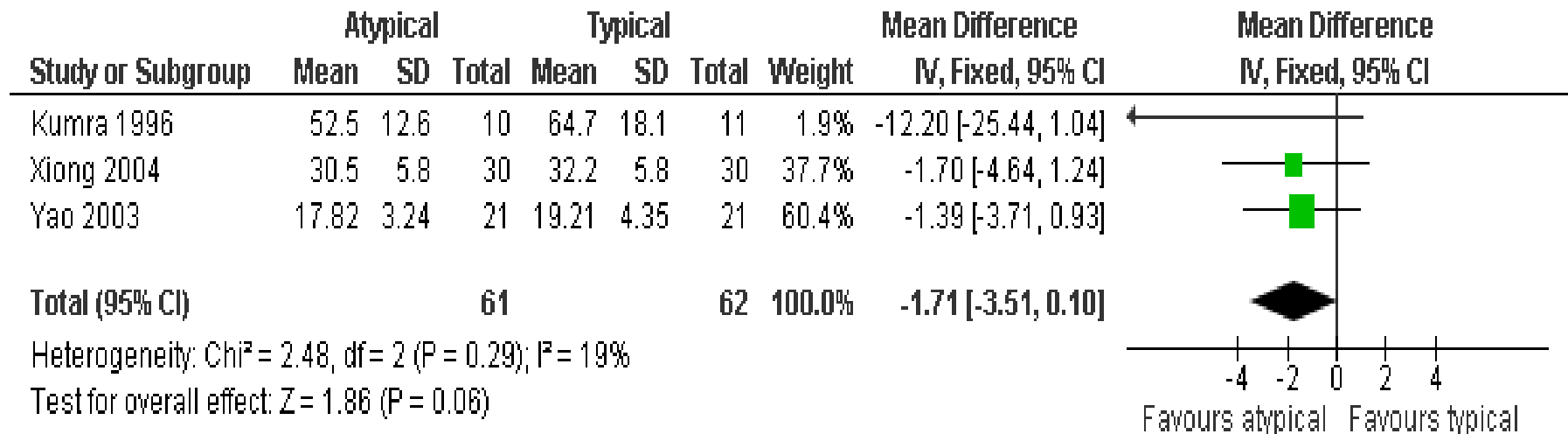
- Presumed better tolerability, concordance & outcome of SGAs being challenged
- Supported by CATIE, CUtLASS & then TEOSS
- Cardio-metabolic concerns raised by SATIETY
- Recent meta-analysis of RCTs in early psychosis concluded efficacy no different between FGAs and SGAs, clear difference in side-effect profile evident (Crossley et al., 2010).

RCTs on Antipsychotic medications

- Childhood onset schizophrenia
- Adolescents with psychosis

- Typical vs atypical
- Atypical vs atypical
- Dosage
- Others

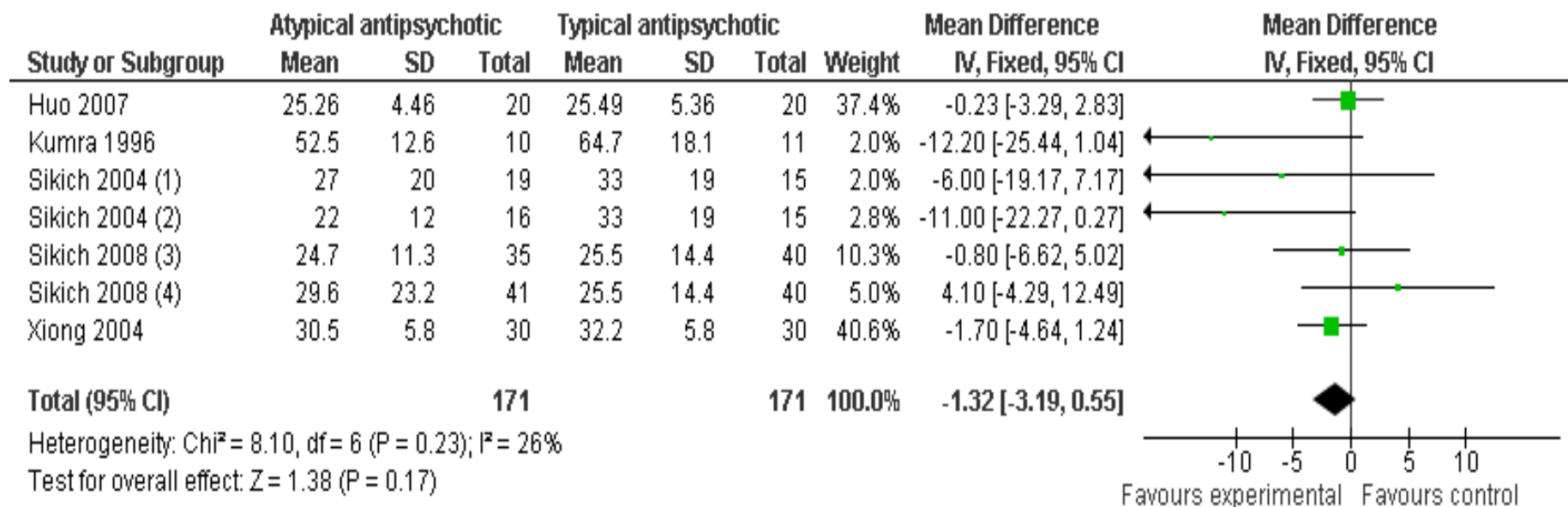
Childhood onset Schizophrenia: Atypical vs Typical Antipsychotic Medications



Kumra (1996) Clozapine vs Haloperidol
 Yao (2003) Risperidone vs Haloperidol
 Xiong (2004) Risperidone vs Chlorpromazine

(Cochrane Review by Kennedy et al 2007)

Adolescents with psychosis: Atypical vs Typical



(1) Sikich 2004 (Data for Risperidone vs Haloperidol)

(2) Sikich 2004 (Data for Olanzapine vs Haloperidol)

(3) Sikich 2006 (Data for Molidone vs Olanzapine)

(4) Sikich 2008 (Data for Molidone vs Risperidone)

Huo (2007) Risperidone vs Perphenazine

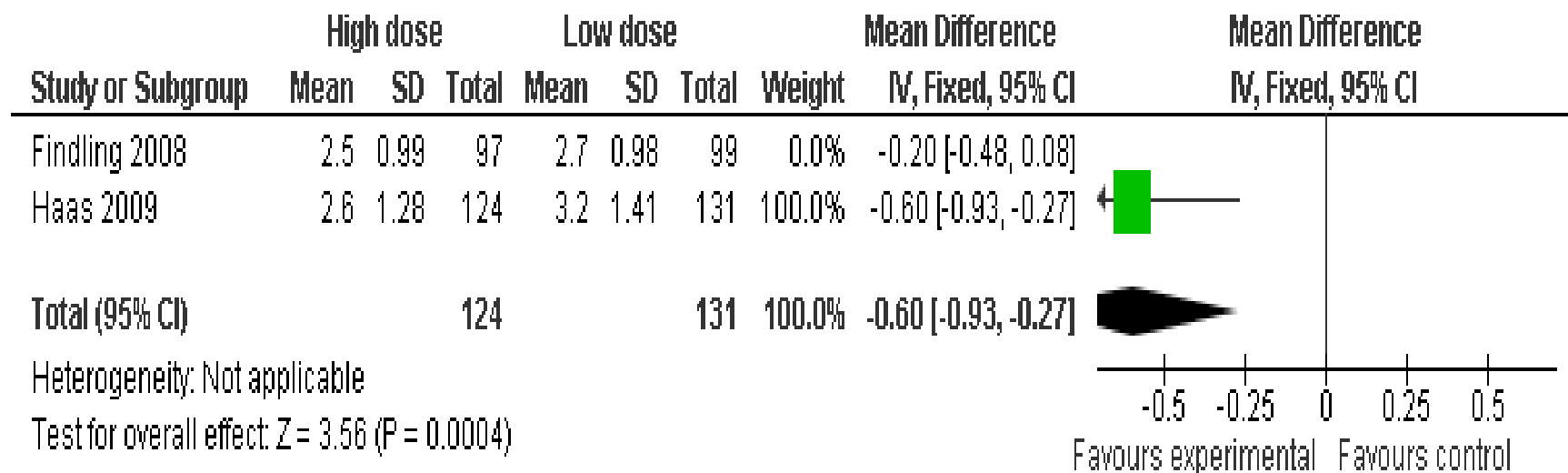
Kumra (1996) Clozapine vs Haloperidol

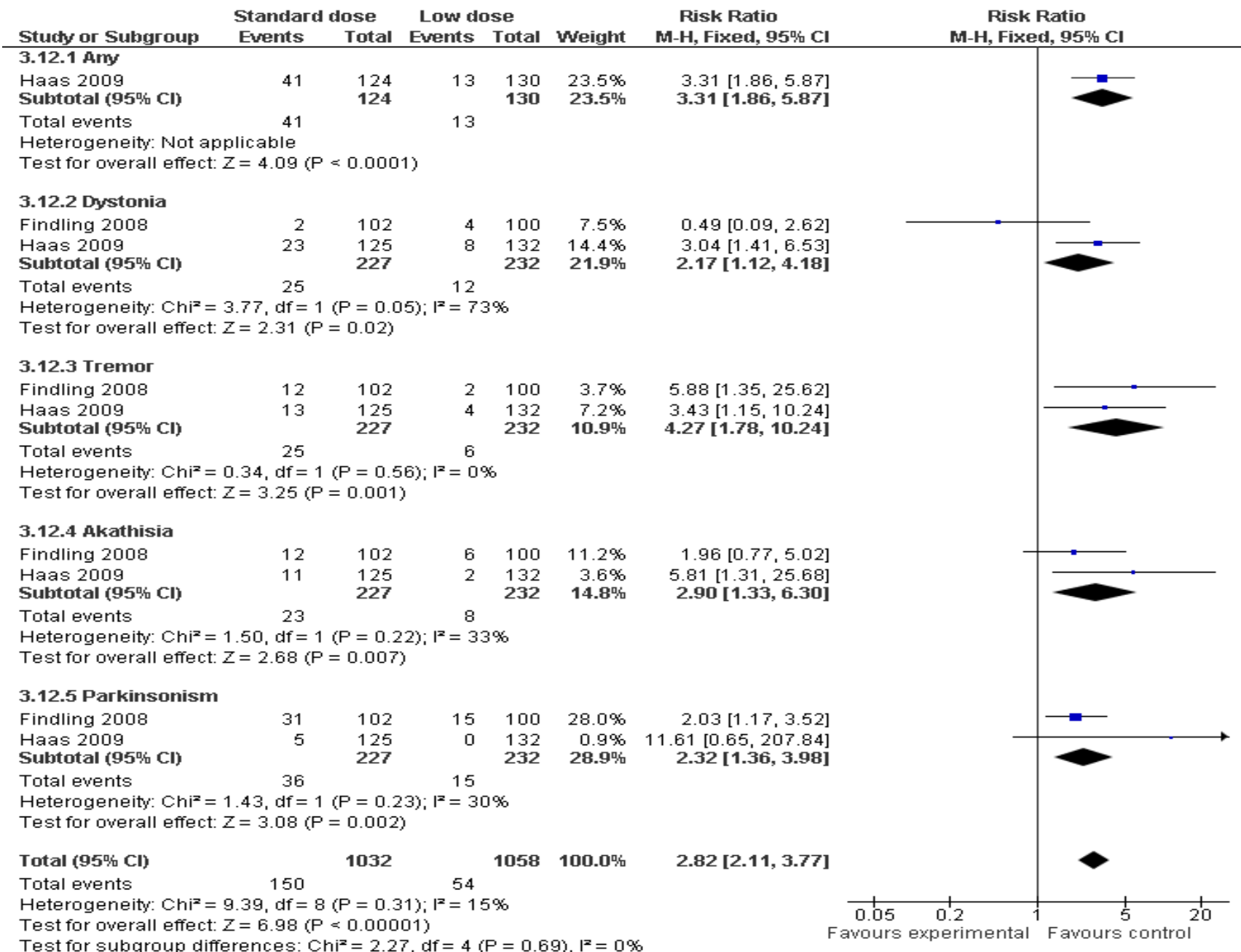
Sikich (2004) Risperidone vs Olanzapine vs Haloperidol

Sikich (2008) Risperidone vs Olanzapine vs Molindone

Xiong (2004) Risperidone vs Cholrpromazine

Atypical Antipsychotics in Adolescents: Lower vs Higher Dose





Take home messages

Survey:

1. Atypicals are being used more often
2. For RT, HPDL and Olanzapine are popular

RCTs:

3. Atypicals (except Clozapine) has very little evidence to show better clinical efficacy.
4. Side effect profile of typical and atypical antipsychotic medications are different.