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MRCPsych General Adult Psychiatry

Psychosis 4

Developing people
for health and
healthcare

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Objectives

To develop an understanding of:

- the course and prognosis of schizophrenia
- risk factors for poor outcomes
- the relevance of duration of untreated psychosis

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Expert Led Session

Schizophrenia: Course & Prognosis

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Overview

- Historical view
- Course
- Prognosis
- Risk factors for poorer outcomes
- Duration of untreated psychosis
- Treatment resistance
- Physical Health
- Suicide

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Schizophrenia

- Schizophrenia affects more than 21 million people worldwide[1]
  - Approx 220,000 people in England and Wales[2]
- Affects around 1 in every 100 people over the course of their life[3]
- In 2007 - accounted for approx 30% of total expenditure on adult MH & social care services[2]
- Moderate/severe disability in 60% of cases[2]
- Mortality is approx fifty percent above that of the general population[2]

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Historical view

- Kraepelin - *dementia praecox* (“premature dementia”)
  – viewed as having a progressive downhill course, similar to forms of dementia, but starting earlier in life[4]

- Bleuler – *schizophrenia* (reflecting observations of loose associations)
  – recognition that some symptoms are chronic, but that patients don’t always show a downward course; chronic symptoms often less severe after the initial acute phase[4]

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Course/Outcome

- Overall outcome poor compared to other psychiatric disorders (except dementias)[4]
- Follow up studies have shown considerable variation in long-term outcome[5]
- People vary considerably in their pattern of symptoms and in the course of any remaining difficulties[5]
- Risk factors interact with personality, temperament, and cognitive traits that influence its course[4]

Course/Outcome

- Most people recover from the initial acute phase; only 14-20% recover fully
- Approx 80% will relapse within 5 years of a treated first episode
  - partly due to stopping medication
- Others (3/4) improve but have recurrent relapses & some degree of ongoing disability
  - timing related to stress, adversity, social isolation, treatment compliance
- Smaller proportion have extended periods of remission without further relapses
- In the longer term (up to 15 years) over half of those diagnosed will have episodic rather than continuous difficulties

(NICE[5])

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In summary…

For every 5 people with schizophrenia:

- 1 will get better within five years of their first obvious symptoms
- 3 will get better, but will have times when they get worse again
- 1 will have troublesome symptoms for long periods of time

(RCPsych[3])

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Remember

- Some people who never experience complete recovery from their experiences still manage to sustain an acceptable quality of life if given adequate support and help[5]

- “There is a subgroup of schizophrenia patients who, a few years after the acute phase, function adequately or experience periods of recovery for a number of years, without treatment”[4]

Predictors for poor odds of remission

Non-modifiable risk factors[6]

- Male sex
- Younger age at disease onset
- Poor premorbid adjustment
- Severe baseline psychopathology

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Predictors for poor odds of remission

Modifiable risk factors[6]

- Longer duration of untreated illness
- Nonadherence to antipsychotics
- Comorbidities (esp substance misuse)
- Lack of early antipsychotic response
- Lack of improvement with non-clozapine antipsychotics, predicting clozapine response

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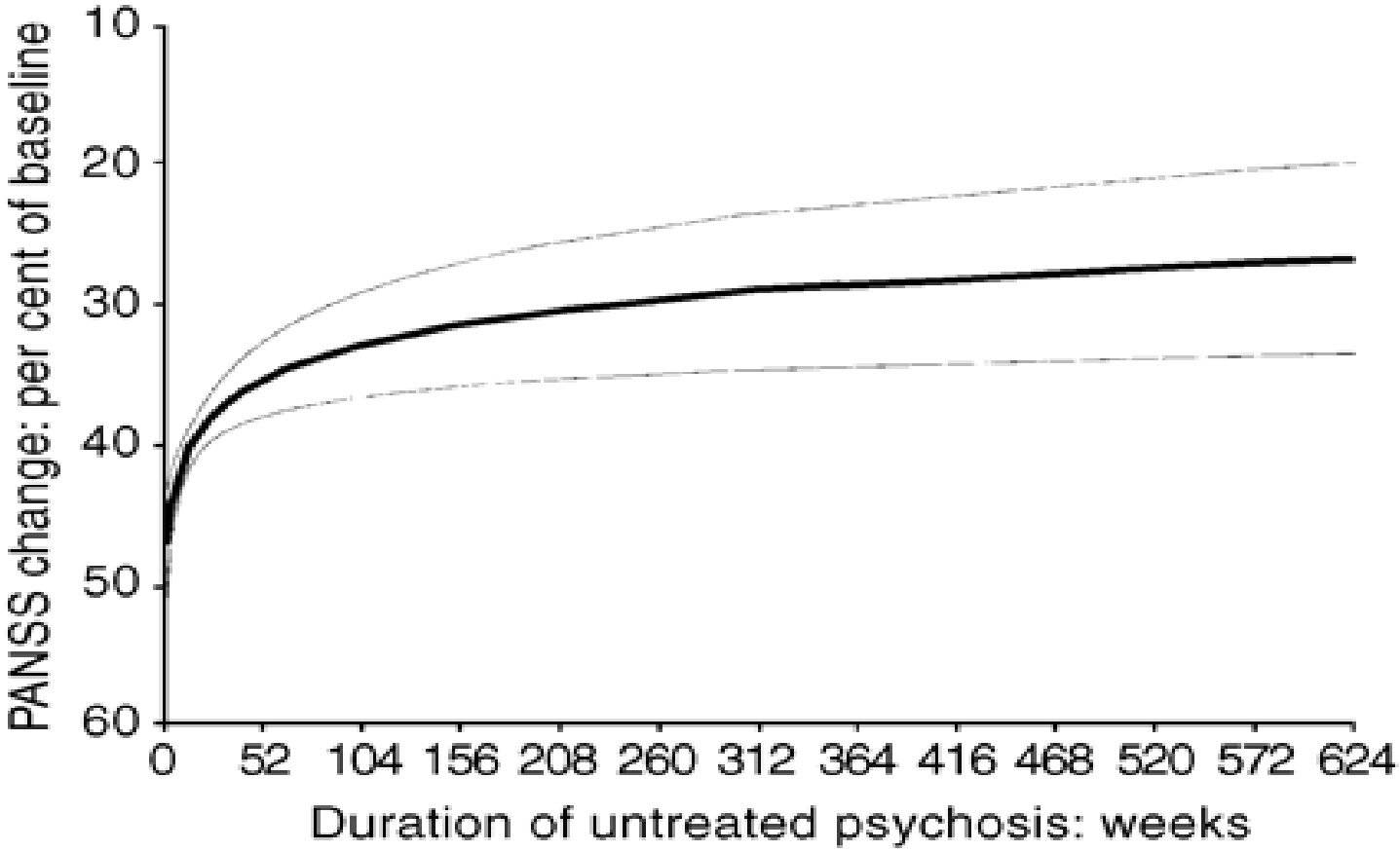
Duration of untreated psychosis



([7])
From: Drake et al. Causes and consequences of duration of untreated psychosis in schizophrenia. The British Journal of Psychiatry.
2000, 177 (6) 511-515

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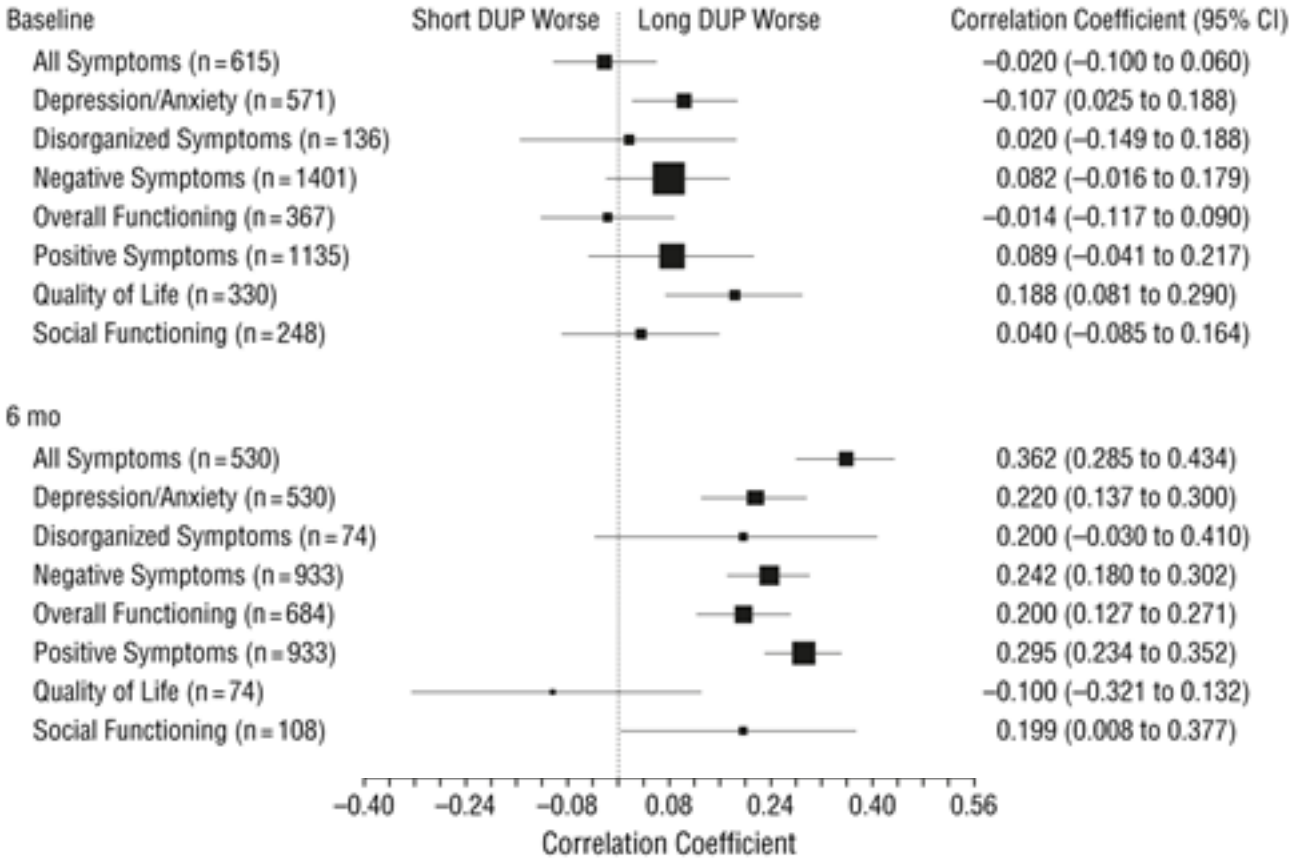
DUP – shorter term outcomes



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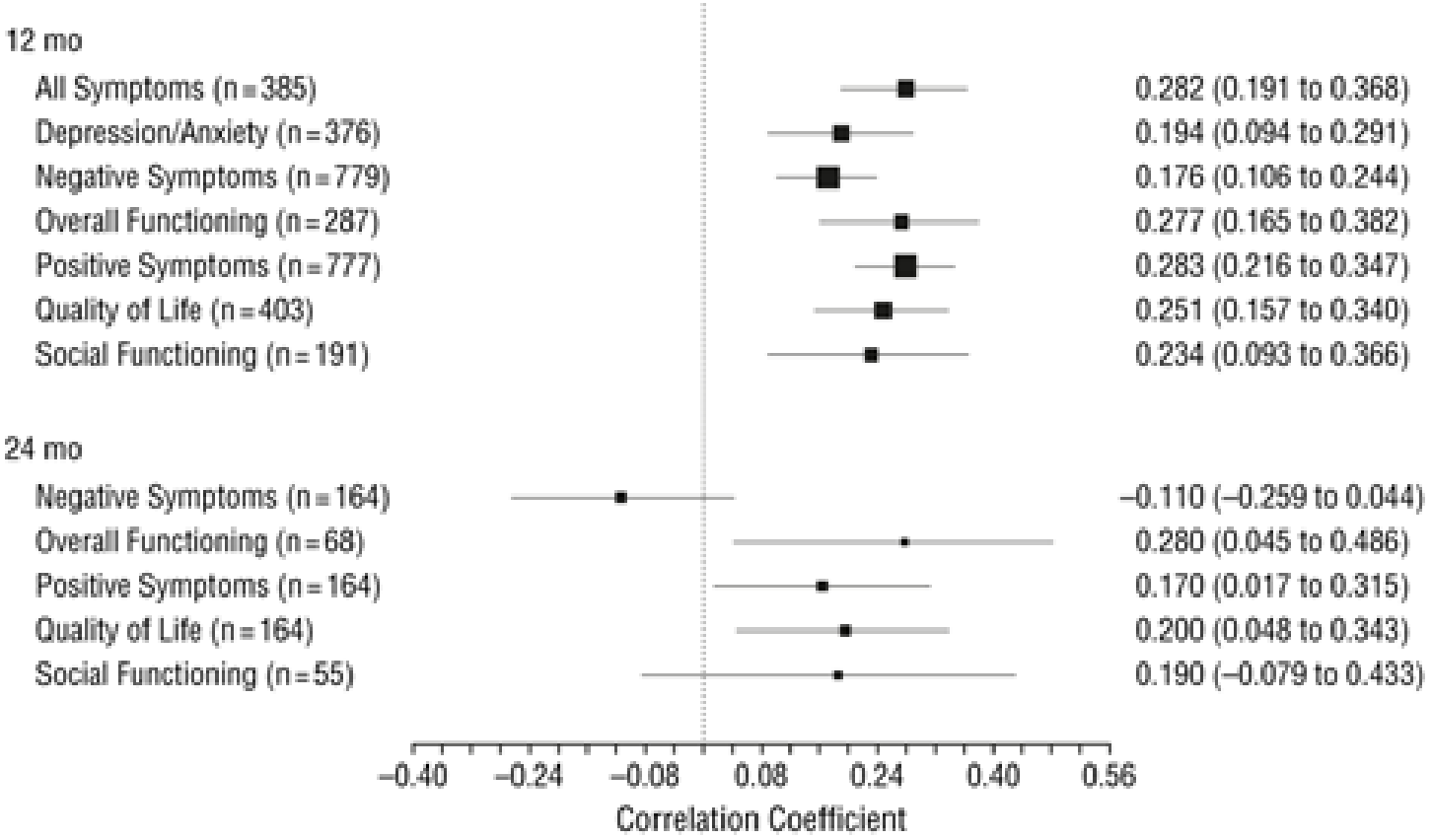
DUP – shorter term outcomes



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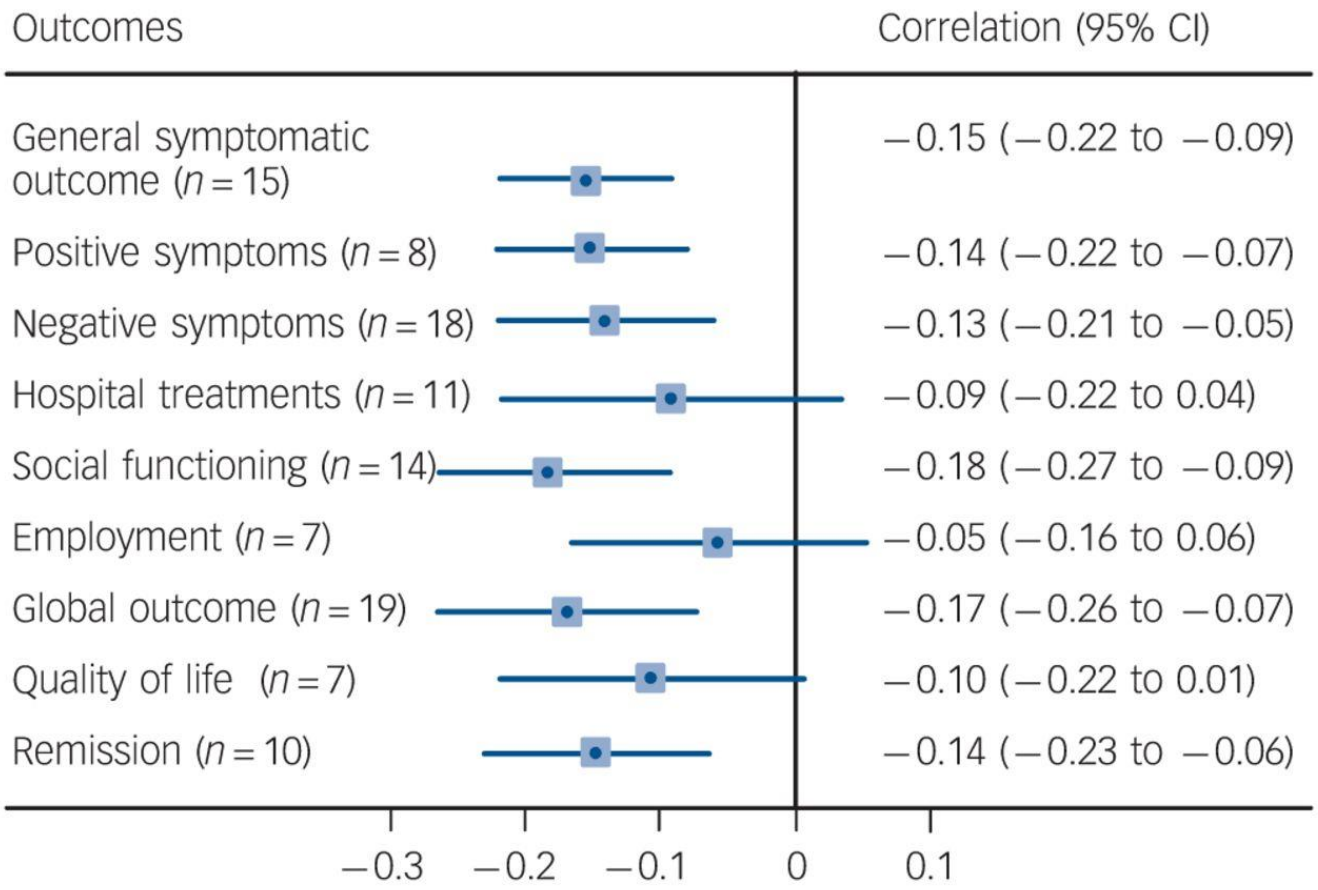
DUP – longer term outcomes



([9])
From: Penttilä M et al. Duration of untreated psychosis as predictor of long-term outcome in schizophrenia: systematic review and meta-analysis The British Journal of Psychiatry, 2014, 205 (2) 88-94

Treatment resistance

- 1/5 - 1/3 continue to have psychotic symptoms despite antipsychotic treatment[10,11]
- Clozapine only medication with evidence of efficacy in treatment resistance[10]

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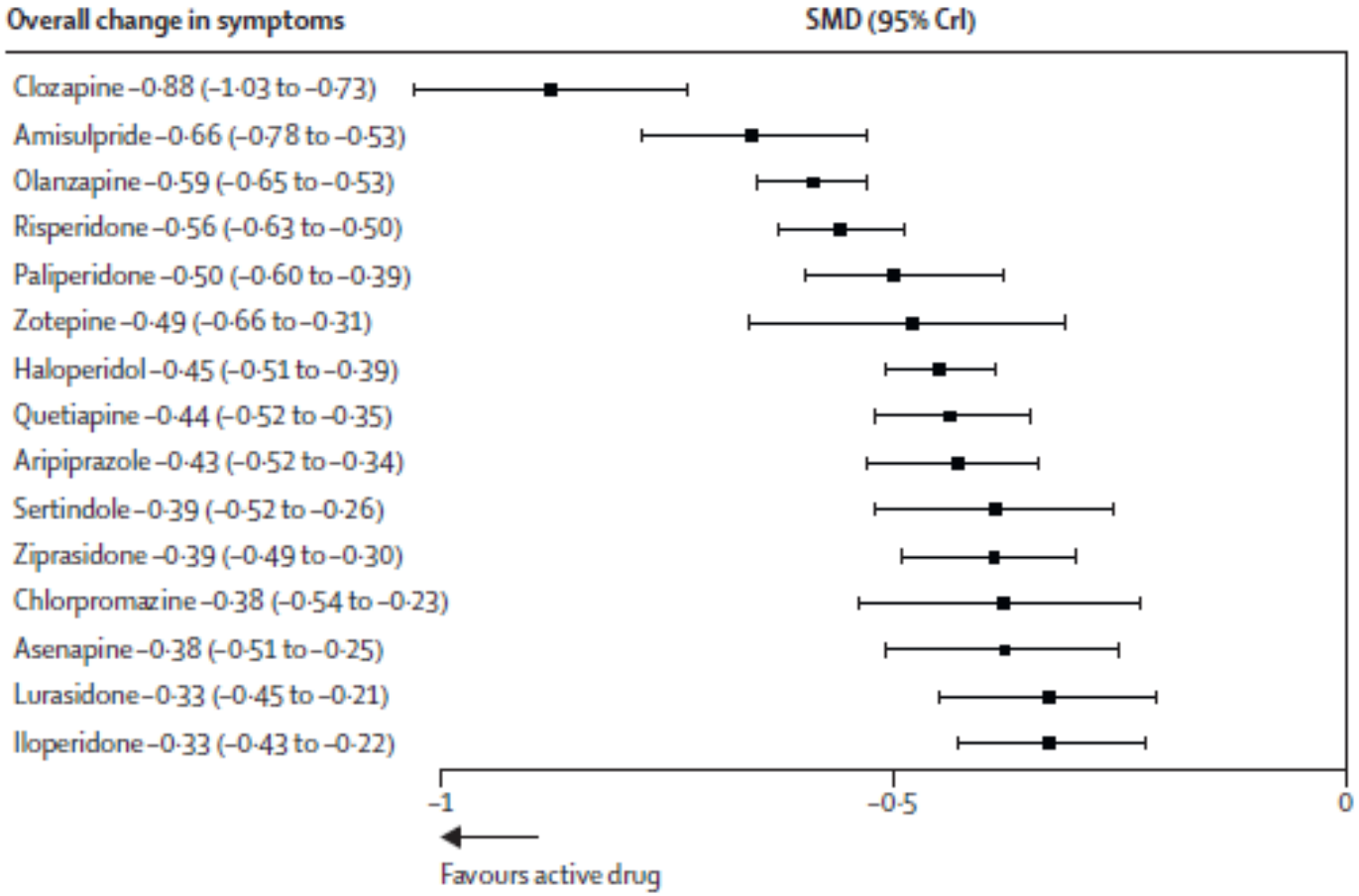
Efficacy of antipsychotics



([12]) From: Leucht et al. Comparative efficacy and tolerability of 15 antipsychotic drugs in schizophrenia: a multiple-treatments meta-analysis. Lancet 2013; 382: 951–62.

Clozapine

- 60% show improvement with clozapine
- Can take 6-12 months (or much longer to stabilise)
- Prescription of clozapine is varied and underused
  - 1 study found mean no. antipsychotics before clozapine initiated = 9.2
  - In North West studies showed 16 – 34 fold variation in prescribing practice
- Adverse effects?

(Mistry et al[13])

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Physical Health

- Males with schizophrenia die 20 years earlier & females 15 years earlier than the general population

- Most premature deaths are due to physical disorders, including cardiovascular disorders, metabolic disorders (e.g. diabetes), COPD, cancers & infectious diseases.

- Diabetes – 2-3 x risk of general population, but often missed

- Other difficulties e.g. dental caries, sexual dysfunction, constipation and nocturnal enuresis also found

(NICE[5])

Why?

- Under recognised & undertreated in primary care
- Nature of psychosis; insight
- Lifestyle choices
- Social stigma
- Stress/distress
- Side effects of treatment (antipsychotics → weight gain, diabetes, lipid abnormalities, galactorrhoea, tardive dyskinesia, prolonged QT)
- Attitudes of healthcare staff

(NICE[5])

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Suicide

- 1/5 of premature deaths from suicide and accidents[5]
- Lifetime risk of suicide in people with schizophrenia 4.9%[14]
- Only consistent protective factor - delivery of/adherence to effective treatment[14]

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Risk factors for suicide in Schizophrenia

Risk factor	Strong association	Weak association
Demographic factors	Young, male, unemployed, higher levels of education	Single (not married), rural
Illness-related factors	Depression, hopelessness, negative self-thoughts, anxiety, insomnia, self-devaluation, low self-esteem, guilty, PTSD	Treatment (in particular, second-generation antipsychotic) may be a protective factor against suicide
	Increased positive symptoms (esp auditory hallucinations and delusions), low negative symptoms, higher level of mental suffering at baseline, mental disintegration, agitation/motor restlessness	Later age of onset Impact of duration of disease on suicide risk is inconclusive
	Presence of insight	
	Presence of physical illnesses	
Genetics	Positive family history	
Previous suicide attempt/ideation	Strong correlation with history of suicide attempt/ideation	
Substance abuse	Alcohol and drug abuse	Smoking
Life events		Potentially increased risk with history of increased childhood trauma

([14]) From: Hor K & Taylor M. Suicide and schizophrenia: a systematic review of rates and risk factors. J Psychopharmacol. 2010 Nov; 24(supplement 4): 81–90.

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Questions or Comments?

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3. RCPsych. Schizophrenia. 2015. http://www.rcpsych.ac.uk/healthadvice/problemsdisorders/schizophrenia.aspx
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MCQs

1. The chemical structure of Olanzapine is:

A. Benzizoxazole
B. Dibenzothiazepine
C. Thienobenzodiazepine
D. Butyrophenone
E. Benzobutyramide

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MCQs

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MCQs

2. Which of the following genes are thought to be involved in the aetiology of Schizophrenia according to the current evidence?

A. COMT

B. DISC-1

C. DTNBP-1

D. GABRB-2

E. All of the above

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MCQs

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MCQs

3. Which of the following is not a predictor of course and outcome in Schizophrenia?

A. Sociodemographic status
B. Features of initial clinical state and treatment response
C. First rank symptoms at baseline
D. Family history of psychiatric disorders
E. Premorbid personality and functioning

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MCQs

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B. Features of initial clinical state and treatment response

C. First rank symptoms at baseline

D. Family history of psychiatric disorders

E. Premorbid personality and functioning

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4. Which of the following scales is the most appropriate for assessment of extra-pyramidal side effects of antipsychotics?

A. Barnes' scale
B. Brief Psychiatric Rating Scale
C. Simpson-Angus Scale
D. Positive and Negative Symptom Scale
E. Unified Parkinson's Disease Rating Scale

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MCQs

4. Which of the following scales is the most appropriate for assessment of extra-pyramidal side effects of antipsychotics?

A. Barnes' scale

B. Brief Psychiatric Rating Scale

C. Simpson-Angus Scale

D. Positive and Negative Symptom Scale

E. Unified Parkinson's Disease Rating Scale

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MCQs

5. Who established antipsychotic effects of Chlorpromazine?

A. John Cane and colleagues
B. Jean Delay and Pierre Deniker
C. Eugene Bleuler
D. John Cade
E. Arvid Carlsson

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5. Who established antipsychotic effects of Chlorpromazine?

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B. Jean Delay and Pierre Deniker

C. Eugene Bleuler

D. John Cade

E. Arvid Carlsson

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Any Questions?

Thank you