Individualising antipsychotic treatment for patients with schizophrenia
QUESTIONS

• Why do outcomes in schizophrenia remain stubbornly poor?
• What impact might individualising treatment have on outcomes?
• What is the basis for antipsychotic choice in patients with schizophrenia?
• How can patients be engaged in individualising treatment?
“We cannot solve our problems with the same thinking that created them.”

Albert Einstein
Why do outcomes in schizophrenia remain stubbornly poor?

• Despite . . .
  – Access to effective treatments
  – Innovative models of community-based care
  – Early intervention
Response & recovery following a first episode of schizophrenia

- Rate of remission in 1\textsuperscript{st} year of treatment
  - 70\% - 80\% \textsuperscript{1-3}
- If treatment is maintained, at 9-year follow-up:
  - 78\% of patients in remission \textsuperscript{4}
- Rate of relapse within 12 months of stopping medication
  - 77\%
  - (3\% if treatment maintained) \textsuperscript{5}
- 82\% of responders relapse within 5 years \textsuperscript{6}


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Revolving door = vicious cycle

Delay in treating first episode

Treatment response but subsequent poor adherence to treatment

Progression to chronic illness and/or treatment resistance

Relapse & need to re-establish treatment
What would be predicted annual relapse/admission rates?

If:
- 50% of patients don’t take treatment regularly
- Relapse rates in these patients are about 50% in 1st year

Schizophrenia: 2-year Outcomes in UK

% of patients (N=1,015)

Hunter R, Cameron R, Norrie J.
Using patient-reported outcomes in schizophrenia: The Scottish Schizophrenia Outcomes Study
Psychiatric Services 2009;60:240-245
Poor engagement in on-going care

Lack of involvement in on-going care

Substance misuse

Comorbid psychiatric disorders

Poor adherence to treatment

Poor response to antipsychotic treatment

Cognitive deficits

Poor access to general health care

Zipursky, RB. Why Are the Outcomes in Patients With Schizophrenia So Poor? J Clin Psychiatry 2014;75[suppl 2]:20–24

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Necessity / Concerns model for understanding adherence

Necessity = understanding and accepting necessity of treatment
Concerns = concerns about accepting treatment

= poor adherence
= improved adherence
Adherence is influenced by multiple factors

**Patient**
- Concerns about side effects
- Few perceived benefits
- Stigma
- Daily routine
- Concerns about dependence
- Lack of involvement

**Clinician / Service**
- Poor therapeutic relationship
- Poor explanation / communication
- Inadequate follow-up

**Illness**
- Severity of illness
- Depression / psychosis
- Cognitive impairment

**General**
- Complexity of treatment
- Duration of treatment
- Lack of support

Mitchell AJ, Selmes T
Why don’t patients take their medicines? Reasons and solutions in psychiatry.
Advances in Psychiatric Treatment 2007;13:336-346

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Is poor adherence always irrational?

- How rational / careful is prescribing?
- How seriously are side effects taken?
- How often do patients make informed choices?
- How often are patients involved in decisions?

= poor adherence

= adherence
What might be the impact of individualising treatment?

**Patient**
- Concerns about side effects
- Few perceived benefits
- Stigma
- Daily routine
- Concerns about dependence
- Lack of involvement

**Clinician / Service**
- Poor therapeutic relationship
- Poor explanation / communication
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- Complexity of treatment
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- Lack of support

Mitchell AJ, Selmes T
Why don't patients take their medicines? Reasons and solutions in psychiatry.
Advances in Psychiatric Treatment 2007;13:336-346
Discussion: How should the choice of antipsychotic be made?

Rank the options below from: 7 = most important to 1 = least important

- Psychiatrist preference
- Pharmacist / nurse recommendation
- Patient preference
- Antipsychotic efficacy
- Response to poor adherence
- Side effect profile
- Negotiation
The choice of antipsychotic medication should be made by the service user and healthcare professional together . . . Provide information and discuss the likely benefits and possible side effects of each drug, including:

- metabolic (including weight gain and diabetes)
- extrapyramidal (including akathisia, dyskinesia and dystonia)
- cardiovascular (including prolonging the QT interval)
- hormonal (including increasing plasma prolactin)
- other (including unpleasant subjective experiences)
Adverse effects have a pervasive impact
1. Which side effects do you think people are most likely to want to avoid?

2. Which antipsychotics are least likely to cause these side effects?
The most common side effects of 2nd-generation antipsychotics

- EPS
- Weight gain
- Raised prolactin & sexual dysfunction
- Daytime sleepiness

- Nausea
- Stomach upset
- Type 2 Diabetes
- Vomiting
- Constipation
- Insomnia
- Dizziness
- Dry mouth
Which side effects would a teenage male most like to avoid?

- EPS
- Weight gain
- Raised prolactin & sexual dysfunction
- Daytime sleepiness

- Nausea
- Stomach upset
- Type 2 Diabetes
- Vomiting
- Constipation
- Insomnia
- Dizziness
- Dry mouth
Which side effects would a woman aged 30 most like to avoid?

- EPS
- Weight gain
- Raised prolactin & sexual dysfunction
- Daytime sleepiness

- Nausea
- Stomach upset
- Type 2 Diabetes
- Vomiting
- Constipation
- Insomnia
- Dizziness
- Dry mouth
Which side effects would an overweight, middle-aged Asian man most like to avoid?

- EPS
- Weight gain
- Raised prolactin & sexual dysfunction
- Daytime sleepiness

- Nausea
- Stomach upset
- Type 2 Diabetes
- Vomiting
- Constipation
- Insomnia
- Dizziness
- Dry mouth
Which side effects would you personally most like to avoid?

- EPS
- Weight gain
- Raised prolactin & sexual dysfunction
- Daytime sleepiness

- Nausea
- Stomach upset
- Type 2 Diabetes
- Vomiting
- Constipation
- Insomnia
- Dizziness
- Dry mouth
How can patients be involved in individualising treatment?

**EDUCATION**
- EPS
- Weight gain
- Raised prolactin & sexual dysfunction
- Daytime sleepiness

**INFORMATION**
- Nausea
- Stomach upset
- Type 2 Diabetes
- Vomiting
- Constipation
- Insomnia
- Dizziness
- Dry mouth
Individualising treatment

Antipsychotic
Oral?
LAI?
Psychosis and schizophrenia in adults: treatment and management

1.5.5.3 Consider offering depot /long-acting injectable antipsychotic medication to people with psychosis or schizophrenia:

- who would prefer such treatment after an acute episode
- where avoiding covert non-adherence (either intentional or unintentional) to antipsychotic medication is a clinical priority within the treatment plan. [2009]
Why are LAIs not prescribed for more patients?

Reasons given by psychiatrists for NOT prescribing LAIs

In a survey of patients with no experience of LAIs, 79% stated they had never been given the option by their psychiatrist.


Jaeger M, Rossler W. Psychiatry Res 2010; 175: 58-62


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Poor adherence in 1\textsuperscript{st} episode schizophrenia leads to high rates of relapse

- 5-year follow-up study after initial recovery from first episode of schizophrenia or schizoaffective disorder

- Discontinuation of antipsychotic medication increased risk of relapse almost 5-fold

Cumulative rates (%) of relapse over 5 years follow-up

Robinson D, Woerner MG, Alvir JMJ et al. Predictors of relapse following response from a first episode of schizophrenia or schizoaffective disorder Arch Gen Psychiatry 1999;56:241-47
Antipsychotic discontinuation in 1st episode schizophrenia leads to rapid relapse

- Patients stable for 1 year after recovery from first episode of schizophrenia or schizoaffective disorder
- Randomly assigned to continue antipsychotic or gradual withdrawal
- Primary outcome:
  - Relapse-free survival at 9 months
- Study terminated prematurely for ethical reasons

Rates (%) of relapse-free survival at 9 months

<table>
<thead>
<tr>
<th>Continuation group</th>
<th>Discontinuation group</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=9</td>
<td>N=11</td>
</tr>
<tr>
<td>88</td>
<td>18</td>
</tr>
</tbody>
</table>

P=0.001

Boonstra G, Burger H, Grobbee DE, Kahn RS
Antipsychotic prophylaxis is needed after remission from a first psychotic episode in schizophrenia patients: results from an aborted randomised trial.
Individualising treatment

Information “…is fundamental to choice and making informed decisions. Without information there is no choice. Information helps knowledge and understanding. It gives patients the power and confidence to engage as partners with their health service.”
Discussion point: INFORMATION

• What are the minimum requirements for any patient information?
  – General principles behind the information
• What content would be reasonable to support informed choice – and consent?
It must be evidence-based.

It must be easy to understand and intuitive.

Both patients and health professionals must be involved in its development.

It should be easy to use during patient-facing interactions.

It must address issues that are important to patients & carers.

For further discussion of these issues, see www.mentalmeds.co.uk/patient-information.php.
• The right to make choices about NHS care.

• The right to be involved in discussions and decisions about healthcare, and to be given information to enable users to do this.

• The right to accept or refuse the treatment that is offered, and not to be given any treatment unless valid consent has been obtained.

• The right to be given information about any proposed treatment in advance, including any significant risks and any alternative treatments, and the risks involved in doing nothing.

- Benefits of treatment vs no treatment
- Alternative treatments:
  • How likely are they to work?
  • How do they compare on side effects?
- Risks associated with poor adherence to treatment
SOME EXAMPLES OF PATIENT INFORMATION ABOUT ANTIPSYCHOTIC MEDICINES
Search results for 'Olanzapine'

9 search results found

Bipolar disorder - Treatment
Antipsychotic medicines include: aripiprazole, olanzapine, quetiapine, risperidone. They may also be used as a long-term mood stabiliser.

Anorexia nervosa - Treatment
olanzapine— a medication that can help reduce feelings of anxiety related to issues such as weight and diet in people who haven't responded to other treatments.

How to fall asleep - Live Well
How to get to sleep. Popular topics. Special reports. Child health. Men's health. Women's health. If you have difficulty falling asleep, a regular bedtime ritual will help you wind down and prepare for bed. Check out our 10 tips to beat insomnia.

Media dementia scare over hay fever and sleep drugs - Health News
xybutynin chloride, 5mg. chlorpheniramine maleate, 4mg. olanzapine, 2.5mg. meclizine hydrochloride, 25mg.
What are side effects? - Health questions
What are side effects? Side effects are unwanted symptoms caused by medical treatment. They're also called "adverse effects" or "adverse reactions". All medicines can cause side effects, particularly if you don't use them as advised. This

Bipolar disorder - Treatment
Antipsychotic medicines include: aripiprazole, olanzapine, quetiapine, risperidone. They may also be used as a long-term mood stabiliser.

Tics - Treatment
Examples of neuroleptics include haloperidol, pimozide and risperidone. However, haloperidol is rarely prescribed nowadays due to the potential side effects (see below).

Health information in other languages
You are here: Accessibility and other languages. accessibility Other language resources. accessibility Health information in other languages. Health information in other languages. Translate information on this website. You can translate most pages

Food additive that could reduce appetite - Health News
Food additive that could reduce appetite. Behind the Headlines. Thursday December 11 2014. The additive, propionate, could be added to bread. "Appetite suppressing additive could be added to food to create 'slimming bread', "ITV News reports.

Huntington's disease - Treatment
In the UK, antipsychotic medicines are usually preferred. antipsychotic medication—such as olanzapine, sulpiride, risperidone and quetiapine.

Microsoft Word - Quality Account 2009-2010.doc
Work to change risperidone cold chain and delivery ongoing with start date in April. Fridge storage needs addressing.

http://www.nhs.uk accessed 05.04.16
Aripiprazole is not licensed for use in Tourette’s syndrome.
Search results for 'Antipsychotic drugs'

Psychosis - Treatment
Psychosis related to drug or alcohol intoxication or withdrawal may only require a short course of antipsychotics or tranquillisers, which have a calming effect. ... Referral to an addiction counsellor may then be recommended. Antipsychotics.

'Antipsychotics used on people with no mental illness diagnosis' -...
Over the course of the study, the use of antipsychotic drugs declined by about 4% a year. ... As the researchers note, simply cracking down on the inappropriate use of antipsychotic drugs may not solve the problem.

Bipolar disorder - Treatment
Antipsychotic medicines. Antipsychotic medicines are sometimes prescribed to treat episodes of mania or hypomania. ... Antipsychotic medicines include: aripiprazole, olanzapine, quetiapine, risperidone. They may also be used as a long-term mood

Sexual dysfunction in men - Live Well
Drugs that cause erectile dysfunction. Some prescription drugs these can include medicines (such as beta-blockers) used to treat raised blood pressure, and antidepressants, antipsychotic drugs and anticonvulsant drugs. ... Support options. For help with

Hidden causes of weight gain - Live Well
Your medicine cabinet. Weight gain is a common side effect of many drugs. ... The most common drugs that can cause weight gain are steroids (taken for many conditions, including arthritis, eczema and asthma), antipsychotic drugs, and insulin, among others

Psychosis
Your GP will look at your symptoms and rule out short-term causes, such as drug misuse. ... Side effects can also occur if someone is taking antipsychotics on a long-term basis.

- Overview
- Mental health news

Huntington's disease - Treatment
In the UK, antipsychotic medicines are usually preferred. Antipsychotic medication—such as olanzapine, sulpiride, risperidone and quetiapine. ... Benzodiazepines—such as clonazepam and diazepam. Antipsychotic medication may also help control

Schizophrenia
In most cases, this will be antipsychotic medicines and cognitive behavioural therapy (CBT). ... Any violent behaviour is usually sparked off by illegal drugs or alcohol, which is the same for people who don't have schizophrenia.

- Overview
- Diagnosis
- Symptoms
- Treatment
- Causes
- Living with
Schizophrenia is a long-term mental health condition that causes a range of different psychological symptoms, including:

- **hallucinations** – hearing or seeing things that do not exist
- delusions – unusual beliefs not based on reality that often contradict the evidence
- muddled thoughts based on hallucinations or delusions
- changes in behaviour

Doctors often describe schizophrenia as a psychotic illness. This means sometimes a person may not be able to distinguish their own thoughts and ideas from reality.

Read more about the [symptoms of schizophrenia](http://www.nhs.uk).

Why does schizophrenia happen?

The exact cause of schizophrenia is unknown. However, most experts believe the condition is caused by a combination of genetic and
There are two main types of antipsychotics:

- **typical antipsychotics** – the first generation of antipsychotics developed during the 1950s
- **atypical antipsychotics** – newer-generation antipsychotics developed in the 1990s

The choice of antipsychotic should be made following a discussion between you and your psychiatrist about the likely benefits and side effects.

Both typical and atypical antipsychotics can cause side effects, although not everyone will experience them and the severity will differ from person to person.

The side effects of typical antipsychotics include:

- shaking
- trembling
- muscle twitches
- muscle spasms

Side effects of both typical and atypical antipsychotics include:

- drowsiness
- weight gain, particularly with some atypical antipsychotics
- blurred vision
- constipation
- lack of sex drive
- dry mouth

Tell your care co-ordinator, psychiatrist or GP if your side effects become severe. There may be an alternative antipsychotic you can take or additional medicines that will help you deal with the side effects.
‘No notable improvement’ in people’s experiences of out-of-hospital mental health care, finds patient survey

Published: 21 October 2015
Categories: Media, Mental health community services

A survey of over 13,000 people who were treated and cared for in the community for their mental health problems has shown ‘no notable improvement’ in the last year and in some questions, a slightly higher proportion of people have reported a poor experience.

The regulator is now calling for NHS trusts to reflect on their findings and improve their care.
<table>
<thead>
<tr>
<th>Drug</th>
<th>Sedation</th>
<th>Weight gain</th>
<th>Extra-pyramidal</th>
<th>Anticholinergic</th>
<th>Hypotension</th>
<th>Prolactin elevation</th>
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<td>Amisulpride</td>
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**Key**  
+++ High incidence/severity  ++ Moderate  + Low  − Very low
Side effects of Olanzapine in people with schizophrenia

Weight gain

<table>
<thead>
<tr>
<th>Name of side effect</th>
<th>Weight gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>What this means</td>
<td>Putting on so much weight that it can affect your health</td>
</tr>
<tr>
<td>What are the chances of getting this side effect?</td>
<td>Two-thirds of people who take Olanzapine for longer than 6 months get this side effect</td>
</tr>
</tbody>
</table>

gets the side effect

doesn’t get the side effect

Source: FDA prescribing information
December 2012

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**Side effects of medicines used in the treatment of schizophrenia**

<table>
<thead>
<tr>
<th>Name of side-effect</th>
<th>WEIGHT GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What this means</strong></td>
<td>Eating more and putting on weight. There is a risk of becoming obese. This means putting on so much weight it can damage your health. It can affect your heart, give you high blood pressure or increase the risk of getting diabetes.</td>
</tr>
<tr>
<td><strong>What can be done about it?</strong></td>
<td>If only a little weight is gained, don’t worry. A diet with lots of fresh fruit and vegetables plus keeping active and getting regular exercise helps to keep weight under control. Exercise doesn’t need to be strenuous or involve going to a gym. Walking briskly—for 30 minutes 3 times a week—has real health benefits. If this doesn’t help, and weight gain is a problem, you can ask to see a dietician for advice.</td>
</tr>
</tbody>
</table>

**What medicines are likely to cause this side effect?**

- **Most likely**: CLOZAPINE, OLANZAPINE
- **AMISULPRIDE, QUETIAPINE, RISPERIDONE**
- **Least likely**: ARIPIPRAZOLE
Summary

• Why do outcomes in schizophrenia remain stubbornly poor?
• What impact might individualising treatment have on outcomes?
• What is the basis for antipsychotic choice in patients with schizophrenia?
• How can patients be engaged in individualising treatment?
Improving the use of medicines in severe mental illness

Medicines in Mental Health Ltd offers a range of services designed to obtain maximum benefit from medicines in the treatment of severe mental illness.