What is the evidence relating to clinical decision making when prescribing anti-psychotics in terms of using:
(a) target symptom and
(b) primary illness approaches

Dr Shama Parveen MBBS, MRCPsych
ST5 in Sutton & Merton Mental Health Learning Disability Team
Antipsychotics

- Any drug that favourably modifies psychotic symptoms.
  - (Miller–Keane Encyclopaedia and dictionary of Medicine, Nursing, and Allied Health, Seventh Edition 2003)

- A functional category of neuroleptic drugs that are helpful in the treatment of psychosis and have a capacity to ameliorate thought disorders.
  - (Falex Partner Medical Dictionary, 2012)
Target symptoms

- Symptoms of an illness that are most likely to respond to a specific treatment, such as a particular psychopharmacological drug. (Mosby’s medical dictionary, 9th edition, 2009)
Literature search– methodology

- **RCPsych journals/reports/guidelines**
  - Psychotropic drug prescribing for people with intellectual disability, mental health problems and/or behaviours that challenge: practice guidelines
  - Faculty report– FR/ID/09– April 2016
  - Atypical antipsychotics and behavioural and psychiatric symptoms of dementia – Prescribing updates for old age psychiatrists, The Royal College of Psychiatrists Faculty for the Psychiatry of Old Age
Cross reference from key documents of the above


Nice guidelines

- Challenging behaviour and learning disabilities: prevention and interventions for people with learning disabilities whose behaviour challenges, NICE guideline Published: 29 May 2015 nice.org.uk/guidance/ng11 © NICE

- Nice guideline on Psychosis and schizophrenia in adults: prevention and management Clinical guideline Published: 12 February 2014 nice.org.uk/guidance/cg178

- Nice guideline on Psychosis and schizophrenia in adults: prevention and management Clinical guideline Published: 12 February 2014 nice.org.uk/guidance/cg178

- Depression in adults: recognition and Management Clinical guideline Published: 28 October 2009 nice.org.uk/guidance/cg90
Challenging behaviour

- Defined as behaviours of an intensity, frequency, or duration that threaten the physical safety of the person or others or restrict access to community facilities (Emerson *et al*, 2001).
Psychotropic drug prescribing for people with intellectual disability, mental health problems and/or behaviours that challenge: practice guidelines
Pharmacotherapy for aggressive behaviours in persons with intellectual disabilities: treatment or mistreatment?

• J A Tsiouris, Journal of Intellectual Disability Research Volume 54, Issue 1, pages 1–16, January 2010
Methodology

- The literature on aggressive behaviours, their associations with psychiatric disorders and other contributing factors and the past and current treatment options for aggressive behaviours in persons with and without ID was reviewed.

- Also, the literature on basic research regarding the brain receptors implicated in aggressive behaviours and the basic research and clinical studies on the anti-aggressive properties of antipsychotics was reviewed.
Aggressive behaviours in persons with ID serve different functions.

Many factors contribute to their initiation, maintenance and exacerbations:
- Genetic disorders,
- Early victimisation,
- Restrictive environments,
- Traumatic brain injury.

If the factors above and the knowledge derived from studies of domestic violence and premeditated aggression in persons without ID are considered and applied during the evaluation of the most severe aggressive behaviours in persons with ID, more appropriate and effective treatment than antipsychotics can be implemented.
Basic research implicates mostly the GABA and the serotonin pre–post synaptic brain receptors influence the initiation, modulation or inhibition of aggression in animals.

The anti–aggressive properties of the antipsychotics have not been supported by reviews of clinical studies and basic research is absent.

Antipsychotics are the indicated treatment only for psychiatric disorders and for aggressive behaviours associated with psychotic disorders and psychotic features as activation of dopamine receptor leads to defensive aggression.
Most of the persons with ID with aggressive behaviours do not have a diagnosis of psychotic disorder.

There is lack of strong evidence supporting the anti-aggressive properties of the antipsychotics.

The overuse of antipsychotics in this population may be explained by the old, faulty notion that aggressive behaviour in persons with ID is mostly associated with psychotic disorders.

Given the discrediting of this notion, the use of antipsychotics in persons with ID may, in some cases, be considered mistreatment rather than proper treatment.
Prescribing of psychotropic drugs to people with learning disabilities and/or autism by general practitioners in England

• Public Health England – June 2015
This study was designed to identify how many people in intellectual disability and/or autism are treated with psychotropic medicines, how the drugs are used and how much of this use is for licensed clinical indications.
The study aimed to provide information about people with ID or autism generally, not just those in touch with specialist mental health services.

Clinical Practice Research Datalink primary care database (CPRD GOLD) was used.

They searched for clinical records of patients living in England and registered with GPs between April 2009 and March 2012 who were identified as having either learning disabilities or autism.
The conclusion was that there was robust evidence of inappropriate use of powerful drugs in people with intellectual disabilities and a ‘Call for Action’ was issued to improve this practice (NHS England, 2015).
Mental illness, challenging behaviour and psychotropic drug prescribing in people with intellectual disability:

- The proportion of people with intellectual disability treated with psychotropic drugs exceeded the proportion with recorded mental illness

- Antipsychotics are prescribed for people with no recorded severe mental illness but behaviours that challenge
There was a possibility that the rate of recorded diagnoses in the database did not correspond to the true rate of mental illness, free text of the electronic health record was not interrogated.

Degree of intellectual disability was not recorded, it was not possible to perform an analysis based on that factor.

An inference was made that if a person had a record of challenging behaviour and was on psychotropic drugs, but had no record of severe mental illness, the prescription was for challenging behaviour, this might not have been the case, prescriptions for antipsychotics that do not seem to be supported by a record of severe mental illness are not necessarily inappropriate and may be used within guidelines to treat complex depression or anxiety disorders, etc.
Antipsychotic medication for challenging behaviour in people with learning disability (Review)

• Brylewski J, Duggan L.

Selection criteria
  ◦ All randomised controlled trials of antipsychotic medication versus placebo.

Data collection and analysis
  ◦ Reviewers independently evaluated and analysed data on an intention to treat basis. Data were evaluated at 4, 8 and 12 weeks as longer follow-up data were not available.
Main results
- Only nine randomised controlled trials could be included in the analyses. These provided no evidence of whether antipsychotic medication helps or harms adults with learning disability and challenging behaviour.

Authors’ conclusions
- There are limited data on this important issue and more research is urgently needed
Challenging behaviour and learning disabilities: prevention and interventions for people with learning disabilities whose behaviour challenges

• NICE guideline Published: 29 May 2015
nice.org.uk/guidance/ng11 © NICE
Consider antipsychotic medication to manage behaviour that challenges only if:

- Psychological or other interventions alone do not produce change within an agreed time
- Treatment for any coexisting mental or physical health problem has not led to a reduction in the behaviour
- The risk to the person or others is very severe (for example, because of violence, aggression or self-injury).
- Only offer antipsychotic medication in combination with psychological or other interventions.
When choosing which antipsychotic medication to offer,

- Take into account the person's preference (or that of their family member or carer, if appropriate)
- Side effects
- Response to previous antipsychotic medication
- Interactions with other medication
Antipsychotic medication should initially be prescribed and monitored by a specialist, who should:

- Identify the target behaviour

- Decide on a measure to monitor effectiveness (for example, direct observations, the Aberrant Behavior Checklist or the Adaptive Behavior Scale), including frequency and severity of the behaviour and impact on functioning

- Start with a low dose and use the minimum effective dose needed
• Only prescribe a single drug

• Monitor side effects as recommended in the NICE guidelines on psychosis and schizophrenia

• Review the effectiveness and any side effects of the medication after 3–4 weeks

• Stop the medication if there is no response at 6 weeks

• Reassess the behaviour that challenges and consider further psychological or environmental interventions
Only prescribe prn (as-needed) medication for as short a time as possible

Ensure that its use is recorded and reviewed

Review the medication if there are changes to the person's environment or their physical or mental health.
If there is a positive response to antipsychotic medication:

- Record the extent of the response, how the behaviour has changed and any side effects or adverse events

- Conduct a full multidisciplinary review after 3 months and then at least every 6 months covering all prescribed medication (including effectiveness, side effects and plans for stopping)

- Only continue to prescribe medication that has proven benefit.
When prescribing is transferred to primary or community care, the specialist should give clear guidance to the practitioner responsible for continued prescribing about:

- Which behaviours to target
- Monitoring of beneficial and side effects
- Taking the lowest effective dose
- How long the medication should be taken for
- Plans for stopping the medication
NHS England 2016 document

STOMPwLD

• Stopping Over-Medication of People with Learning Disabilities
Key principles

- Regular reviews of people with LD on psychotropic medications.

- Reducing inappropriate prescribing of psychotropic medications for Tx of challenging behaviours in PLD.

- If reduction / withdrawal possible, needs to be done slowly with clear monitoring.

- Clear documentation of rationale for use of psychotropic medications (including diagnoses).

- Use of psychological therapies / PBS for Tx of challenging behaviours.
Atypical antipsychotics and behavioural and psychiatric symptoms of dementia – PRESCRIBING UPDATE FOR OLD AGE PSYCHIATRISTS

- The Royal College of Psychiatrists Faculty for the Psychiatry of Old Age
The atypical antipsychotics risperidone and olanzapine have the best evidence base for effectiveness compared with placebo for physical aggression, agitation and psychosis.


The effect of atypical antipsychotics in these situations is not entirely attributable to sedation

Typical antipsychotics are effective with similar symptoms but have a weaker evidence base


Prescribing of antipsychotics in UK primary care: a cohort study

Objective: To examine the recorded indication for antipsychotic prescriptions in UK primary care

Participants: Individuals prescribed antipsychotics between 2007 and 2011
Less than half of the people prescribed first-generation antipsychotics in UK primary care have a diagnosis of psychosis or bipolar disorder.

Findings were similar for second-generation agents, although 62% of people receiving olanzapine did have a diagnosis of psychosis or bipolar disorder.

These agents are more commonly prescribed to older people, despite the propensity of this age group to develop side effects.
Antipsychotics are still commonly prescribed to people with a diagnosis of dementia, contrary to clinical guidance, and this needs further attention in UK primary care.

Other common diagnoses included depression, anxiety disorders, personality disorders and attention deficit hyperactivity disorder (ADHD), while up to 17% of people receiving antipsychotics had none of the diagnoses we explored.
Methodological limitations

- Prescriptions issued in secondary care would not have been captured

- The nature of the data did not allow to determine the clinicians’ rationale for prescribing antipsychotics to people without psychoses or bipolar disorder diagnoses
Nice guideline on Psychosis and schizophrenia in adults: prevention and management

- Clinical guideline Published: 12 February 2014
  nice.org.uk/guidance/cg178
The choice of antipsychotic medication should be made by the service user and healthcare professional together, taking into account the views of the carer if the service user agrees.

Provide information and discuss the likely benefits and possible side effects of each drug, including metabolic, extrapyramidal, cardiovascular, hormonal and others.

- Do not initiate regular combined antipsychotic medication, except for short periods (for example, when changing medication)
Offer clozapine to people with schizophrenia whose illness has not responded adequately to treatment despite the sequential use of adequate doses of at least 2 different antipsychotic drugs.

At least 1 of the drugs should be a non-clozapine second-generation antipsychotic.
Bipolar disorder: assessment and management

- Clinical guideline Published: 24 September 2014
  nice.org.uk/guidance/cg185
If a person develops mania or hypomania and is not taking an antipsychotic or mood stabilizer, offer haloperidol, olanzapine, quetiapine or risperidone.

If the person is already taking lithium, check plasma lithium levels to optimize treatment and consider adding haloperidol, olanzapine, quetiapine or risperidone, depending on the person's preference and previous response to treatment.
Managing bipolar depression in adults in secondary care

- If a person develops moderate or severe bipolar depression and is not taking a drug to treat their bipolar disorder, offer fluoxetine combined with olanzapine, or quetiapine on its own, depending on the person's preference and previous response to treatment.
Depression in adults: recognition and Management

- Clinical guideline Published: 28 October 2009
  nice.org.uk/guidance/cg90
For augmentation

- If a person with depression is informed about, and prepared to tolerate, the increased side-effect burden, consider augmenting an antidepressant with:
  - an antipsychotic such as aripiprazole, olanzapine, quetiapine or risperidone
For people who have depression with psychotic symptoms,

- Consider augmenting the current treatment plan with antipsychotic medication (although the optimum dose and duration of treatment are unknown).
Generalised anxiety disorder and panic disorder in adults: management

- Clinical guideline Published: 26 January 2011,
nice.org.uk/guidance/cg113
Do not offer an antipsychotic for the treatment of GAD in primary care. [new 2011]

For complex, treatment-refractory GAD and very marked functional impairment or high risk of self-harm, consider augmentation of antidepressants with other drugs, but exercise caution and be aware that:
- evidence for the effectiveness of combination treatments is lacking
- side effects and interactions are more likely when combining and augmenting antidepressants. [new 2011]
Nice guidelines about ADHD and BPD

- Nice does not recommend antipsychotics for treatment of ADHD

- Nice recommends drug Tx should not be used specifically for BPD or for the individual symptoms or behaviour associated with the disorder (for example, repeated self-harm, marked emotional instability, risk-taking behaviour and transient psychotic symptoms).
  - Antipsychotic drugs should not be used for the medium- and long-term treatment of borderline personality disorder.
Conclusion

- Good evidence based for use of antipsychotics for treatment of primary illness
  - Schizophrenia and other psychotic illness
  - Bipolar affective disorder
  - Psychotic depression

- Some evidence based for use of antipsychotics for treatment of BPSD

- Limited evidence based for use of antipsychotics for treatment of challenging behaviour in PWLD but, there are methodological flaws with the studies done.
Thank you