The efficacy and effectiveness of medication management training interventions

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Problem of non-adherence in psychosis

Evidence based knowledge/interventions/NICE guidelines to improve adherence with treatment and related outcomes

Potential solutions for the implementation & dissemination of best practice

Effect of training mental health nurses & allied professionals
Efficacy & effectiveness

- The prescribing of medicines is the most common healthcare intervention
- Powerful evidence of efficacy of the potential of medication (from clinical trials)
- Poor evidence of effectiveness in real world settings
- Efficacy/effectiveness gap leads to -
  - failure to translate the benefit of investment in new medicines/treatment into health gains for patients
Reasons for efficacy/effectiveness gap

Characteristics of clinical trials

- Strict inclusion/exclusion criteria (e.g. exclusion of patients with co-morbidities)
- Patients who agree to participate in clinical trials are probably more adherent than patients who decline or those who never get asked

“Data don’t make any sense, we will have to resort to statistics.”
Reasons for efficacy/effectiveness gap

• Patient beliefs about their illness and treatment

• Medication taking behaviour

• Family, social & cultural influences
Reasons for efficacy/effectiveness gap

Health Care Professionals

• Poor adherence to prescribing guidelines
• Limited implementation of evidence based adherence interventions
• Focus on the outcome (i.e. taking medication) rather than the process (the experience of taking medication)
medication management
for psychosis

10 day clinical short course (degree level, 30 credit module) ● Aimed at mental health nurses and allied professionals ● Developed in 1999 – following the success of compliance therapy ● Teach 3 cohorts a year
medication management for psychosis

5 days clinical psychopharmacology

- Clinical Pharmacology
- Mechanism of action of psychotropic medication [antipsychotics, antidepressant, mood stabilisers]
- Side effect assessment & management
- Safe and effective administration of medication

5 days concordance skills

Core interpersonal and process skills to facilitate choice

Assessment

- Practical problems with medication, side effects, adherence, importance confidence, beliefs and concerns about medication

Key intervention skills

- Medication problem solving, looking back, exploring ambivalence, talking about beliefs and concerns, looking forward
Assessment of knowledge & clinical competency

- 25 MCQ & short answer exam
- Clinical role play – demonstration of competency in MM skills (20 minute interview with a ‘patient’ played by an actor)
- Competency assessed by course leader and carer
MRC guidance for the development & evaluation of complex interventions

- **FEASIBILITY/PILOTING**
  - Testing procedures

- **DEVELOPMENT**
  - Identifying/developing theory
  - Modelling process and outcomes

- **EVALUATION**
  - Assessing effectiveness
  - Understanding change process

- **IMPLEMENTATION**
  - Dissemination
  - Long term follow up
Development of MM training

- Adherence interventions targeted at patients e.g. compliance therapy, behavioural tailoring, MI, CBT, Psychoeducation
- Understanding what service users think about their antipsychotic medication
- What influences service users decisions about taking antipsychotic medication?
• Knowledge: adherence behaviour, psychopharmacology, assessment & management of side effects

Interpersonal skills

Beliefs & concerns
Exploring ambivalence
Looking forward

Problem solving
Assessment

Keeping people engaged, resistance low
Exchanging information & developing discrepancy

Process

Looking back
Foundation skills

Keeping people engaged, resistance low
Exchanging information & developing discrepancy

Interpersonal skills
- Reflective listening,
- Summarising,
- Checking understanding

Process skills
- Collaborative agenda setting,
- Transparency,
- Normalising

Knowledge of psychopharmacology
Concordance Assessment

Keeping people engaged, resistance low
Exchanging information & developing discrepancy

Interpersonal skills
Knowledge of psychopharmacology
Process skills
Assessment
Concordance Assessment

• Five areas
  – Practical considerations
    • What medicines, who supplies, OTC medicines, homeopathic remedies, alcohol and substance use
  – Side effects and coping strategies
  – Adherence
  – Readiness to take medication
    • Importance, confidence and satisfaction
    • Common beliefs about medication
• Summary from patients' perspective
• Drives interventions
Medication problem solving

Keeping people engaged, resistance low
Exchanging information & developing discrepancy

Knowledge of psychopharmacology

Interpersonal skills

Process skills

Problem solving

Assessment
Medication problem solving

- Following on from assessment
- Address practical issues
  - e.g. getting medication, affordability, dispensing, getting prescriptions, reconciliation etc
  - Side effects from medication
- The aim of the problem solving exercise is to build the patients own capacity to problem solve
Looking back

Keeping people engaged, resistance low
Exchanging information & developing discrepancy

Interpersonal skills

Knowledge of psychopharmacology

Problem solving

Assessment

Looking back

Process
Looking back exercise

1999

Developed “stress problems” during gap year prior to starting university

Saw GP who started sulpiride. No positive effects but took it because told to by parents

Admitted to psychiatric hospital. Terrible experience. Stops meds as soon as discharged

Discharged from hospital. Stress OK. Stopped medication because it wasn’t working

Started on haloperidol. Feel much better but a bit “zombiefied”

Second hospital admission. Given an injection. Resented staff. Very angry

Started on an atypical. “Like a lifeline”. Feels more alive

Leaves hospital. New flat

Started on haloperidol. Decide to stop. Don’t tell family who are angry

Getting on with life. Starts new job

Stops medication because feels better. Readmitted

New flat

Getting on with life.

Starts new job
Exploring ambivalence

Keeping people engaged, resistance low
Exchanging information & developing discrepancy

Interpersonal skills
- Exploring ambivalence
- Problem solving

Knowledge of psychopharmacology
- Assessment
  - Problem solving
  - Looking back

Process
- Exploring ambivalence
Exploring ambivalence

• Being uncertain about taking medication is normal
• Stopping medication is normal
• Some people might be certain about taking it one day but change their mind the next
• The exploring ambivalence exercise is a way of understanding the persons unique natural uncertainty about taking medication
Exploring ambivalence

<table>
<thead>
<tr>
<th>Taking medication</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not so good</strong></td>
<td><strong>Good</strong></td>
</tr>
<tr>
<td>I feel tired all the time</td>
<td>I have more control over my voices</td>
</tr>
<tr>
<td>Antipsychotics take away my creativity and this makes me feel worthless</td>
<td>I get on better with my parents</td>
</tr>
<tr>
<td></td>
<td>I feel safer</td>
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<table>
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<tr>
<th>Stopping medication</th>
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</thead>
<tbody>
<tr>
<td><strong>Good</strong></td>
<td><strong>Not so good</strong></td>
</tr>
<tr>
<td>I’d have more energy</td>
<td>Having to go back into hospital</td>
</tr>
<tr>
<td>I can write more (for a while)</td>
<td>Damaging to relationships I care about</td>
</tr>
</tbody>
</table>
Talking about beliefs and concerns about medication

- Knowledge of psychopharmacology
- Interpersonal skills: Exploring ambivalence, Problem solving
- Process skills: Beliefs & concerns, Assessment, Looking back

Keeping people engaged, resistance low
Exchanging information & developing discrepancy
**Talking about beliefs and concerns about medication**

“I think that the medication that you give me is slowly eating away at me and is poisoning me” Conviction rating=80%

<table>
<thead>
<tr>
<th>Evidence for……</th>
<th>Evidence against…..</th>
</tr>
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<tbody>
<tr>
<td>▪ The medication leaves a strange taste in my mouth</td>
<td>▪ I know other people who take the same medication and they are ok</td>
</tr>
<tr>
<td>▪ It makes me feel sick</td>
<td>▪ My doctor reassures me it is not poison</td>
</tr>
<tr>
<td>▪ The voices tell me its poisoning me</td>
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“I think that the medication that you give me is slowly eating away at me and is poisoning me” Conviction rating=65%
Keeping people engaged, resistance low
Exchanging information & developing discrepancy

Interpersonal skills
- Beliefs & concerns
- Problem solving
- Exploring ambivalence
- Looking forward

Process skills
- Looking back
- Assessment

Knowledge of psychopharmacology
Looking Forward

• Patients with mental health problems have the same goals and aspirations as the rest of us

• The looking forward exercise helps people to identify their goals and what needs to happen to achieve them
  – It also explores how medication may fit in to their future plans to enable them to achieve their goals
EVALUATION of training

• Effectiveness –
  – Patient outcomes
  – Clinician outcomes

• Understanding change process
<table>
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<tr>
<td><strong>Psychopathology</strong>&lt;sup&gt;1,5&lt;/sup&gt;</td>
<td>↓</td>
</tr>
<tr>
<td><strong>Relapse</strong>&lt;sup&gt;6&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td><strong>Attitudes</strong>&lt;sup&gt;1,5&lt;/sup&gt;</td>
<td>↑</td>
</tr>
<tr>
<td><strong>Adherence</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>↑</td>
</tr>
<tr>
<td><strong>Involvement</strong>&lt;sup&gt;5&lt;/sup&gt;</td>
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<th>Clinician outcomes</th>
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<tr>
<td>Psychopathology(^1,5)</td>
<td>Knowledge(^2,3,4,5)</td>
</tr>
<tr>
<td>Relapse(^6)</td>
<td>(\uparrow)</td>
</tr>
<tr>
<td></td>
<td>Attitudes &amp; confidence(^2,5,6,7,8)</td>
</tr>
<tr>
<td>Attitudes(^1,5)</td>
<td>(\uparrow)</td>
</tr>
<tr>
<td>Adherence(^1)</td>
<td>Skills(^2,3)</td>
</tr>
<tr>
<td>Involvement(^5)</td>
<td>Therapeutic optimism(^3)</td>
</tr>
</tbody>
</table>

\(^3\) Byrne et al (2005) Aust & NZ J Psych 38, 246-253
\(^4\) Robson (2005) MSc dissertation, IoP, KCL
\(^7\) Chadwick et al (2009) MSc dissertation
\(^8\) Bressington et al (2013) Nurse Education Today
Dissemination of MM training

TRAIN THE TRAINERS
- 30 Senior Nurses or Lecturers
- 11 regions throughout the UK
- Two weeks training in medication management
- Provided the trainer with the skills, teaching materials & supervision to roll out the course in 30 HE sites
- In collaboration with Eli Lilly
- 2001-2002

INNOVEX/QUINTILES NURSE ADVISOR ROAD TO RECOVERY PROGRAMME
- 8 Nurse Advisers
- 5 days training in concordance skills and side effect assessment and management
- Delivered 4282 educational sessions
- 36,666 Mental Health workers throughout the UK exposed to concordance skills training
- In collaboration with Janssen Cilag
- 2002-2007

KING’S HEALTH PARTNERS
Pioneering better health for all
Dissemination of medication management training

INTERNATIONAL TRAINING
- Germany (M Shultz)
- Hong Kong (D Bressington)
- Thailand (N Boorman)
- USA (S Hall)
- Australia (M Byrne)

EDUCATIONAL MATERIALS
- DVDs of clinical skills
- Concordance Skills training manual translated into
  - German
  - Chinese
  - Thai
  - Japanese
  - Korean
Local picture of MM training

• Trained 800+ mental health nurses in SLAM & Oxleas

- Band 5
- Certificate/Diploma
- Inpatient
- BME

- Band 6+
- Degree +
- Community
- White
Key points

- Training programmes for clinicians can have a positive impact on patient outcomes.
- There’s no ‘ONE SIZE FITS ALL’ approach to improving adherence in individual patients – needs to be personalised.
- Although MM training is effective, it may be even more effective if we personalise training.
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