UNIVERSITY OF ABERDEEN
Centre of Academic Primary Care

A Mindfulness-based programme for patients with chronic pain:
Exploring the barriers and facilitators to engagement

Fathima Leila Marikar Bawa

Academic Fellow in General Practice, University of Aberdeen

Project Supervisors:

Professor Christine Bond, Professor Stewart Mercer, Dr Jane Sutton

My presentation

- Background
- Methods
- Quantitative Results
- Qualitative results
- Overview of Findings
- Limitations
- Next steps

Background: Chronic pain

- Chronic pain common reason to seek medical help
- Bio-psycho-social model of pain
- Avoidance of behaviours leads to reduced functioning
- Medication often ineffective
- Other treatments needed

Mindfulness- based interventions

- Increasingly popular for long term conditions
- 8 week course with weekly group meditation and daily home practice
- Implementation within NHS & target groups
- SR found may be an effect on some outcomes
  - Low participation rate
  - High attrition from intervention groups

Aim

- To explore the barriers and facilitators to engagement, of chronic pain patients, with a mindfulness programme

Methods

- Mixed methods study
- Participants
  - Adults with chronic pain
  - Recruited from 2 GP practices
  - Database searching of prescription records
  - GP screening of lists against eligibility criteria
  - Invited to take part in mindfulness programme
- Quantitative data
  - Pre- and post-programme questionnaires: demography and validated measures, analysed using SPSS

Qualitative data: Interviews

- Timing
  - (Screening)
  - Post-programme
  - Longitudinal follow-up
- Approach
  - Participant led interviews with guidance towards key areas where necessary
- Management
  - Audio-recorded
  - Transcribed
  - Analysed (completers and non-completers separately)

Interpretative Phenomenological Analysis

The approach:

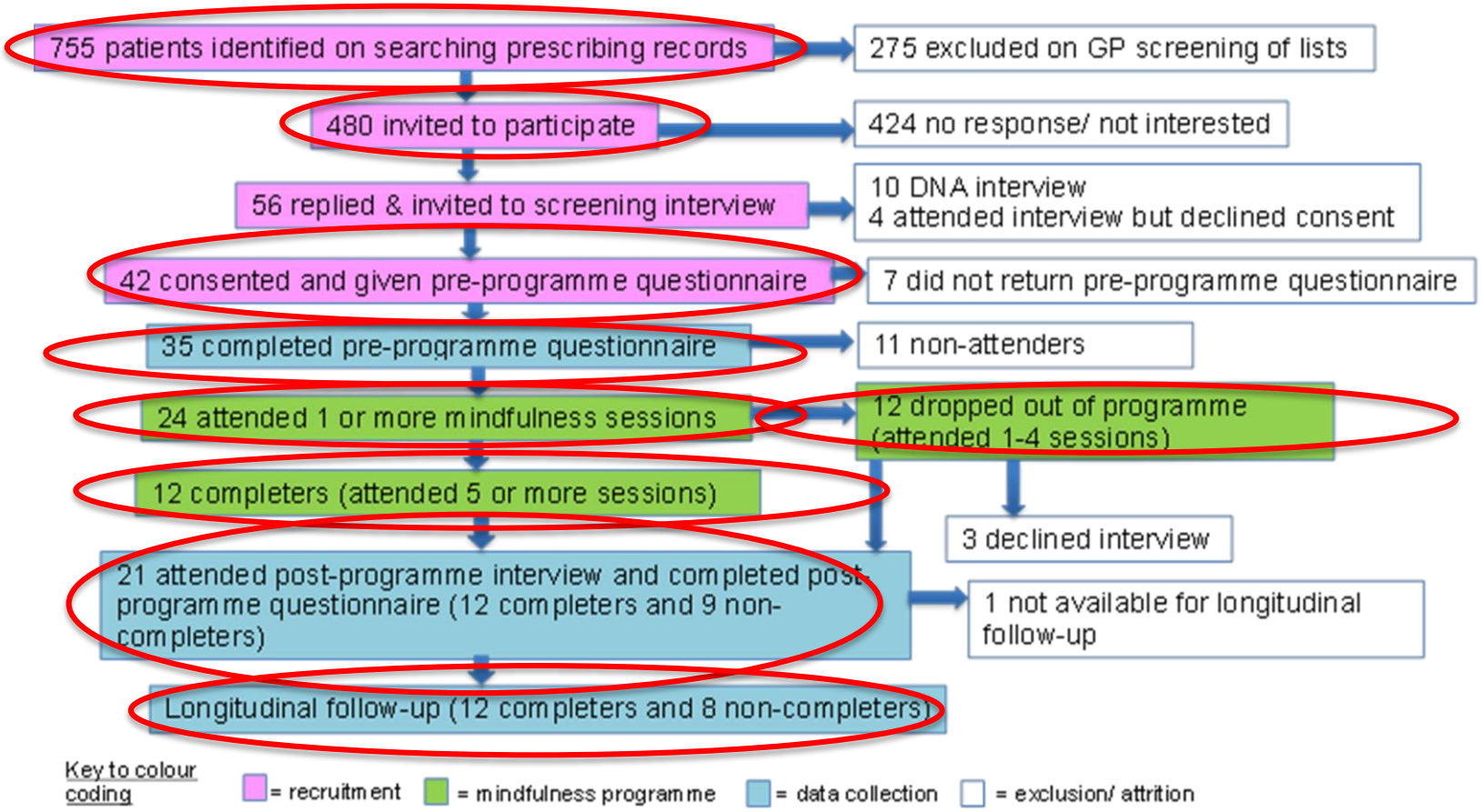
- A method of in-depth qualitative data analysis
- Explore how the participant ascribes meaning to their experience
- Suspend judgement & assumption
- Understand the deeper experience of the participant

Interpretative Phenomenological Analysis

Progress to date:

- Listened to recordings, adding pauses, intonations, expressions to transcripts
- Transcripts read and re-read, making notes on thoughts, observations, reflections
- Recurring phrases, language used, emotions noted
- Themes identified
- 2nd coder independently coding and theming of subset of transcripts for validity

Recruitment & Retention



Demographics

35 completed pre-programme questionnaire

- 77% female
- 72% aged 50-73
- 69% white Scottish
- 69% Christian
- 34% osteoarthritis

Quantitative results

T tests: pre- post scores n=21

- Psychological health (SCL90BSI) mean change 4.11 (0.11, 8.12).
- Pain acceptance (CPAQ) mean change 13.28 (7.02, 19.54).
- Health-related quality of life (RAND 36-item health survey)
  - 3 out of 8 subscales improved (role limitations physical, energy/fatigue and general health perceptions)

- Pain scores (NRS) no significant change
- Mindfulness scores (MAAS) no significant change.
- Psychological flexibility (AAQII) no significant change.

Qualitative results: Barriers before programme

- External barriers (e.g. lack of time, disability)

- Internal barriers
  - Negative psychological factors (e.g. Fear of humiliation, low self-esteem)
  - Pre-conceptions about meditation

"You see things on the TV, but you always see people sitting, you know, on the floor and humming away, and I thought, "Mmmh, I don't know if that would ever be for me", but er, but this wasn't so much like you see it on the TV, kind of thing, it was more accessible I think." Participant G23

Qualitative results: Facilitators before programme

- External facilitators
  - Involvement of others (e.g. Support from family)

- Internal facilitators
  - Positive personal attributes (e.g. Self-determination)
  - Health beliefs (e.g. Medication not effective)
  - Realising current approach to pain ineffective (e.g. Resistance, pushing through pain)
  - Realising effects of pain on life (e.g. Feeling alone, frustration)

"I would come to a complete stand still, because I just allowed myself to get too sore, and it would impact on what I was able to do, which then would really frustrate me, because I'd feel like I was giving in to the pain."
Participant G50

Qualitative results: Barriers during programme

- External barriers (e.g. Venue too cold, group sessions too long)
- Internal barriers (e.g. Guilt when serving self, self-judgement)
- Adverse effects (e.g. Worsened pain, dizziness, sense of panic during mindfulness exercise)

"I found the, with the mindfulness, the thinking about it (pain) and the body scans (mindfulness exercise) which I found very difficult on my own, they were alright in, in a group, but on my own, I found it actually, because I've got used to, if you like, putting it to one side, and doing it, it was bringing it (pain) to the front again, and in a way, making it worse, I know this sounds silly, making it worse, um, so I've had a lot more trouble with it" Participant G87

Qualitative results: Facilitators during programme

- External facilitators:
  - Impact of others (e.g. Partner taking interest in mindfulness)
  - Course design (e.g. Adapting practices to own ability)

- Internal facilitators:
  - Commitment (e.g. Determination to complete course)
  - Realisation of benefits from mindfulness programme
  - Positive experience of mindfulness (e.g. Sense of serenity, awareness)
  - Positive group experience (e.g. Acceptance, common goal, sense of not being alone)

"So I felt it was a bit like that, you feel you're not alone, and you feel that there are other people that, you know, that know what you're going through, and know how difficult it is, in varying degrees, you know cos as I say, there was a lot of people, a lot of people worse than, than I was, I felt like a bit of an imposter actually." Participant G65

Qualitative results: Barriers after programme

- Lack of effects (e.g. Lack of change in approach to own pain)

"There doesn't seem to be, like you know like, not, not that I've noticed, there doesn't seem to be any change in, in that (my approach to managing pain), it's just, I suppose it's just something that's gone on for so long, um." Participant G65

Qualitative results: Facilitators after programme

- External facilitators:
  - Tools for future engagement (e.g. Bought book for further reading)

- Internal facilitators:
  - Incorporation into life (e.g. Mindfulness as a toolkit, use in stressful situations)
  - Effects (e.g. Empowerment, reaction to pain changed)
  - Spirituality (e.g. Sense of greater meaning to life, clarity on values)

"It's made me appreciate the fact that you can have spirituality without being in a, because if you are outside, and it is beautiful, and the loch and the hills and birds singing, and things that you hadn't noticed, you know, little things you're seeing, um, yeah, there is a sense of wonder, and awe, and yeah, spirituality, but it's happened out there, it's not, it's not really linked, I wouldn't say to you know, an organised religion. It's probably filled that sort of need to have um, something spiritual, something greater." Participant G47

Overview of Findings: Quantitative

- 3 out of 6 outcomes showed some improvement
- Psychological health and pain acceptance improved
- Pain scores did not significantly improve
- Mindfulness did not significantly improve but measured with MAAS

Overview of Findings: Qualitative

- Barriers and facilitators to engagement with mindfulness programme identified
- Some identified barriers modifiable
  - Pain unchanged: Clear description of aims of mindfulness
  - Unable to do movement practices: encourage tailoring to own ability
  - 'They think the pain is all in my head': presented with pain at centre, with thoughts and emotions secondary.

- Facilitators can be reinforced
  - Support from family: encourage to attend with family member
  - Positive group experience: refresher session

- Non- completers more disabled, more psychological barriers, less self-determined, less able to relate mindfulness and pain

Limitations

- Not completed analysis (11/21 completed)
- Small sample so some barriers & facilitators may have been missed
- Public engagement group (rheumatoid arthritis support group)
    - Agreed with findings
    - Use of jargon and culturally specific metaphor as important barriers
        - Escort your mind back and congratulate yourself when it arrives
        - Breathe into the pain

Next steps

- Design of modified mindfulness programme
- Hold focus group meeting

Future work

- Look more widely at engagement with mindfulness
  - Majority Caucasian, middle class & female
  - Cross cultural/ universally acceptable, e.g. Asylum seekers & refugees
  - Use of language
  - Mindfulness without Borders – use of art to express emotion, music
  - Other creative forms as well as poetry e.g. Expressive movement

Thank you for listening!