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The effectiveness of alcohol brief interventions delivered by community pharmacists: randomised controlled trial

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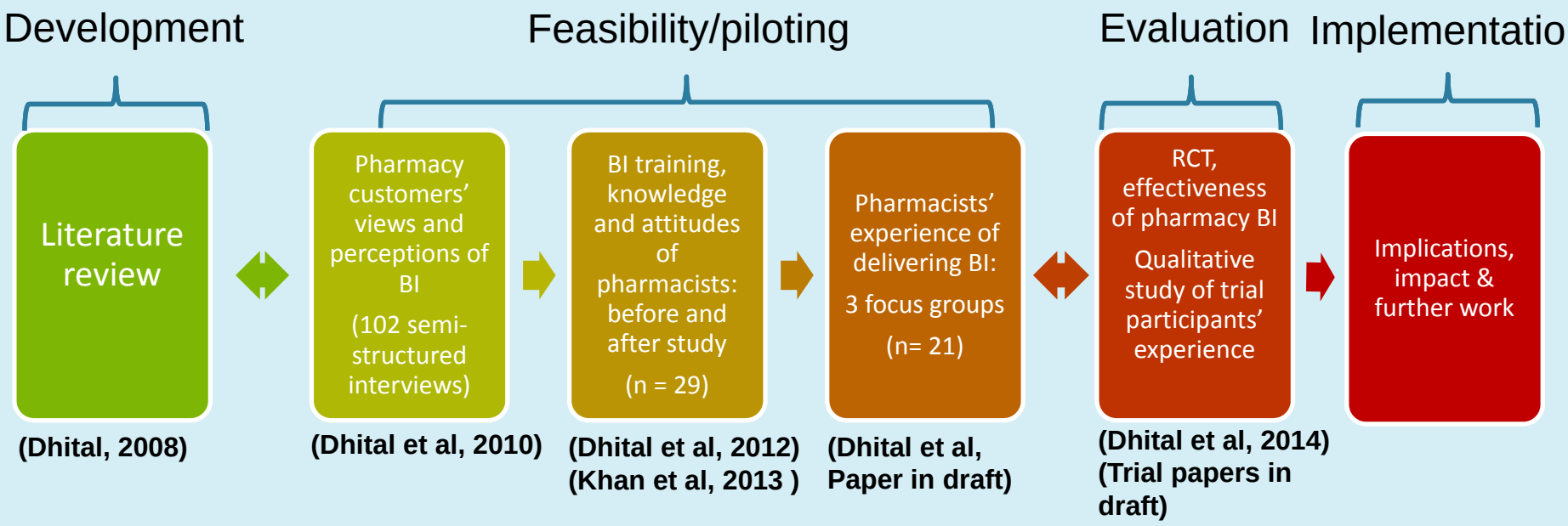
Overview

What is already known:

- Pharmacists & pharmacy staff are 3rd largest health workforce in the world
- Development of public health roles
- Therefore a large potential to influence public health

Research programme



Based on MRC framework. Developing and evaluating complex interventions (Craig et al, 2008)

Pharmacy alcohol BI RCT

- **Aims:**
  - To determine if alcohol BI delivered by community pharmacists, compared to a control (Alcohol: The Basics leaflet), is effective at reducing risky drinking at three-month follow-up (Dhital et al, 2013)
    - Inner London borough, UK
    - Pragmatic design

Design

- Sample size:
  - Effect size 0.30 (Moyer 2002), 1 sided test, (139 each group), 80% power (5% significance level)
- Parallel group, allocated to BI or leaflet-only control condition (via sealed envelopes)
- Each pharmacy to recruit 24 participants over 6 months
- Randomisation stratified by each

  of the 17 pharmacists (1:1)
- Recruitment through customers' activity in the pharmacy:
  - View posters/flyers
  - Purchase certain pharmacy medications
  - Pharmacy services e.g. Stop Smoking, MUR
  - Rx for chronic medical conditions

Design

- **Intervention (approx 10mins):**
  - Influenced by MI
  - Aim to encourage thinking about alcohol
  - Whether to reduce?
  - Empathetic style, rapport, explore experience

- **Control:**
  - Given leaflet, ‘Alcohol : Basics’ not expected to be effective at promoting behaviour change (Kypri et al, 2011)
  - Not informed they were control participants

Pharmacists' and staff training

- **17 pharmacists from 16 pharmacies** (of 40 available sites)
- **One-day & followed half-day training on BI for pharmacists:**
  - Role-play BI scenarios
  - Focus on communication
- **Half-day training for support staff:**
  - Inform and identify potential participants
- **Weekly visits/contacts by researcher:**
  - Support
  - Check adherence to study protocol

Main outcome measures

- **Primary outcomes:**
  - Change in total AUDIT scores between groups*****
  - Proportion remaining hazardous / harmful at 3-months******
  - Additional analysis: change in AUDIT scores from baseline to follow-up for each group*****

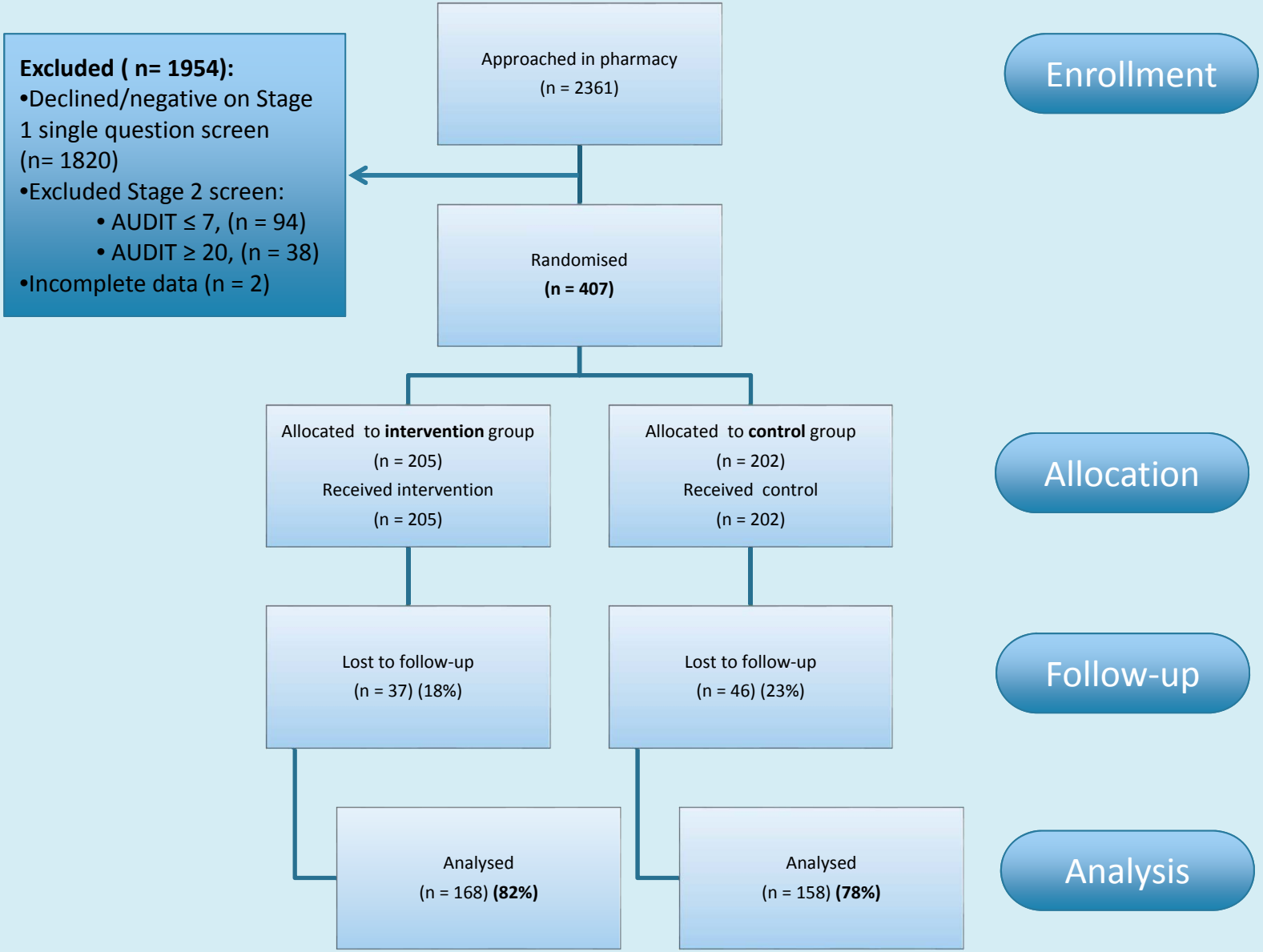
- **Secondary outcomes:**
  - 3 sub-scale scores (consumption, problem and dependence)*****

*****ANCOVA for AUDIT change scores

****** Binary outcome tested using logistic regression model

(Data analysed on an ITT basis, Missing data due to attrition using Pearson X^2 *(intervention or control, gender, ethnicity and education)*, and independent *t-test (age, AUDIT baseline)*

Trial recruitment and retention



Results

- **Primary outcomes:**
  - Total AUDIT not differ significantly between groups
    - Total AUDIT approx 0.5 point difference between groups (-0.51, -1.56 to 0.53), p = 0.34‡

      (‡ = *adjusted for pharmacist, baseline score, gender, age, ethnicity and education)*
  - Odds of remaining hazardous/harmful were 0.87 (0.50 to 1.51), p = 0.061*****

    (***** = *adjusted for pharmacist, gender, age, ethnicity and education)*
  - Additional analysis: no sig change in total AUDIT from baseline to follow-up for both groups
    - Intervention: 0.10 (-1.15 to 1.35), p = 0.88†
    - Control: -0.45 (-1.67 to 0.76), p = 0.46†

      († = adjusted for pharmacist only)

Results

- **Secondary outcomes:**
  - No sig differences in secondary outcomes between groups for consumption and problem:
    - Except for **dependence** in unexpected direction (with control group approx half point lower (-0.47, -0.84 to -0.10), p = 0.013 ‡

      (‡ = *adjusted for pharmacist, baseline score, gender, age, ethnicity and education)*
  - Additional analysis: no sig difference for **dependence** and **problem** sub-scales from baseline to follow-up for both groups
    - Except for **consumption**:
      - Intervention: -0.76 (-1.35 to -0.18), p = 0.011†
      - Control: -0.65 (-1.23 to -0.08), p = 0.025†

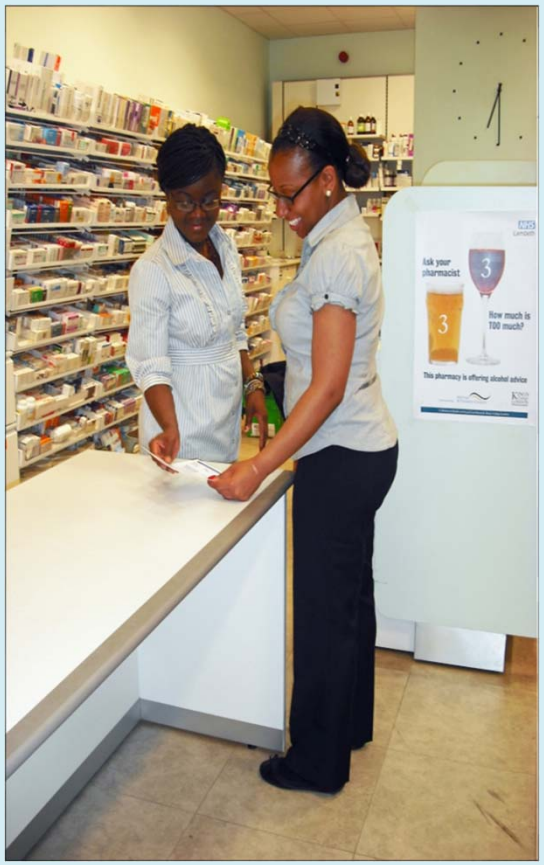
      († = adjusted for pharmacist only)

Results

- Customers asked if they recalled having a discussion with pharmacist about their drinking following AUDIT questions:
  - 39% (n = 62) control participants correctly responded (others believed they had such a discussion)
  - 77% (n = 130) of intervention participants correctly responded

Conclusion

- There is no evidence of effectiveness of BI delivered by community pharmacists in this study
- Pharmacy setting is promising for this type of work
- Future studies consider:
  - Extending training
  - Altering other features of intervention & study design
  - Efficacy trial
- **What this study adds:**
  - Pharmacists are willing to:
    - Engage in trial participation
    - Training
    - Delivering BI
- Policy makers need to consider developing pharmacy workforce before implementing BI in this setting



Questions?

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