

What do patients with Type 2 Diabetes think about their medicines?

Aikaterini Psarou¹, John Wilding¹, Helen Cooper²

¹ Obesity and Endocrinology - University of Liverpool,
² Faculty of Health and Social Care - University of Chester



ABSTRACT

Type 2 diabetes patients rarely fully comply with their diabetes medicines, partly due to fear of weight gain. Increased body weight adversely affects diabetes control, yet many diabetes treatments promote weight gain. New medicines may help with weight loss, but their use is limited due to tolerability and cost.

Aims: (i) measure patients' expectations, beliefs and attitudes towards their medicines, with particular focus on body weight effects and association with adherence; (ii) develop and test a pilot intervention to improve adherence.

Methods: Phase 1: Participants are asked to complete validated questionnaires and take part in qualitative interviews before and after starting on a new diabetes medicine. Phase 2: A pilot intervention based on data collected from phase 1 and evaluated using the same tools.

Outcome: Understanding patients' beliefs and experiences of diabetes medicines will help develop an intervention promoting diabetes and body weight awareness and, allow patients to make informed choices about treatment options with a view to improving adherence.

BACKGROUND

- Type 2 Diabetes (T2DM) is a complex heterogenous and progressive disease which requires management of a range of factors including glucose and body weight.
- In the NHS, primary and secondary care are key providers of medical support and treatment for T2DM patients. Although lifestyle interventions are the first line of treatment, most people subsequently need sequential addition of diabetes medicines.
- Patients are generally reluctant to take medicines and would prefer to take as few as possible (Pound et al, 2005).
- Patients' adherence levels to their diabetes medicines (oral tablets and insulin injections) range from 36-93% over a period of 6-24 months (Cramer, 2004).
- Non-adherence amongst patients with diabetes has been associated with concern about weight gain (Peyrot, et al 2009).

RESEARCH QUESTIONS

- How do the expectations, beliefs and attitudes of people with T2DM towards different diabetes treatments that either promote weight loss or result in weight gain, change over time?
- What is the impact of this change on patients' adherence to their medicine(s)?
- How can an intervention promoting treatment options, focusing on body weight, improve patient understanding of their diabetes treatment and adherence?

This is a mixed method design incorporating questionnaires, interviews and pilot intervention.

PRELIMINARY RESULTS

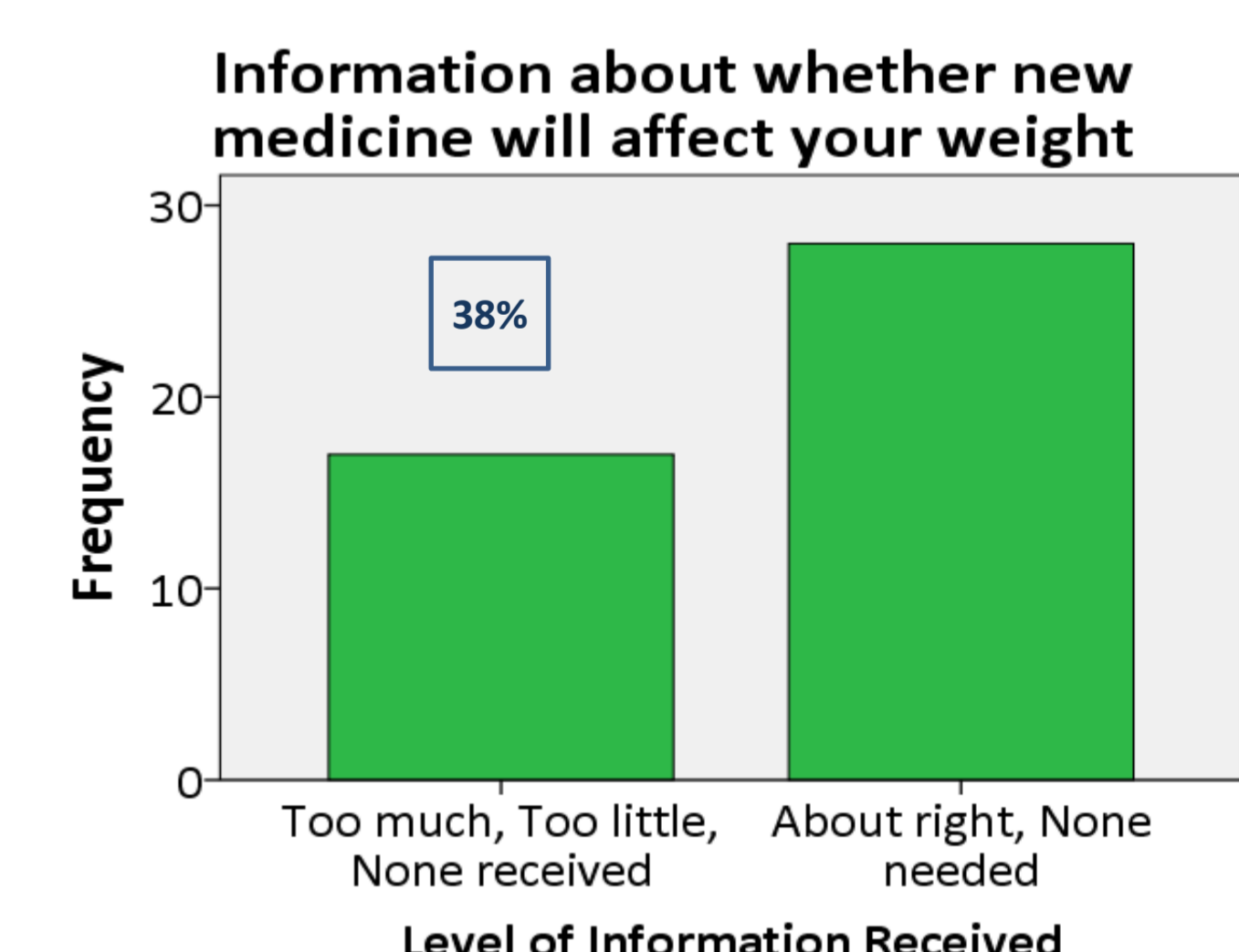
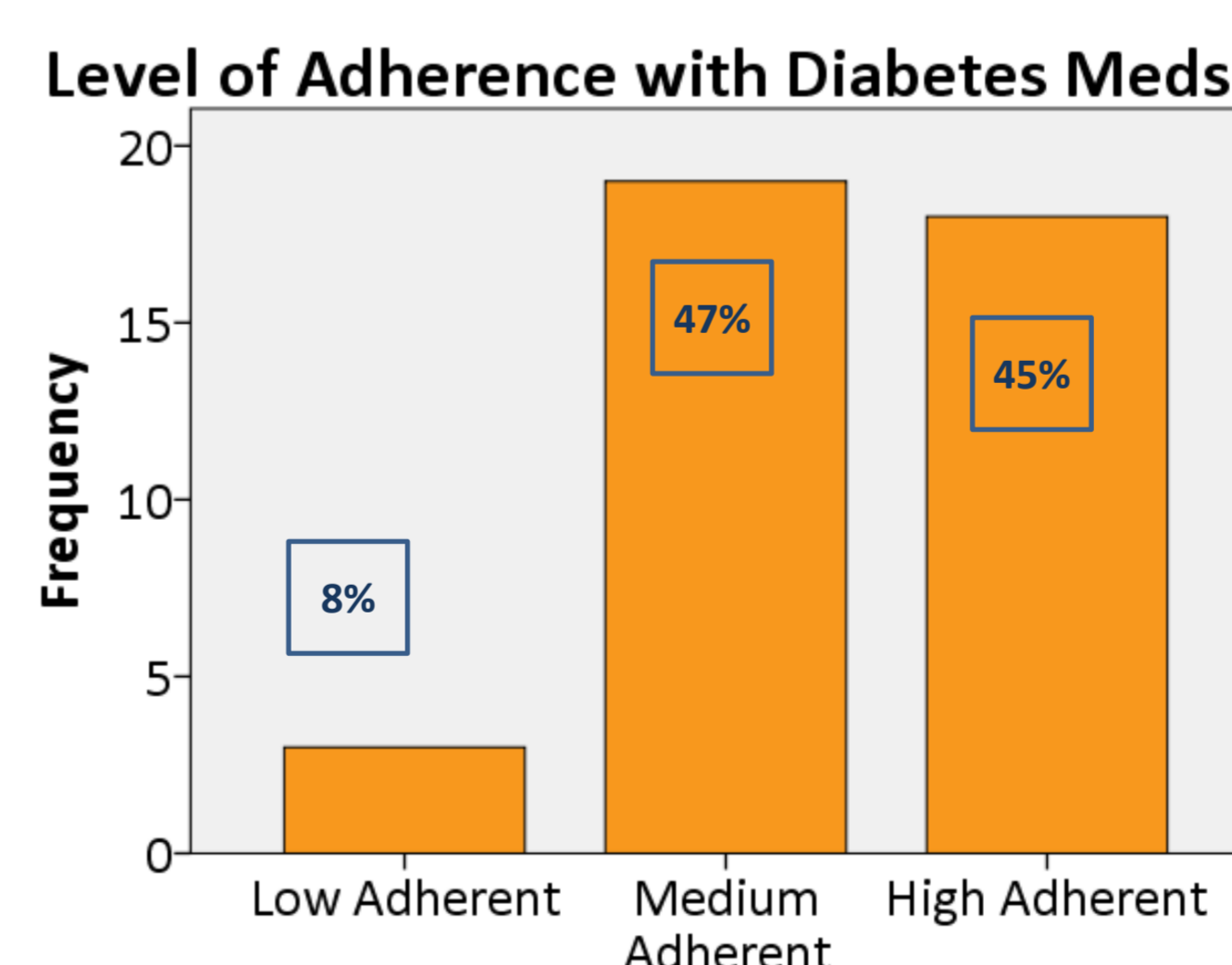
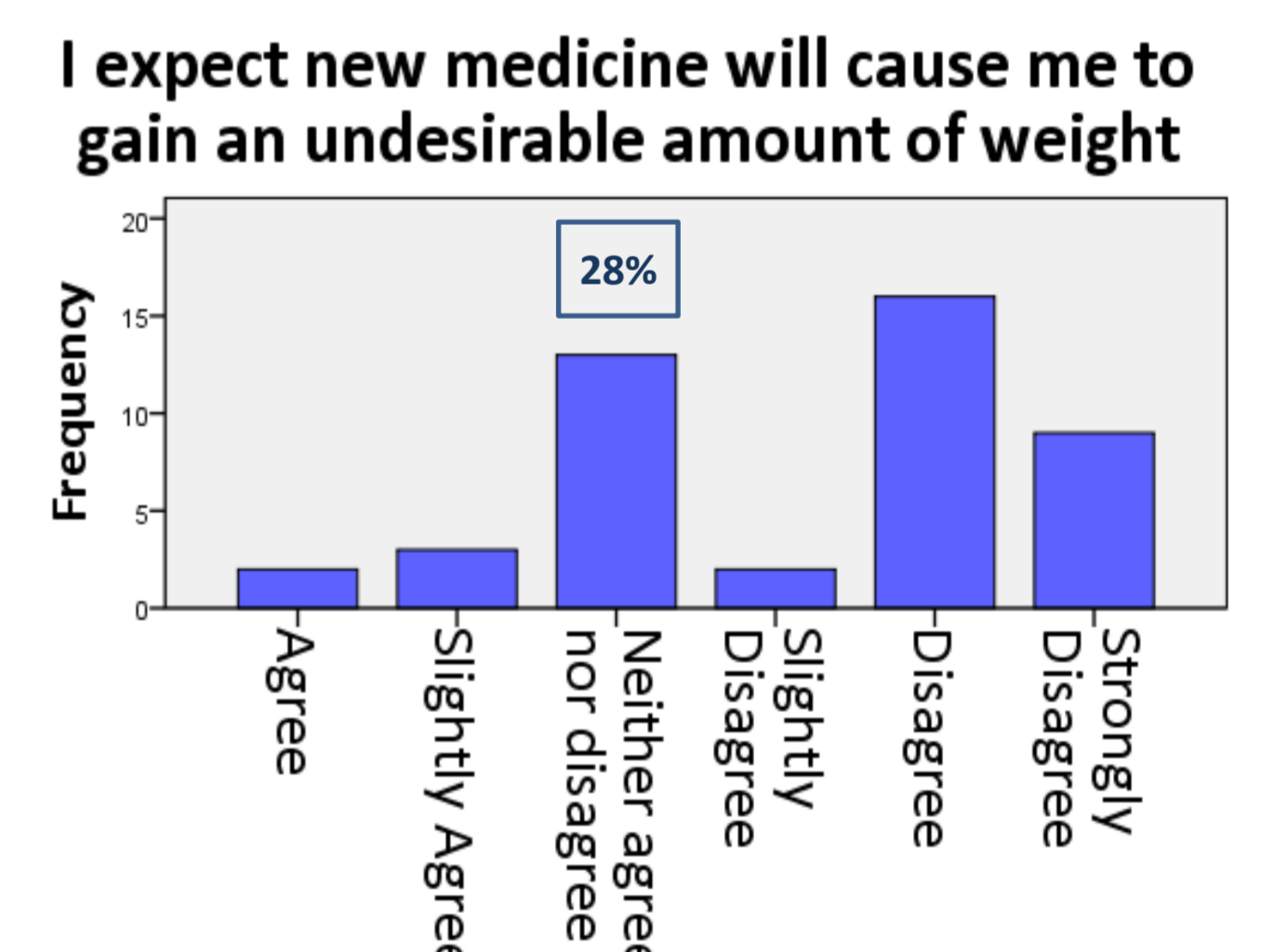
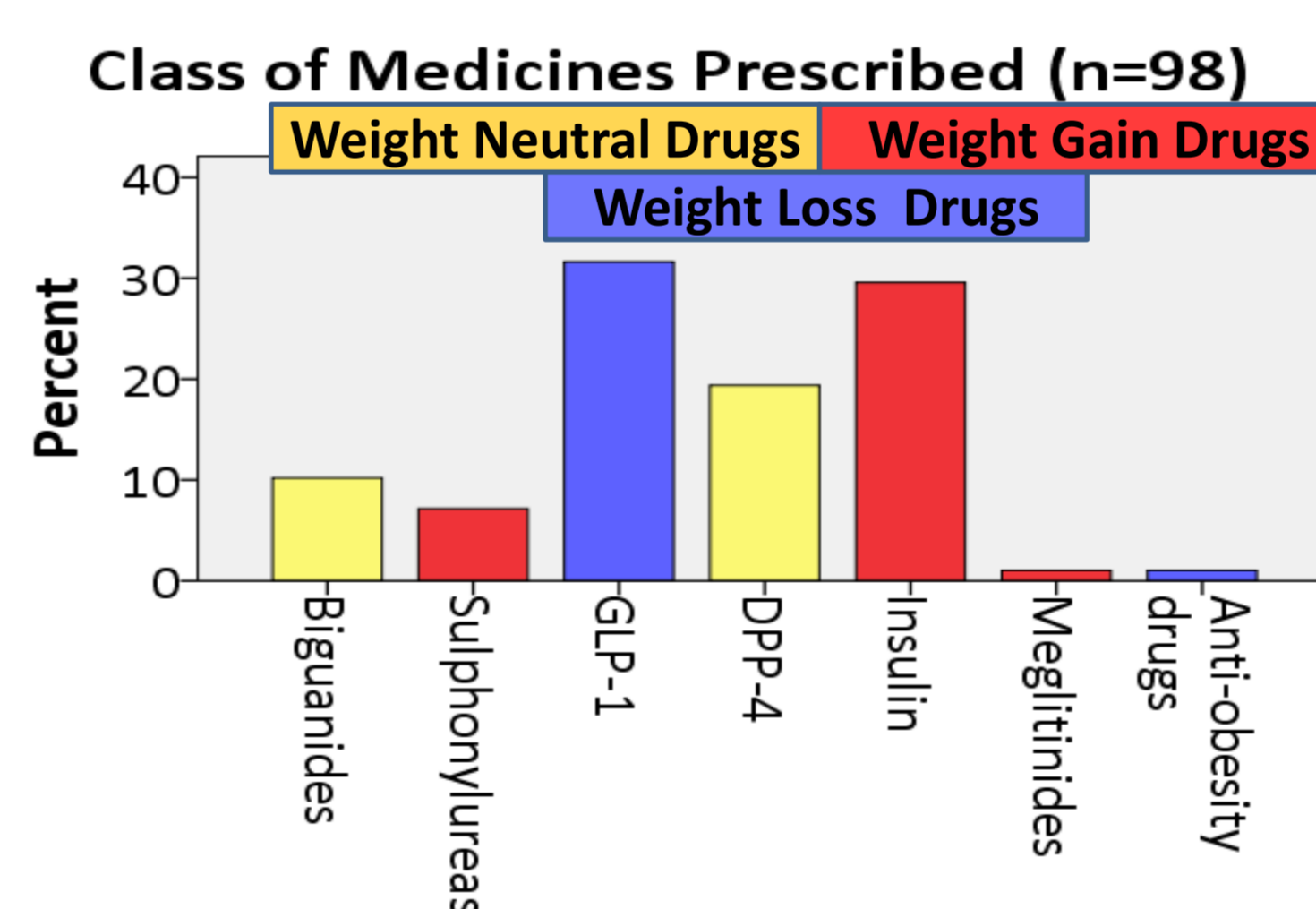
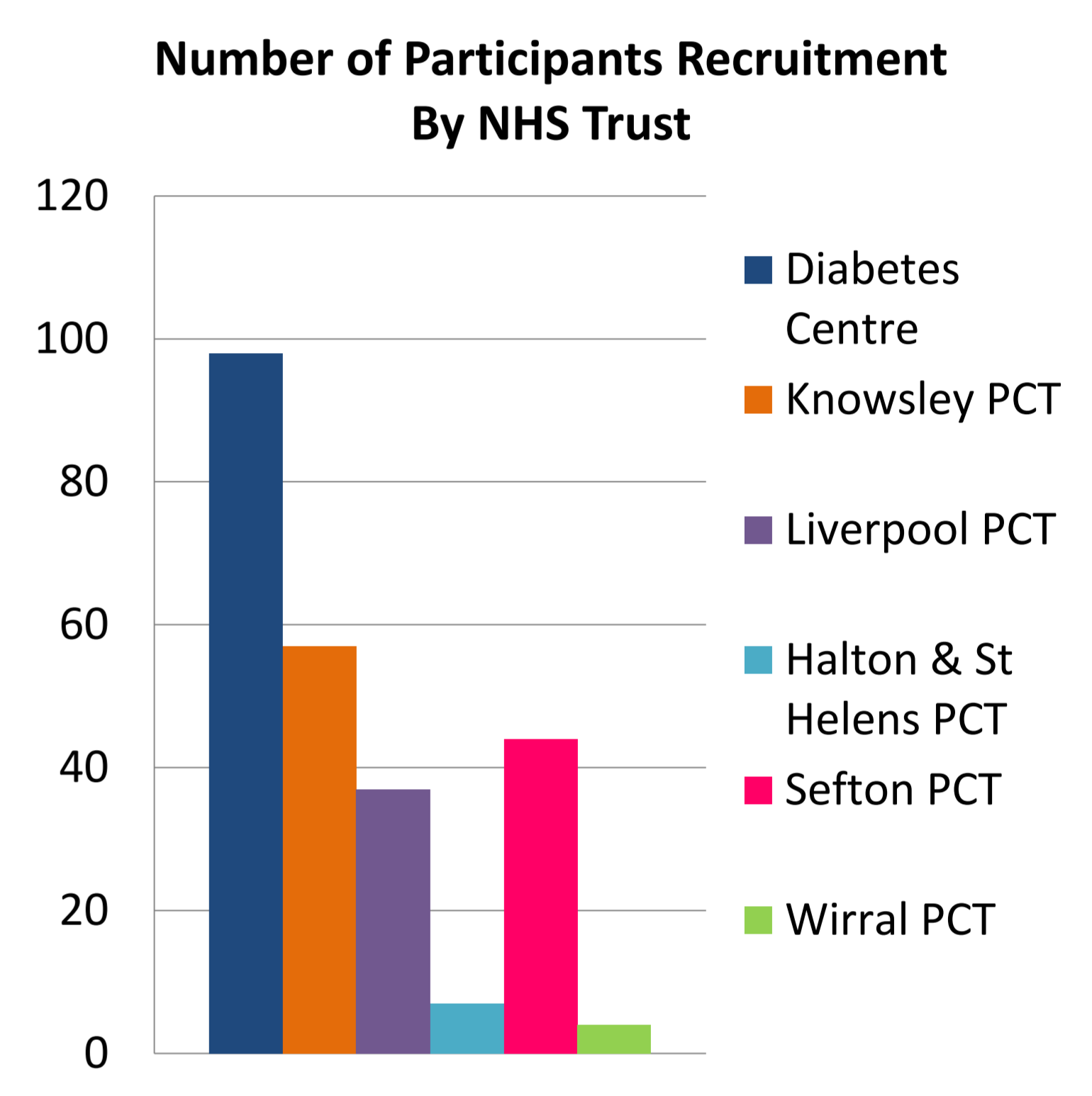
In phase 1, the aim is to recruit:

- 300 participants who complete both first and second questionnaires to achieve a 5% significance level at 80% power, indicating patients' pre-treatment expectations exceeded by their experience.
- 20-30 participants who take part in interviews 1 and 2, to explore in depth patients' expectations, beliefs and attitudes towards their medicines and associated lifestyle advice.

To date, over 250 participants have been approached, of which 150 have returned questionnaire 1 and 85 have returned questionnaire 2. This is approx. 29% of target.

Also, seven participants completed interview 1.

Participants Characteristics	
Gender (n=98)	58% Male 42% Female
Age in yrs (mean ±SD) (n=98)	59 ± 11.5
Diabetes Duration in yrs (mean ±SD) (n=88)	8.9 ± 8.1
Employment status	45.7% Retired 31.9% Full/Part time 12.8% Unemployed 9.6% other
Body Mass Index (kg/m ²) (n=44) (mean ±SD)	35.8 ± 8 Healthy Range 18.5-24.9
HbA1c (mmol/mol) (mean ±SD) (n=43)	79 ± 18 Normal Range 48-53 (6.5-7%)



WHAT NEXT?

These results are based on a very small proportion of participants (n=44). A more detailed statistical analysis will be conducted when the target number of 300 participants is reached. In addition, the face-to-face interviews will enable to explore further the questionnaire findings, and both quantitative and qualitative data will enable the development of the pilot intervention.

REFERENCES

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Pound, P., Britten, N., Morgan, M., Yardley, L., Pope, C., Daker-White, G., and Cambell, R. (2005). Resisting medicines: a synthesis of qualitative studies of medicine taking. *Social Science and Medicine*, 61, 133-155.

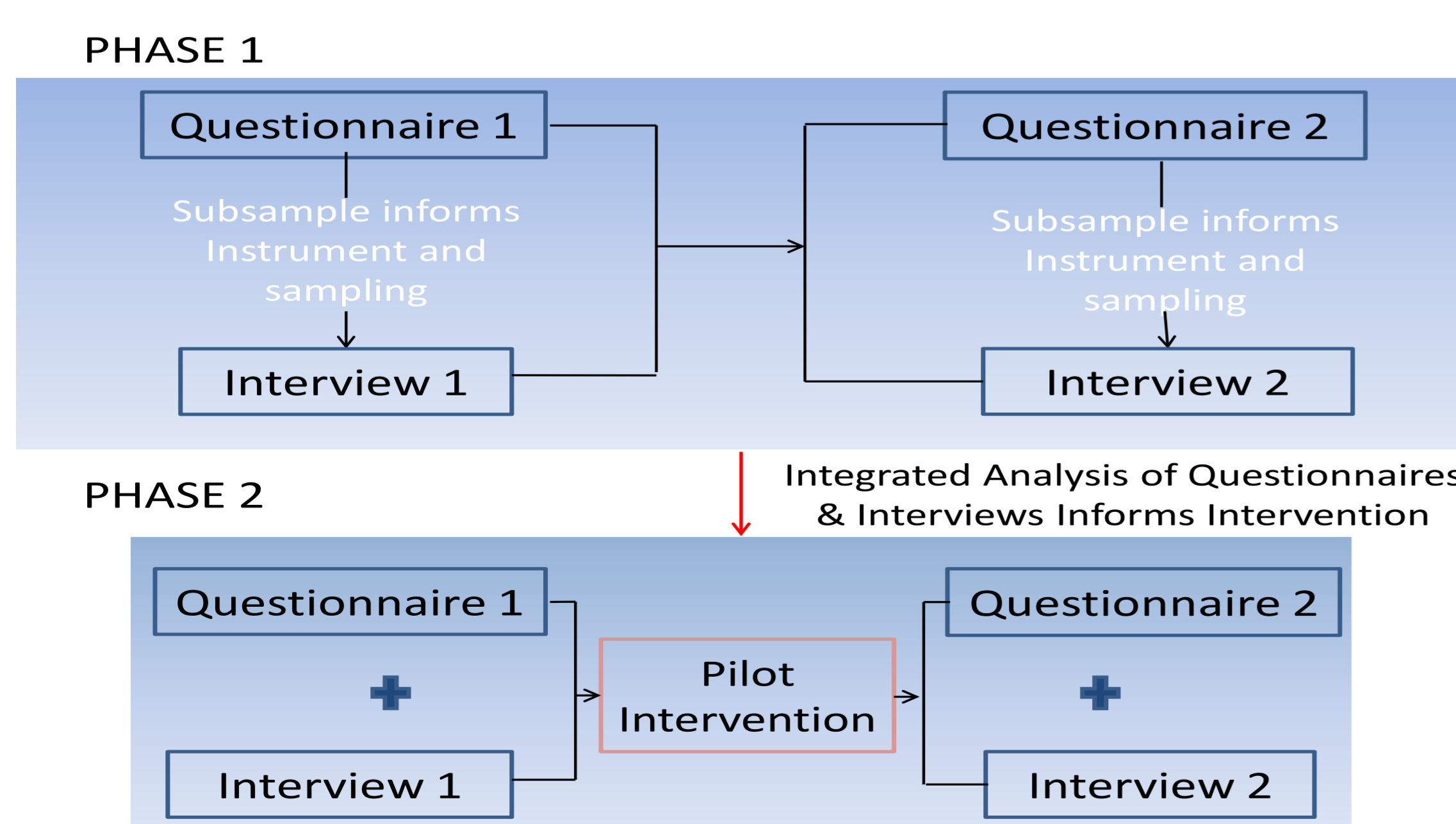


Figure: Visual Diagram of Methodology Study Design (Mixed Methods)