Investigating the Role of Pharmacists in Cardiac Rehabilitation: A Qualitative Study

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Introduction

- Cardiovascular Disease (CVD) is an extensive condition affecting many communities across the world, and accounting for 31% of worldwide deaths.¹ In the UK, those living in poorer communities are 4 times more likely to die due to a cardiac event.
- Cardiac rehabilitation is a multidisciplinary intervention which offers patients with health education, physical activity, management of stress and advice on how to reduce the risk of experiencing subsequent cardiovascular events²
- One study claims that pharmacists have a role in enhancing patient outcomes within cardiac rehabilitation through education, counselling, drug safety, medication reviews and optimisation, monitoring of medication adherence, prevention/control of CVD risk factors and post discharge follow-up. It is also thought pharmacists work well to support the multidisciplinary team particularly through conducting medication reviews and adjustment of drug therapy.³
- However, there is very limited data reported on the effect of pharmacist interventions in cardiac rehabilitation.⁴
- it has been reported that the importance of pharmacists has not been displayed³, as well as a lack of information on the long-term effect of pharmacist interventions.⁵ There is also very little on the involvement of community pharmacists in patient care and outcomes.³
 Having a better understanding of the services that pharmacists can contribute to cardiac rehabilitation would be vital for improving patient care, and preventing recurrence of extensive cardiac problems.

Materials & Methods

Procedure:

- A sample of 10 participants was used
- Semi-structured qualitative interviews (30-40 minutes) were conducted via Zoom
- Interviewed a mixture of pharmacists and healthcare professionals
- An interview discussion guide was created
- Consisted of 8 prompt areas
- Ethical approval was gained from the Safety and Ethics Sub-Committee at the University of Birmingham
- A pilot interview was conducted before interviews took place

Aims

- To interview pharmacists and healthcare professionals working in cardiology/cardiac rehabilitation to investigate the role of pharmacists on patient care and outcomes
- To ascertain the potential avenues for the role progression of pharmacists in cardiac rehabilitation services

Thematic Analysis

- Interviews were transcribed and video recorded via Zoom software
- Transcripts were reviewed and analysed in line with Braun and Clarke (2008)
- Codes were generated from the transcripts and ideas with similar concepts were grouped together to form subsequent themes

Results and Discussion



7 8 9 10 Table 1: Partic	F F F F cipant Demogra	MPharm MPharm, MSc and IP Undergraduate, Postgraduate Diploma and IP MPharm	4 20 1 10	Hospital Hospital Primary Care	Communication between primary and secondary care Raising awareness of CR services to primary care Errors following discharge
					Figure 1: Thematic Map
Themes					Quotations
	Increasing pharmacist involvement in cardiac rehabilitation				"The knowledge is there, and it's quite extensive. The problem is them [pharmacists] being more introduced to the system and how the system is running"- Participant 4 "I think they could work across all of the cardiac rehab parts. So even if it's like phase two, there's a chat at home They could identify patients on the ward and say that it's [they're] ideal for cardiac rehabilitation invitation" – Participant 3
Overcoming barriers to patient care					"I guess, to try and encourage the population in that area or the public to engage with public health. And you know better lifestyle living that you know, smoking cessation reduced alcohol intake, you're exercising, losing weight" – Participant 1
Improving communication between primary and secondary care					"What we need to do is raise awareness about cardiac rehabilitation to colleagues in primary care It's about making it known that practitioners can refer back into the cardiac rehab service if they feel it's appropriate, or would it would be a benefit to the patient." – Participant 2

 Table 2: Generated themes and quotes

- One of the main themes arising from this piece of research is the need for more pharmacists to be actively involved in cardiac rehabilitation programmes. There is scope for an increase in
 professionals working in cardiac rehabilitation in order to enhance the service, and pharmacists are well equipped to undergo training to provide services beyond their traditional role to
 improve patient outcomes
- Barriers to accessing healthcare remains a large problem for the treatment and prevention of cardiovascular disease. Pharmacists can have an influential role in attempting to overcome these barriers through active participation within the wider community to provide education and resources, and within their sphere of work through promoting interprofessional education.
- Results also show that there is disparity in communication between primary and secondary care, which leads to problems in patient follow up after discharge, and errors in information being transferred across the sectors.

Conclusion	References
 The results from this research have been collated to add to existing literature on the role of pharmacists in cardiac rehabilitation. Pharmacists are skilled healthcare professionals that can bring patient satisfaction through medicine related interventions, but also through advances made in the wider community However, the role of the pharmacist still needs to be extensively studied to be able to draw concrete conclusions about their role specifically in cardiac rehabilitation. 	 Health matters: Preventing cardiovascular disease [Internet]. GOV.UK. [cited 2022Nov28]. Available from: https://www.gov.uk/government/publications/health-matters-preventing-cardiovascular-disease Dalal HM, Doherty P, Taylor RS. Cardiac rehabilitation [Internet]. The BMJ. British Medical Journal Publishing Group; 2015 [cited 2022Nov28]. Available from: https://www.bmj.com/content/351/bmj.h5000 Omboni S, Caserini M. Effectiveness of Pharmacist's intervention in the management of cardiovascular diseases [Internet]. Open Heart. Archives of Disease in childhood; 2018 [cited 2022Nov28]. Available from: https://openheart.bmj.com/content/5/1/e000687 Simon White, Claire Anderson, The involvement of pharmacists in cardiac rehabilitation: a review of the literature, International Journal of Pharmacy Practice, Volume 13, Issue 2, June 2005, Pages 101–107, https://doi.org/10.1211/0022357055984 Management of pharmacotherapy-related problems wiley online library (no date). Available at: https://onlinelibrary.wiley.com/doi/10.1111/bcpt.13210 (Accessed: November 28, 2022). Virginia Braun & Victoria Clarke (2006) Using thematic analysis in psychology, Qualitative Research in Psychology, 3:2, 77-101