

# **Do community-based physical activities cater for older adults with a joint replacement? A qualitative study**

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## ***BACKGROUND***

Hip and knee replacement operations are very common, particularly in older adults, and are done to provide pain relief and improve functional mobility. However, long-term pain, disability, social isolation and depression are common after surgery. Exercise is very important for joint recovery, and for general wellbeing after surgery. Research has shown however that many people do not do enough physical activity after having a joint replacement. The reasons for this may be due to worries about damaging the new joint, pain, lack of mobility or not being sure of what to do. Additionally, research shows that if people have been inactive for a long time before their surgery, they are less likely to become active after surgery.

Being part of a community-based physical activity group could help improve recovery and overall wellbeing in older adults with a joint replacement. This is because groups provide an opportunity to get out and about, meet new people and potentially meet others that have also had a joint replacement. People are also much more likely to continue with a group-based activity than if they are told to do exercises at home. Whilst there is a lack of exercise groups specifically designed for people with a joint replacement, existing community-based activities designed for older adults should be appropriate.

## ***STUDY AIMS***

We wanted to find out if and how instructors/leaders of existing community-based activities for older adults cater for the needs of older adults who have had a hip or knee replaced. We also wanted to explore the experiences of instructors/leaders of these activities in engaging with older adults with a joint replacement, and to understand whether there are any barriers to encouraging initial uptake and long-term adherence to group-based activities.

## ***METHODS***

In total, I interviewed 11 instructors/leaders from a range of different community-based activities for older adults in Bristol. This included health walks, group cycle rides, Tai Chi, gentle exercise classes, Zumba gold, walking sports and falls prevention classes. I audio-recorded and transcribed each interview, and then used a method of analysing the data

where I highlighted key quotes/sections of text from the interviews. These were then coded, and similar codes or topics were grouped together into themes and sub-themes. In the write-up, quotes from the interviews were used to provide examples of the themes.

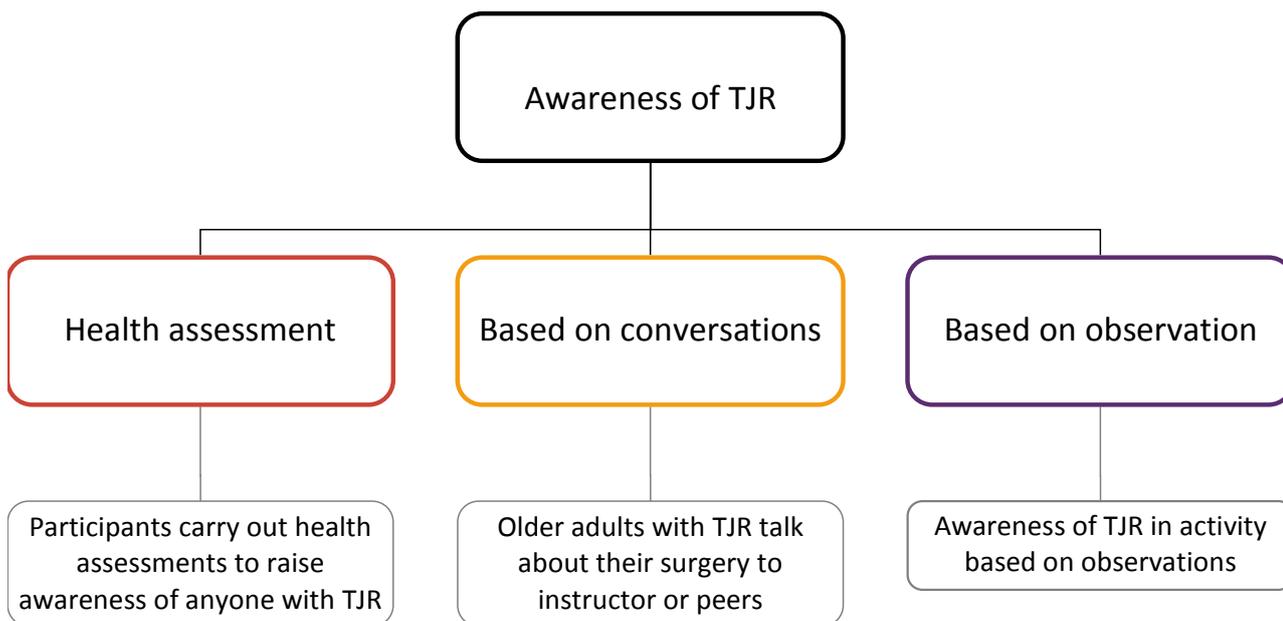
## ***RESULTS***

Six major themes emerged from the data. The results showed that all participants tailor their activity and provide various levels of support to suit the needs of older adults with a joint replacement. Most participants felt that more training from health professionals on what physical activity is best after joint replacement would be beneficial to build instructor/leaders' confidence supporting this population. A fundamental barrier to uptake seems to be the gap between health professionals and community-based activities and participants offered solutions to this. Participants discussed factors relating to long-term adherence to their activities, which were similar to older adults in general.

**Theme 1: Awareness of people with a joint replacement in their activity**

There was a variety of ways in which instructors/leaders assess or know whether there is someone in their group with a joint replacement. One of the main findings is that people with joint replacements tend to talk about their surgery, particularly if there are others in the group that have also got a joint replacement. For some activities, it may be important to understand if there are people in the group with a joint replacement in order to be able to provide support if needed.

\*TJR = Total Joint Replacement



**Figure 1 Factors influencing awareness of people with TJR in the group**

## Theme 2: How activities cater for the needs of older adults with a joint replacement

In recognising barriers to physical activity experienced following a total joint replacement, participants discussed their perceived suitability of the activity for this population, adaptations they make and ways they help to build confidence in people's ability to do the activity.

\*TJR = Total Joint Replacement; BCT = Behaviour change technique

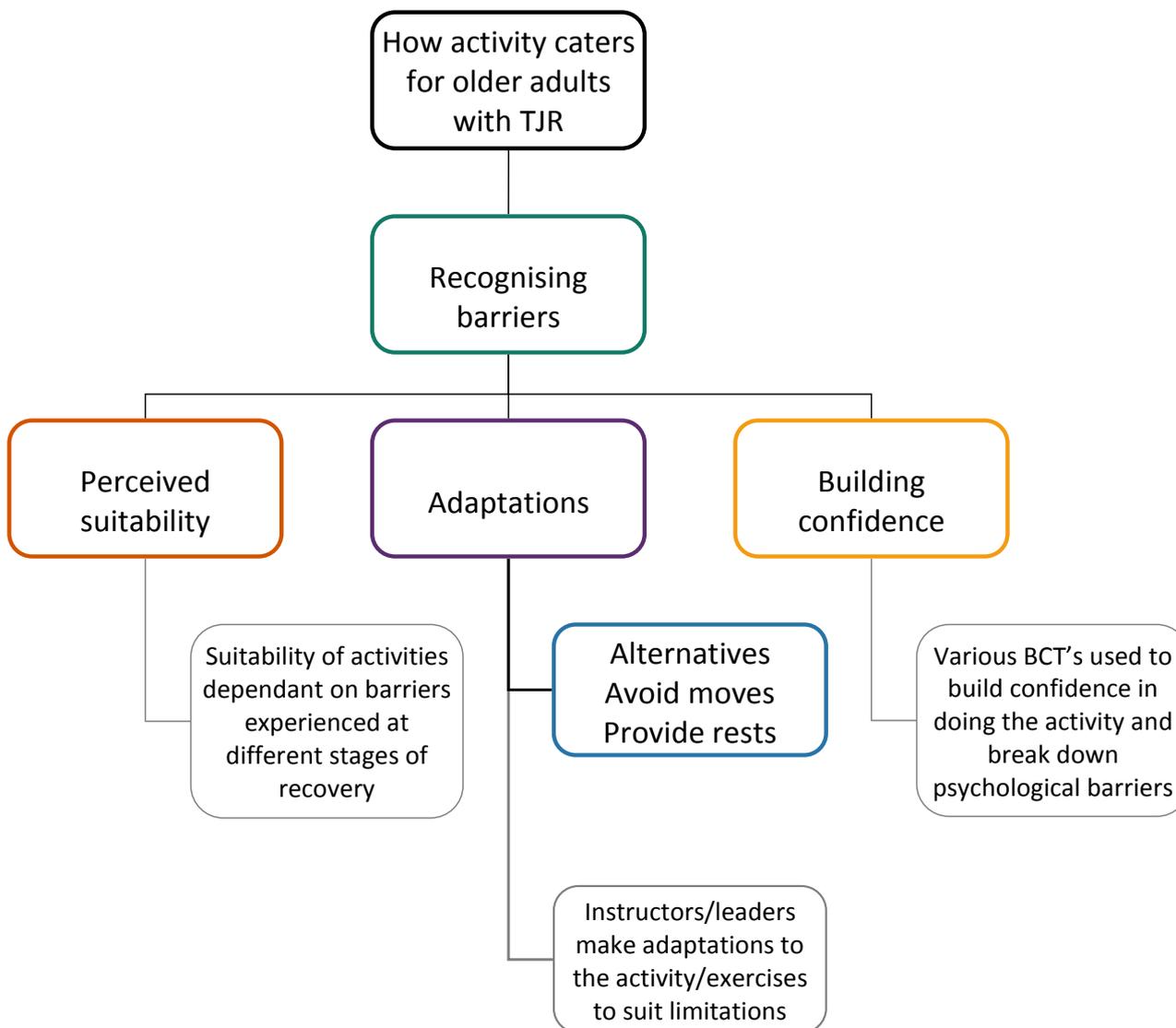


Figure 2 Ways that activities and instructors/leaders cater for the needs of older adults with a TJR

### Are existing community-based activities suitable?

Yes. In general, strength and balance activities, or chair-based activities should be suitable after individuals have been signed off by the physio/GP, this is because they are very similar to physiotherapy exercises, are low-intensity and can be easily adapted if necessary. Walking or cycling based activities seem to be more suitable later on through the recovery, at the point that individuals are confident walking or cycling the distances/routes.

## Adapting the activity

All participants discussed various ways in which they provide support and adapt the activity to suit individuals with a joint replacement. Examples of ways to adapt an activity may be providing an alternative exercise or route that is easier or less intense, providing a seated alternative, avoiding certain moves (i.e. kneeling down or going over styles on walks), or providing rests.

## How to help build confidence and help change behaviour

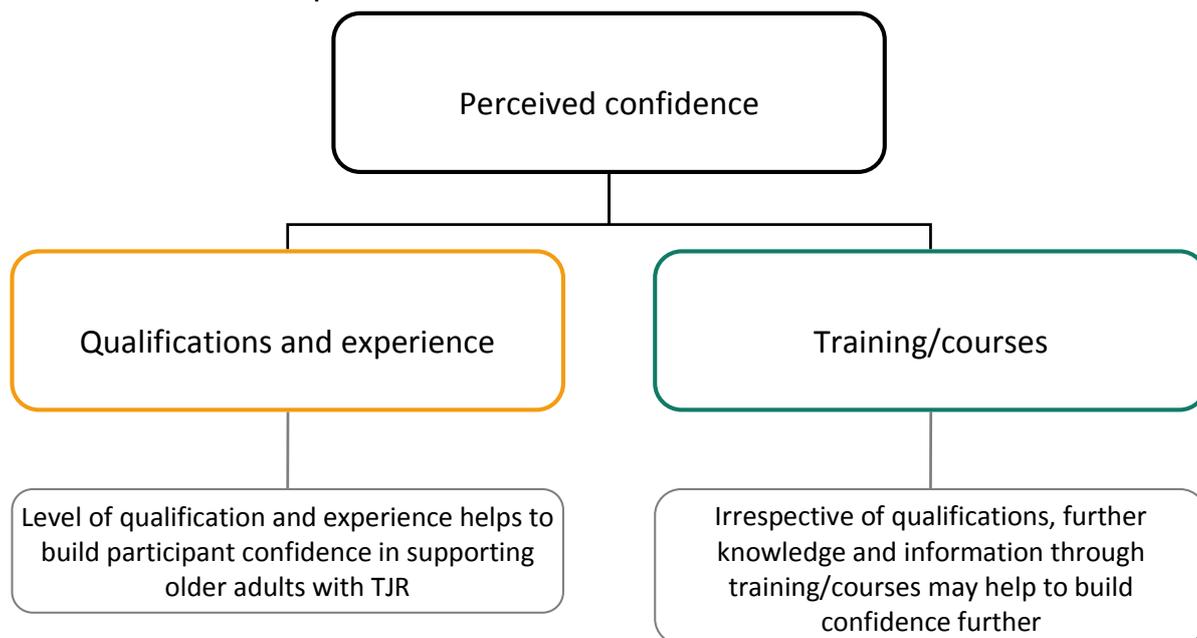
Individuals with a joint replacement often lack confidence in their ability to do the activity, or in knowing what is best for their joint. It is important to provide support to build their confidence in doing the activity and in being active (at a level appropriate for them) - this helps with long-term behaviour change. Below are some examples of ways that participants in this study provide support to individuals with a joint replacement.

Behaviour Change Techniques	Descriptions
<b>Goal-setting</b>	Help people to set and work towards goals that are meaningful to them i.e. it may be being able to walk a certain distance or be able to stand up from a chair.
<b>Feedback on outcomes of behaviour</b>	Provide feedback to people on improvements they have made.
<b>Monitoring of behaviours</b>	Keep a close eye on those who are cautious of the activity and provide support when necessary.
<b>Instruction on how to perform the behaviour</b>	Provide instructions of how to do certain moves or exercises to help with learning, ensuring you break it down into smaller steps.
<b>Demonstration of behaviour</b>	Demonstrate how you do the exercise/activity to them, so they can see how it should be done. Or let individuals who are unsure, watch the class (if possible) so they can see what it involves.
<b>Behavioural practice</b>	Encourage people to have a go, and practice the exercise or activity, and provide feedback on how they are doing.
<b>Graded tasks</b>	Encourage people to take things a step at a time, and gradually increase the level they are working at. This helps to build strength, increase pain tolerance and also builds confidence in someone's ability to do the activity.
<b>Social support (practical)</b>	Provide practical help and support with the activity – this may be provided by a buddy or a peer.
<b>Verbal persuasion about capability</b>	Use verbal persuasion and reassurance to help build confidence and perceived ability to do the activity.

### **Theme 3: Perceived confidence**

During the interviews, the theme of confidence in supporting an individual who has had a joint replacement to be active emerged, in terms of how best to cater for the barrier's individuals may be experiencing. Whilst exercise qualifications specific to older adults, and experience, helped to build confidence, most participants felt that training or courses provided by health professionals to help raise awareness of the needs of people with joint replacements and what exercises are best, would help to build their confidence.

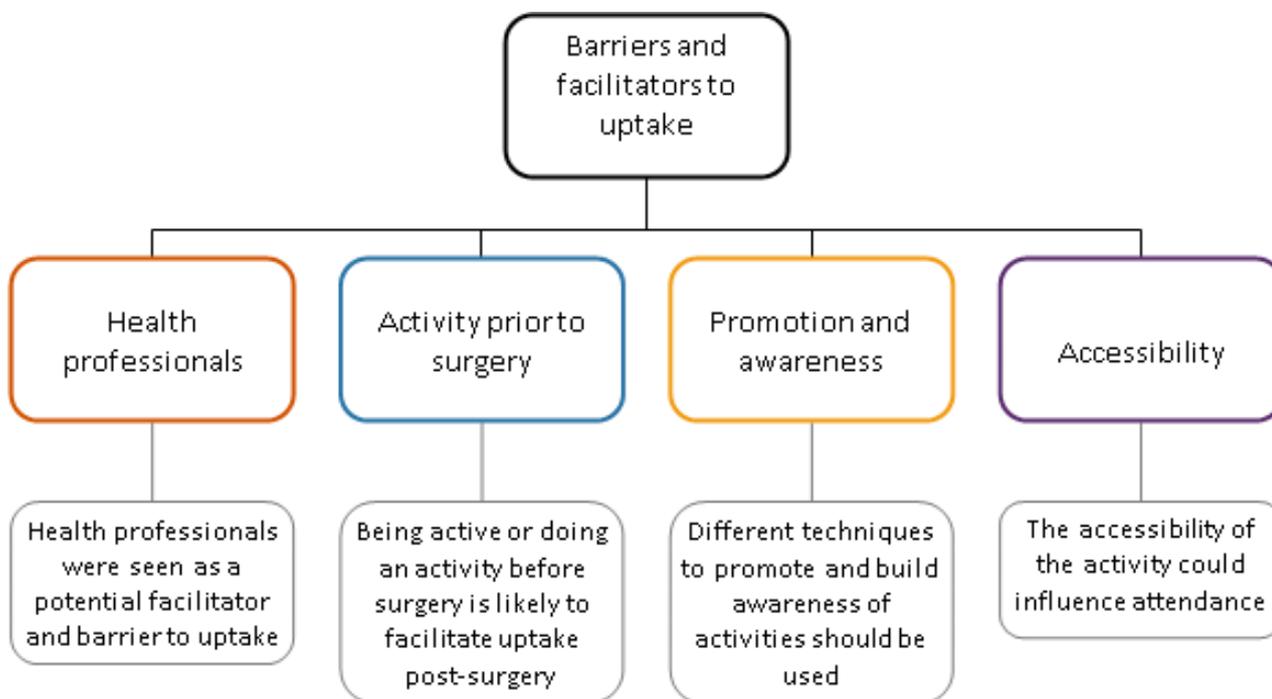
\*TJR = Total Joint Replacement



**Figure 3 Factors related to perceived confidence in supporting older adults with a TJR to be active**

#### **Theme 4: Barriers and facilitators to uptake**

Instructors/leaders spoke of factors potentially hindering or discouraging older adults attending community-based physical activities following joint replacement, and factors that facilitate uptake. Four sub-themes emerged; health professionals, activity prior to surgery, promotion and awareness and accessibility. Results suggest that more work needs to be put into bridging the gap between health professionals and community-based activities.



**Figure 4 Barriers and facilitators to uptake**

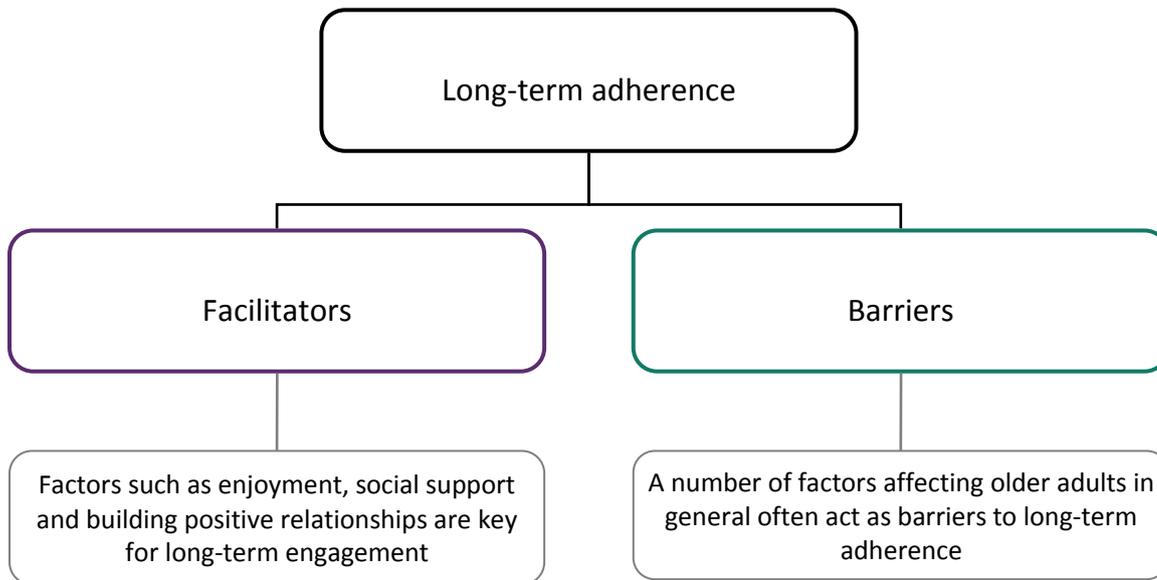
### ***Theme 5: Solutions to initial engagement***

Some examples of solutions to encourage uptake to community-based physical activities following joint replacement were:

- Health professionals should promote community-based activities that are suitable and available immediately following surgery and physio
- Promote the use of social prescribers and/or community navigators to work with individuals following surgery to encourage behaviour change and signpost to community-based activities
- Patients provided vouchers following surgery as an incentive to try new activities
- Have a two-way information sharing event to build relationships between health professionals and individuals delivering community-based activities. Health professionals can provide information and knowledge on physical activity that is beneficial following joint replacement surgery and can find out about activities available within the community to refer or signpost patient to
- Promotion of physical activity following joint replacement via national media channels i.e. TV and newspaper

### **Theme 6: Long term adherence**

The main facilitators to long term adherence that were discussed were enjoyment, social support (i.e. opportunity for tea and coffee, connecting with others with joint replacements, and building friendships), as well as building positive relationships up between the instructor/leader and the people the group. The barriers that were discussed were related to older adults in general (i.e. changes in life circumstances, family commitments and health conditions).



**Figure 5 Factors affecting long-term adherence**

### ***Ideas for future directions and further research***

Previous research highlights the need to develop interventions to promote long-term active lifestyles among older adults with a joint replacement, who often present with multiple medical co-morbidities. The findings of this study however suggest that new interventions may not be needed for this population as existing community-based activities are suitable and can be tailored towards the needs of older adults with a joint replacement.

Considerable efforts and further research should instead be put into identifying effective ways to bridge the gap between health professional and community-based provisions.

The range of activities available, to suit varying interests, levels of co-morbidities and stages of recovery need to be promoted to NHS staff and joint replacement patients to increase uptake. Participants identified that training from health professionals on physical activity after joint replacement would be beneficial to enhance their knowledge and confidence in providing practical and behavioural support to this population. As such, information exchange workshops to bring NHS staff and individuals delivering community-based physical activity programmes together should be an area of further research. Furthermore, as social prescribing was discussed as a potential solution to reduce the strain on NHS services in promoting positive lifestyle behaviours and signposting to community-based physical activity groups, future studies should explore social prescribing as a model to promote physical activity behaviour change following joint replacement.

### ***Conclusion***

The findings of this study suggest that existing community-based physical activities tailored for older adults are suitable following joint replacement.

- Strength and balance-based activities (including chair-based classes) are suitable during the initial stages of rehabilitation, once signed off from the consultant/physio/GP.
- Walking or cycling-based activities provide opportunities for individuals to progress onto during joint recovery, once they are confidence walking or cycling the distance or route.
- Instructors/leader of community-based activities make efforts to tailor their activity and use techniques to support and accommodate for the unique barriers experienced by older adults with a joint replacement, as well as those with other co-morbidities or limitations.
- Findings confirm the positive influence of social-support, and support from instructors on uptake and adherence to physical activity programmes in this population.

- The current study supports the promotion of group-based community physical activity programmes to improve physical and psycho-social outcomes following joint replacement.
- The ideas for future practice and research provided should now be explored to assist in bridging the gap between health professionals and community-based activities and to improve physical activity attitudes and behaviours among older adults with a joint replacement.