

Musculoskeletal Research Facilitation Group (Cat Group)  
Critically appraised topic and clinical bottom line  
Date: April 2016

**Specific Question:** In adult patients immediately post primary total knee replacement (TKR) for osteoarthritis (OA) is group therapy more clinically effective than an individual programme for pain and function?

Clinical bottom line

After TKR, group rehabilitation is not more effective than individual rehabilitation. Individual rehabilitation appears similarly effective if undertaken as a package of 2 initial individual face-to-face treatment sessions followed by telephone support for a home exercise programme or as a package of 12 individual treatment sessions.

Why is this important?

Post TKR rehabilitation is delivered in a variety of ways across Shropshire including individual one-to-one treatment sessions and group sessions. Is there a form that is the most clinically effective?

Inclusion Criteria

Adults following primary TKA for OA, where rehabilitation is delivered in either a group setting or on a one-to-one basis.

Search (2000-2015)

Cochrane systematic reviews

Medline

CINAHL

PEDRo

NHS Evidence

Type of Study

systematic reviews & RCT's

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	Description	Search terms
Population and Setting	male and female adults immediately post primary TKR for OA	
Intervention or Exposure (ie what is being tested)	group therapy / rehabilitation / exercise classes / physiotherapy / physical therapy	
Comparison, if any	individual programme of physiotherapy / physical therapy/ one to one exercise / rehabilitation /physiotherapy / physical therapy	
Outcomes of interest	reduced pain, increased function, patient satisfaction	
Types of studies	systematic reviews & RCT's	

Routine Databases Searched

Clinical Knowledge Summaries, PEDro, BMJ Updates, Clinical Evidence, TRIP, Database, NICE, HTA, Bandolier, The Cochrane Library, Medline, Cinahl, Embase, PsycInfo, Professional websites. Joanna Briggs Institute, Web of science, Sports discuss and Pub med

Date of search  
02/01/2015

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Results

First Author, year and type of study	Population and setting	Intervention or exposure tested	Study results	Assessment of quality and comments
Ko 2013 RCT	Adults following primary TKR for OA	249 patients were randomized into three groups. One-to-one therapy: 12 sessions over 6 weeks of manual therapy, therapeutic modalities (e.g. cryotherapy) and specific exercises. Group therapy: 12 sessions over 6 weeks of a 50 minute circuit of weight bearing functional tasks (e.g. stairs), specific exercises (e.g. step-ups) and aerobic activities (e.g. stationary cycling). Monitored home programme: 2 individual sessions on instruction and progression of a home based exercise programme similar in content to the group therapy programme with telephone follow-ups.	Primary outcome: knee pain & function measured by the Oxford knee score  No significant difference in any outcomes were found between the groups..	Assessed as a high quality study with the use of the CASP RCT tool.

Summary

Of the papers identified from the search only one RCT was highlighted as potentially being able to answer the question (Ko et al 2013).

There is evidence to suggest that group therapy is not clinically more effective than an individual programme at improving pain and function. The individual programme would appear to be equally effective delivered either through 2 initial face-to-face individual sessions with telephone support for a home exercise programme or a 12 session programme of individualised manual therapy, specific exercises and therapeutic modalities.

The implications of this for practice suggest our current practice improves outcomes for pain and function but it does suggest we review the delivery of rehabilitation to ensure cost effectiveness as well as clinical.

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References

Ko V, Naylor J, Harris I, Crosbie J, Yeo A, Mittal R. One-to-one therapy is not superior to group or home-based therapy after total knee arthroplasty. A randomized superiority trial. *The Journal of Bone and Joint Surgery* 2013;95(21):1942-1949

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