

Mobile app to support home exercise adherence in knee osteoarthritis (MappKO)



A Randomised Clinical Trial

182 people with knee osteoarthritis were randomised to receive:

Exercise + App

(n=90)



- Physio prescribed personalised strength home exercise program with progressions
 - Advice to complete exercises 3/week until 26-week follow-up
 - Exercise instruction booklet and resistance bands
- +
- Instructions to download & use 'My Exercise Messages' app

Both groups attended 2x physiotherapy sessions via Zoom

Download the app for free:



Exercise only

(n=92)



- Physio prescribed personalised strength home exercise program with progressions
- Advice to complete exercises 3/week until 26-week follow-up
- Exercise instruction booklet and resistance bands

App features: Goal setting, exercise tracking and targeted behaviour change messages

KEY FINDINGS

Primary outcomes at 26 weeks

Complete adherence
36% (n=31)

Adherence to prescribed exercise
(completed exercises at least 3x/week)

Favoured Exercise + App Group

Complete adherence
16% (n=14)

Improvement from baseline
Mean 14.2 (SD 11.1)
out of 68 points

Physical Function (WOMAC)
(out of 68 points)

No meaningful between group differences

Improvement from baseline
Mean 12.8 (SD 9.9)
out of 68 points

CONCLUSION

Using the 'My Exercise Messages' app to support home exercise increased the likelihood of being completely adherent to prescribed exercise frequency but this did not translate to improvements in physical function, compared to exercising without the app.