Physical Activity Maintenance and Digital Health Interventions in People with Rheumatoid Arthritis: A Qualitative Study

Rachel Simmons, Heidi Lempp, James Galloway, Helen Oldrieve, and Lindsay Bearne

Kings College London
Background

• Physical Activity (PA) improves health and function in people with RA

• PA maintenance is difficult

• Health professionals support PA

Ezzat et al 2015, Brodin et al 2015

• Limited resources and increasing demand
Digital Health Interventions (DHI)

‘Any health intervention delivered through digital media’

Combined decision and/or emotional support with health information
Aims

Explore

• Perceptions of the factors that influence PA maintenance
• Views on the use of DHIs to support PA maintenance
Methods

- Interviews with patients from 2 inner city NHS hospitals
- Focus group with Health Care Practitioners (HCPs)

Patients
- Adults aged ≥18 years with established RA

HCP’s
- HCPs working at an inner-city NHS Trust, with more than 3 months of clinical experience managing people with RA
Interviews and the Focus Groups were:

- Audio-recorded
- Transcribed verbatim and data anonymised
- Analysed using thematic analysis (Nvivo 10)
- Themes generated by CONSENSUS: with a second researcher
- RESONANCE corroborated with sample of participants
Results: Patient Interviews

17 patient participants were recruited

- 10 females: 7 males
- Mean age 57.5 years [standard deviation 17.8 years]
Five Themes

Balancing the benefits of PA with the costs

Interaction of person, disease, and DHI.

Gaining knowledge about safe and effective PA

The Environment matters

Disease control

PHYSICAL ACTIVITY MAINTENANCE
Balancing the Benefits with the Costs.

Aware of the Benefits

The gym helps me to relax and keep my limbs moving.
(Barrington, 71)

Fearful of consequences of PA

I slightly worry about my hips. Whether I’d be pushing them too far, and doing them some damage.
(Linda, 53)
I’m always wary of the internet as the quality isn’t licensed you don’t know what’s good and what’s not, so I’m always a bit reticent (Jim, 77)

Reassurance from the physio has driven me to do more....

to go and exercise without worrying (Jennifer, 55)
My RA flared like mad.... I couldn’t even get up the stairs (Aleesha, 38)
I started off thinking I could use the equipment, and then found I couldn’t so I didn’t like it anymore (Mohammed, 47)
Interaction of Person, Disease, and DHI.

I have a laptop, but I hate computers. I only use them because I have to for work....I like low tech solutions.... the pedometer appeals (Sue, 52)

Ah that’s brilliant [SMARTWATCH] ...if it measures my stair climbing as well that would be brilliant (Barbara, 73)
Results: HCP Focus Group

- A 60 minute focus group was conducted with
  - 2 physiotherapists,
  - 2 Rheumatology Drs (1 consultant, 1 registrar),
  - 1 podiatrist
- Mean (SD)) duration of clinical experience was (9 (6)) years
## Two themes

| Inactivity Demands a Proactive Response | Digital Health Interventions Offer Potential, but ‘There’s No Panacea’ |
Theme 1: Inactivity Demands a Proactive HCP Response

We should refer all our patients to physiotherapy irrespective of whether they have a specific problem - it is part of the national standard. (Doctor, registrar)
Theme 2: Digital Health Interventions Offer Potential, but ‘There’s No Panacea’

I think it’s a fantastic opportunity to engage. People engage with their phone in a different way through Facebook, Twitter or WhatsApp, it’s a potential tool to get into patients’ lives. (Physio 2)

Digital technologies show potential, but I don’t think we can really find a consensus of one size fits all? (Physio 1)
Conclusions

- PA maintenance is challenging and influenced by a number of factors – Education, symptoms, and the environment
- DHI were largely welcomed by patient and HCP participants
- Multimodal interventions incorporating DHI should be explored and, if effective, integrated into physiotherapy practice to increase PA in people with RA.
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Contact
Rachel.simmons@gstt.nhs.uk
Rachel.Simmons1@kcl.ac.uk
Lindsay.Bearne@kcl.ac.uk


