

# Inflammatory Arthritis Patient Perspectives on Strategies to Support Medication Adherence

## A Qualitative Study Using a Novel Group Exercise



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## BACKGROUND

- Disappointing and inconsistent findings of adherence intervention research in inflammatory arthritis (IA) highlight the need for further work in designing interventions that promote and support treatment adherence.
- Patient-centered approaches to developing medication adherence interventions have shown promise in other chronic diseases, and may be particularly relevant in IA where they have scarcely been applied.
- We aimed to explore IA patients' perspectives on strategies to support medication adherence.**

## METHODS

### Eligibility Criteria

- Individuals were eligible for the study if they:
  - Had a rheumatologist-confirmed diagnosis of IA
  - Were taking a DMARD(s)
  - Could communicate in English

### Study Design

- Qualitative study involving focus groups with novel group exercise**
- An experienced facilitator led participants through a group exercise where participants were asked to design a hypothetical tool(s)/aid(s) supporting medication use.
- Participants developed their tools individually using provided activity sheets and coloured cards corresponding to features of their tools, including:
  - What (is your tool?)
  - How (does your tool work?)
  - Who (is there anybody who uses your tool with you?)
- Participants were then invited to share their tools with the group, and the facilitator used open-ended questions to promote discussion.

### Qualitative Analysis

- We applied an iterative, thematic approach informed by aspects of grounded theory and using the constant comparison method.
- Three study team members independently read and annotated the transcripts, and after discussion agreed on an initial coding framework.
- Categories emerging from the focus groups were identified and collected under major thematic headings.

## RESULTS

- Six focus groups were held with 4-6 participants each.
- Qualitative analyses resulted in the identification of three predominant emerging themes (**Table 1**):
  - Educational resources**: Encompassing communication with a healthcare provider (e.g., rheumatologist, pharmacist), patient group classes, pamphlets and written resources, eHealth/mHealth, and learning about medication side-effects.
  - Lifestyle modifications and adaptations**: Comprised of physical reminders/prompts for medication use (e.g., blister packs, pill boxes), electronic alerts/reminders (e.g., smartphone apps), establishing a routine (e.g., taking medication with breakfast), and managing multiple medications.
  - The journey of medication use**: Encompassing the sequential process of patients learning about and gaining confidence in prescribed medications, and the subsequent integration of these medications into their daily life.

Table 1. Illustrative Quotations Corresponding to Major Themes

Categories	Illustrative Quotations
<b>Theme 1: Educational Resources</b>	
<b>Role of Education</b>	"I just think that the patient education part is lacking in the beginning when I found out and that probably would have helped me, like, okay I have to take my medication." (Female, 40's, ankylosing spondylitis)  "So that I understand that basically what it's going to do to my body. Is it going to work? And just basically educating myself from that drug and understanding how it's going to work in my body." (Male, 40's, psoriatic arthritis)
<b>Group Education</b>	"One of the education classes I attended here was about Biologic medication. And what I learned in there as far as avoiding alcohol, certain foods and I just got some tips in attending those classes as far as things to avoid and not to do." (Male, 40's, psoriatic arthritis)
<b>Role of the Healthcare Professional</b>	"Well I use my rheumatologist and then we go through pros and cons." (Female, 60's, Wegener's granulomatosis)  "So your pharmacist would be a huge person who unfortunately we forget especially with the big stores. We're in person with them." (Female, 50's, rheumatoid arthritis)
<b>Pamphlets/ Written Resources</b>	I find it helpful to have handouts, like to have a hard copy of something and not just in their head information because my head gets overloaded. (Female, 60's, rheumatoid arthritis)

Table 1 (continued). Illustrative Quotations Corresponding to Major Themes

Categories	Illustrative Quotations
<b>Theme 2: Lifestyle Modifications and Adaptations</b>	
<b>eHealth/ mHealth</b>	"So I said there should be an app that, you know, you're always being connected (...) whether it's a cell phone or whatever else, bingo, time to take your medication or that kind of thing." (Female, 50's, rheumatoid arthritis)  "There are a couple [apps] out there and all they really do is remind you or they remind the person that you assign if you don't take your medication. But for me sometimes I push it back earlier or later. So I like the reminder of, hey take your medication, and then actually ask, oh did you take your medication or did you take it the next day?" (Male, 30's, psoriatic arthritis)
<b>Physical Reminders/ Prompts</b>	"Blister packs work good." (Male, 50's, psoriatic arthritis)  "I would take that [medication] with my toothbrush. My pills would be beside my coffee cup in another container and I would know that it would happen." (Female, 50's, rheumatoid arthritis)
<b>Establishing a Routine</b>	"It's just take with meals." (Female, 70's, rheumatoid arthritis)
<b>Managing Multiple Medications</b>	"And I find that [bubble pack] for me is the best way otherwise I've got all these bottles of pills and it's, like, did I take this or didn't I take this?" (Female, 60's, Wegener's granulomatosis)  "I take three different medications on three different schedules and fortunately my memory is still good enough that I don't have trouble with that." (Male, 50's, rheumatoid arthritis)
<b>Theme 3: Journey of Medication Use</b>	
	"Once I know the med, once I'm confident in the med, it's working, then I phase it into my lifestyle." (Male, 60's, psoriatic arthritis)  "But once you establish that this [the medication] is going to be good for you then I think the hard thing is just to be compliant whether you will remember to take it, in what order and when and all that kind of stuff." (Female, 70's, rheumatoid arthritis)

## CONCLUSIONS

- To our knowledge, this is the first study to use a novel group exercise to explore patients' perspectives on strategies to support medication use in IA.
- Both educational resources and lifestyle modifications/adaptations were paramount to medication use among IA patients.
- These findings have important implications for the development of patient-centered medications adherence interventions.**