

# PERCEIVED BARRIERS AND FACILITATORS OF VACCINATION ACCEPTANCE AMONG RHEUMATOID ARTHRITIS

## PATIENTS FROM THE PERSPECTIVE OF PHYSICIAN AND NURSE PROVIDERS

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### INTRODUCTION

- National guidelines emphasize the importance of immunization for rheumatoid arthritis (RA) patients.<sup>1</sup>
- Vaccination rates remain suboptimal in this population, with rates for influenza coverage averaging 25 - 59%.<sup>2</sup>
- Previous research suggests that concerns about adverse effects, and lack of information provided by the primary-care physician and rheumatologist were associated with lower vaccine coverage rates.<sup>3</sup>

### AIM

- To explore health care providers (HCPs) perspectives regarding barriers and facilitators of vaccine acceptance among RA patients, which will be targeted in a motivational communication intervention to increase vaccine uptake.

### METHODS

- We conducted 3 focus group (FG) interviews with English-speaking rheumatologists (Rh), general practitioners (GP), and nurses (Ns) affiliated with an academic center.

Table 1. Demographic characteristics

Group (participants)	Sex (M/F)	Age (years ± SD)
Rh (n=7)	2/5	46±5.7
GP (n=6)	2/4	54±11.4
Ns (n=5)	0/5	50±9.9

- FG interviews were moderated by two trained clinical research assistants, who ensured the groups addressed the 2 key topic areas of interest: barriers and facilitators of vaccination acceptance.
- The interviews consisted of the following questions:
  - Do you think there are any **preconceived ideas about vaccines** or barriers to get vaccinated among patients with RA? What are they?
  - In your experience what makes patients with arthritis decide not to get vaccinated?
  - What do you consider are the **main factors determining your RA patients' willingness** to get the flu/pneumonia vaccines?

- All FG interviews were transcribed and uploaded into MAXQDA 12 and thematic analysis was independently conducted by two members of the research team.

### RESULTS

Table 2. Identified barriers for vaccine uptake in RA patients

Categories	Themes	HCPs' quotes
Patient-related factors	Knowledge & beliefs	<i>Sometimes I have patients who say "I never get sick, I don't need the vaccine". You don't get sick until you get sick. – Rh</i>
	Side effects	<i>Patients with rheumatoid arthritis may also... the same questions may also occur to them. Would this vaccine be effective? Will it harm me in some way, or make me more vulnerable to infection? They all have those questions. – GP</i>
	Social media	<i>I have to say the social medias...you have all of those anti... and just promoting all these misconceptions about vaccines. And I think if they're not big into social media, it's out there, it's in the community. And then you have the people famous who are promoting anti-vaccines too. They're like people that are against vaccines. There's a big movement now against vaccines. – Ns</i>
HCP-related factors	Lack of time	<i>Now we are asked to screen our patients for depression and to ensure proper vaccination. I think that I just don't have enough time to deal with my patients' rheumatological problems. – Rh</i>
Healthcare system-related factors	Poor provider communication/ access to information	<i>Another barrier I find to the discussion, is... it's not always clear what medications the patients are on, if they are on immunomodulators... it's not always clear what my role is versus the role of the rheumatologist in terms of discussing the pros and cons of... maybe not these vaccines, but other vaccines. Yeah, just there's poor communication between the different caregivers. – GP ...[rheumatologists] they're not knowledgeable enough [on how to persuade the patient]... – Ns</i>
	Accessibility	<i>Unfortunately, in our system, most of my patients don't have primary care physicians and so, that's a huge barrier ... for appropriate vaccination in our patients. – Rh</i>

Table 3. Identified facilitators for vaccine uptake in RA patients

Categories	Themes	HCPs' quotes
Patient-related	Knowledge & beliefs	<i>In hospitals, in clinics, RA clinics, even private clinics, there should be literature. A.... And you have something about the importance of vaccination in the disease that you have, ....And it's opening up discussion if anything else, and they can talk with their rheumatologist "Hey what about this, should I get vaccinated? I didn't last year, should I?" – Ns</i>
HCP-related factors	Taking time to educate patients	<i>That's why you would be telling them, "you're not just doing it for yourself, you're doing it to protect your baby" ... I personalize it, I say that's why I get the flu vaccine, I don't want to bring the flu home to my kids and to my family. I think sometimes personalizing it makes it more real. – Rh</i>
	Perceived responsibility	<i>Absolutely relevant [to discuss influenza and pneumonia vaccines with RA patients] because we're there to treat them and optimize their health. And one of the ways about optimizing their health is really promoting the flu vaccine and the pneumococcal vaccine. – Ns</i>
	Team work	<i>Even if the physician is good, it doesn't work. A team has to follow chronic disease...rheumatoid, or any other chronic disease management. – GP</i>
Healthcare system-related factors	Cost	<i>And if it's free. That really helps. And access I think is a big deal too. If you can tell them, "you can have it here we have a nurse who does it here" "Ah might as well" you know but if you have to go to the CLSC, you have to make an appointment, so it makes things more complicated. – Rh</i>
	Accessibility	<i>They get it right away when, you know, you see the patient, the vaccine is there, go... they're pushed to do it, because otherwise they don't have an excuse. Well, they don't have to come back... in a way, you're sort of pushing them towards it, if you have access to a nurse who will vaccinate. – GP</i>

### CONCLUSIONS

Barriers for influenza/pneumococcal vaccine uptake among RA patients identified by HCPs included:

- Patient preconceived ideas, concerns about side effects, and negative social media influences,
- Not having a family doctor or nurse clinician, lack of time spent with HCPs, and poor inter-provider communication.

Facilitators for influenza/pneumococcal vaccine uptake among RA patients identified by HCPs included:

- Education of patients and HCPs on infection risk and impact of vaccines in infection-prevention,
- Recognizing the social responsibility of appropriate vaccination,
- Facilitating access to vaccines and to a team based integrated care.

### IMPLICATIONS

- Enhancing patients' and providers' knowledge on the importance of vaccines for RA prevention, clarifying roles, and promoting effective provider-patient communication, may help increase vaccine uptake among RA patients.
- Results will be used to inform the development of a low-cost, evidence-based intervention (motivational communication) delivered by health care professionals that aims to improve vaccine uptake among RA patients.

### REFERENCES

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