

Addressing influenza vaccine hesitancy in Ontario community pharmacies:

Identifying targets for actions using behaviour change framework

Gokul Raj Pullagura

PhD Candidate, Pharmacy



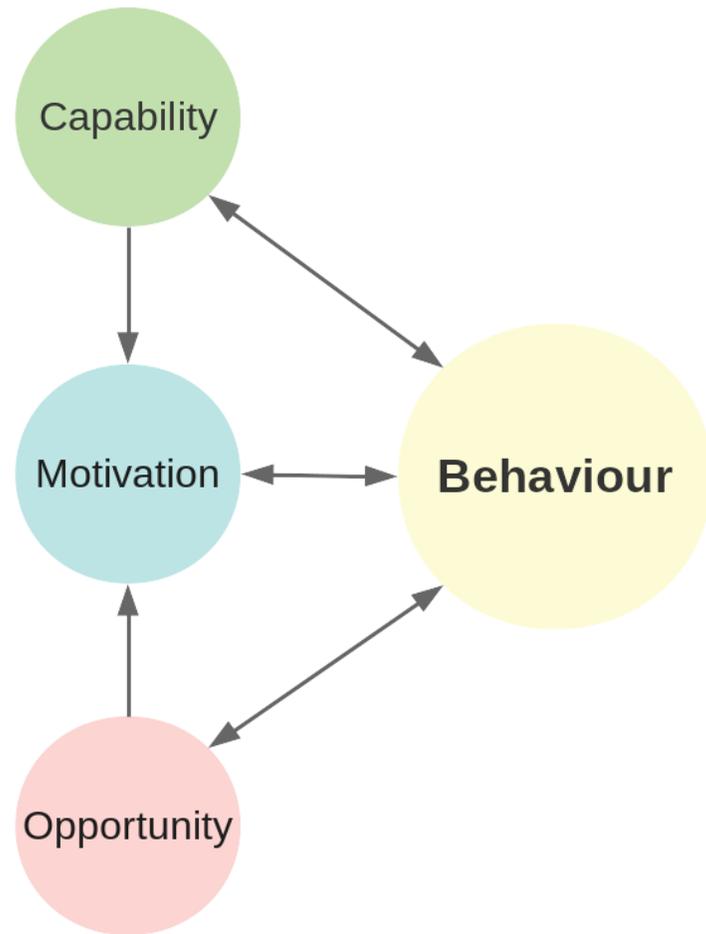
Disclosure statement

I have no affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization.

Objectives

- Introduction: Behavioural model and framework (COM-B & TDF)
- Understanding influenza vaccine hesitancy (IVH) at the community pharmacy: Results from a mixed-methods study
- Behavioural target identification and characterization
- Behavioural target analysis using COM-B and theoretical domains framework
- Discussion and future directions

Introduction – Behavioural model (COM-B) and Theoretical Domains Framework (TDF)



COM-B component		TDF Domain
Capability	Psychological	Knowledge
		Skills
		Memory, Attention and Decision Processes
		Behavioural Regulation
Opportunity	Physical	Skills
	Social	Social Influences
Motivation	Physical	Environmental Context and Resources
	Reflective	Social/Professional Role & Identity
		Beliefs about Capabilities
		Optimism
		Beliefs about Consequences
		Intentions
Goals		
Automatic	Automatic	Social/Professional Role & Identity
		Optimism
		Reinforcement
		Emotion

Mixed methods study – Understanding IVH in Ontario community pharmacies

Part 1: Cross-sectional online survey of Ontario community pharmacists (885 responses; 16% response rate)

- Objective: To explore seasonal influenza vaccine hesitancy (IVH) at the community pharmacy from the practicing pharmacists' perspective.
- Survey tool – 38 questions exploring 5 domains such as pharmacists' knowledge, attitudes, behaviour, experiences surrounding IVH at the community pharmacy.

Part 2: Semi-structured interviews with Ontario community pharmacists (22 participants)

- Objective: To gain an in-depth insight into pharmacists' attitudes and perspectives towards IVH and their behavior with those hesitant to receive the influenza vaccine.
- Qualitative thematic analysis was conducted, identifying 4 themes and 13 subthemes.

Mixed methods study – Key findings

- IVH is a **common occurrence** in Ontario community pharmacies, with pharmacists reporting interactions with an average of 16 individuals hesitant to receive the influenza vaccine per week.
- Pharmacists' self-rated **knowledge, confidence** and perceived **ability** to identify and address patron concerns on influenza, its vaccine and related issues was **high**.
- Initiating patient conversations on influenza immunizations is challenged by **operational barriers** such as time, current remuneration and staffing.

“I think just keeping up with injecting the people who want to be injected is a big challenge...” D0-99

“For a pharmacist to find the time to do something....they need to feel like they are being remunerated properly for it and to me that has not happened.” WF-157

Mixed methods study – Key findings

- Pharmacists' interaction with individuals hesitant to receive the influenza vaccine is primarily **passive** in nature and initiated by the patient.

“We are not being advocates, we are just responding to questions...” AH-155

“It often comes up in conversation about something else.” IL-198

Mixed methods study – Key findings

- Pharmacists perceive vaccination decisions as **binary outcomes** as opposed to movement across a continuum.

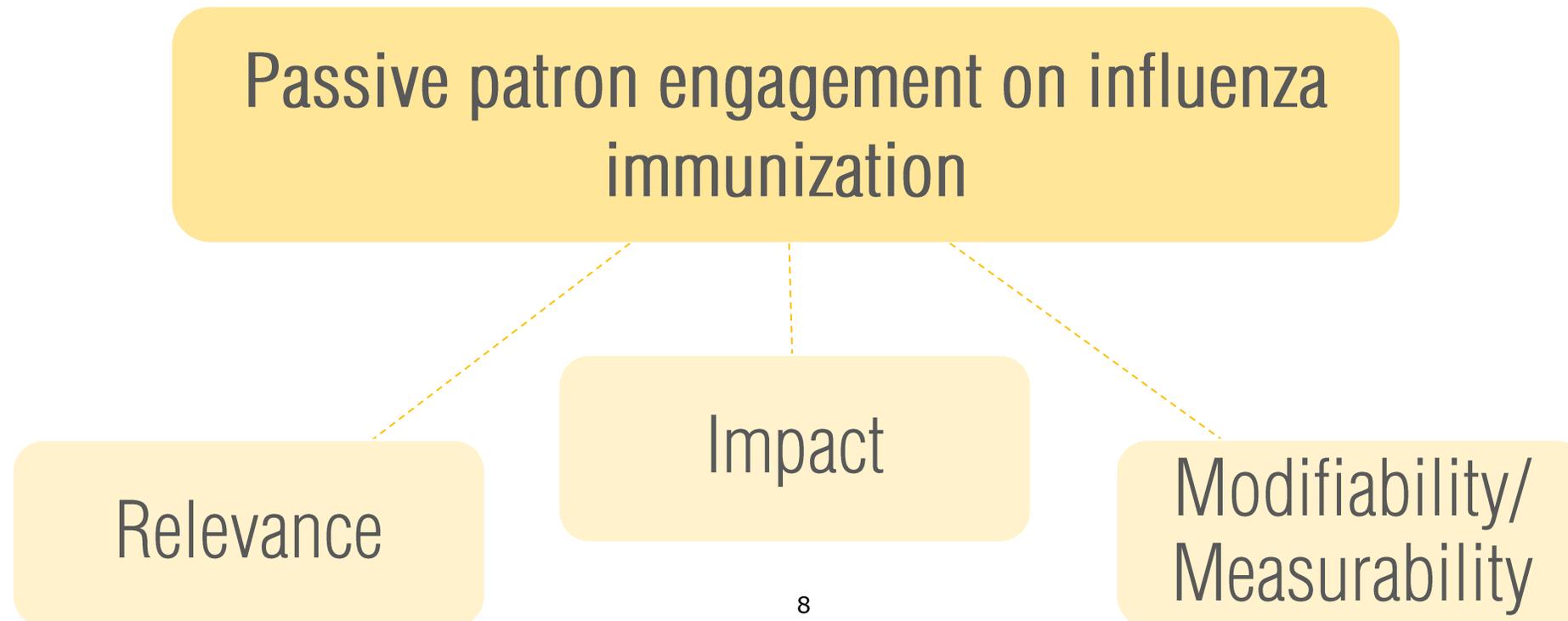
“...So people either are going to get it or not is my impression.” CL-200

“I just have this recollection of people being adamant that they are not getting the vaccine and nothing I could do could change their mind and they make me sad, this is what it did, it made me sad.” HS-350

- Such binary perception of individuals as being either pro vaccine (needing a few questions addressed) or anti-vaccine (where no amount of discussion would yield a favorable outcome) limits patient interactions on influenza vaccination.

Behavioural target – Identification & characterization

Active patient engagement by community pharmacists through initiation of interactions on influenza immunization during the flu season.



Behavioural target – Promoting pharmacist initiated patient interactions on influenza immunization

Barriers to address	TDF domain (COM-B component)	Behaviour change technique
Pharmacists perception of vaccination decisions as binary outcomes.	Beliefs about consequences & Beliefs about capabilities (Motivation - Reflective)	<u>Technique</u> : Persuasive communication. <u>Content theme</u> : Perceiving vaccination decisions across a spectrum, where intended outcome is movement of a vaccine hesitant individual along the spectrum.
Lack of remuneration for patient engagement on vaccination / poor remuneration for vaccine administration.	Reinforcement (Motivation - Automatic)	<u>Technique</u> : Material incentive. <u>Description</u> : Provision of incentive (professional/fiscal) for documented engagement with vaccine hesitant individuals.
Operational barriers to patient engagement on vaccinations such as time and staffing.	Environmental context & resources (Opportunity - Physical)	<u>Technique</u> : Physical restructuring, workflow optimization, behavioural modeling.

Behavioural target – Promoting pharmacist initiated patient interactions on influenza immunization

Enablers to leverage	TDF domain (COM-B component)	Behaviour change technique
Pharmacists' self-identified role as vaccination advocates within the community.	Social/Professional role & identity (Motivation - Reflective)	<u>Technique</u> : Identification of self as role model, persuasive communication, valued self-identity. <u>Content theme</u> : Self-affirmation as a form of positive reinforcement.

Discussion and future directions

- Conventional approaches to address IVH most often target the capability component by improving knowledge or skills of the provider and / or the patient. However, our analysis suggests that reorienting efforts to target the motivation and opportunity components may be of increased benefit in the community pharmacy context.
- Pharmacists' binary perception of vaccination decisions prevents optimal engagement with individuals hesitant to receive the influenza vaccine.
- Enhancing pharmacist initiated patient interaction on influenza immunizations has the potential to address some of the challenges related to IVH at the community pharmacy.
- Addressing influenza vaccine hesitancy at the community pharmacy will likely benefit from interventions targeting the non-conventional and non-linear behavioural components of motivation and opportunity.

Acknowledgement

- Dr. Nancy Waite
- Mr. Richard Violette
- Dr. Sherilyn Houle



UNIVERSITY OF WATERLOO
FACULTY OF SCIENCE
School of Pharmacy

UNIVERSITY OF
WATERLOO



gokul.pullagura@uwaterloo.ca