# Drug-Drug Interactions: Perceptions of Ambulatory Clinic Patients

## David Poon, B.Sc., PharmD, Louise Lau, B.Sc., B.Sc.(Pharm), ACPR, Harkaryn Bagri, B.Sc., B.Sc.(Pharm), ACPR, Michael Legal, B.Sc.(Pharm), PharmD, ACPR, FCSHP, Karen Dahri, B.Sc., B.Sc.(Pharm), PharmD, ACPR, FCSHP

#### Background

- This research project is a continuation of prior research:
- Alert fatigue contributes to under detection of DDIs<sup>1</sup>.
- Poor agreement between pharmacists on severity of  $DDIs^{2}$ .
- DDIs, although often preventable, can lead to adverse drug reactions resulting in patient harm.
- Healthcare professionals (HCPs) play a significant role in providing medication counselling to patients.
- Prior to this study, there is a lack of research exploring patients understanding of DDIs and how DDIs can impact their health.

#### **Objectives**

- Identify patients' perception of drug interactions.
- Determine factors that are important to patients understanding of medications.

#### Methods

- Design: Qualitative study of key informant interviews that were completed over the phone.
- Recruitment: The patient population included individuals recruited from the renal transplant clinic at SPH, heart function clinic at VGH, and through professional interactions. Written informed consent was provided by the participants, prior to the interview.
- Qualitative Analysis: Audio recordings were transcribed into text and subsequently organized into themes using NVivo.

Demographics (n = 7)			
lean (±SD)			
Clinic	VGH: 2 SPH:		H: 4
linge (years)	63 (±12)		
Gender	5 males		
Education	Post-secondary		
	5		
ledical Conditions	3 (±2)		
Jumber of Medications	9 (±1)		
Age (years) Gender Education Medical Conditions	5 males Post-secon	63 (: s idary 3 (:	±1 ±2





Other: 1 2 females Trades

### Results

#### Questionnaire

Patient Reported Understanding of Medications (Mean ±SD) Likert scale: 0 = very low to 5 = very goodPatient Reported Definition of a DDI

> *"I would define a drug interaction as* when the effects of one drug interferes with the effects of another drug."

#### Patients Have an Incomplete Unde Equate Them to Dru

#### **COMMON T**

Most patients were unable Patients are unclear if they exp Patients are concerned about GI and CNS caused by minor and m

#### Patients Rely on HCPs to Ide COMMON T

HCPs should inform patients about DDIs a Shared responsibility between physicians a Pharmacists have the pharmacological Physicians should be responsible for the

> "[HCPs should] let the of the drug-drug inter taking the drugs and f to one or both m

#### Patients Do Not Seek Informati

#### **COMMON T**

Patients want to know medication side DDI information were important counselli Patients do not identify barriers preventing informatior

Reliance on using the internet to find supp

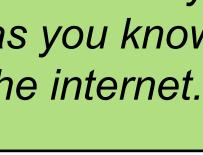
"...there's information readily available as long as you know where to look on the internet."





	Discussion
	Patients believe
	however our rese
4 (±1)	<ul> <li>Patients have medication ve</li> </ul>
Correct: 2 Incorrect: 5	Limited unders on medication
"[A] drug interaction could possibly [be] fatal	<ul> <li>Rely on physic DDIs.</li> </ul>
or harmful to patients."	In terms of medic
arotonding of DDIs and Often	Patients care a
<u>erstanding of DDIs and Often</u> ug Side Effects	Understand t
HEMES	No barriers acce
le to define a DDI (5) perienced a DDI or not (4) S side effects, which they believe are noderate DDIs (7)	<ul> <li>Patients comfore rather than specified on the spectrum of the spe</li></ul>
entify and Manage DDIs	HCPs and pa
HEMES	Future research
and how they plan to resolve them (3)	interventions car
and pharmacists to manage DDIs (6) cal knowledge to detect DDIs (4)	Limitations
e medications being prescribed (3) e patient be aware	<ul> <li>Conclusions from other patient pop inpatients.</li> </ul>
eraction, if to stop find an alternative nedications."	<ul> <li>Potential selection</li> <li>large circle of car</li> </ul>
	<ul> <li>Subjective analysis</li> </ul>
ion Relating to DDIs	
HEMES	Conclusion
effects when being counselled (5) ing points for only some patients (2) ng them from accessing medication	<ul> <li>Patients have a g medications, how implications from</li> </ul>
on (6)	Doforopoo
plemental medication information (4)	References 1. Bagri, H., Legal, N and decisions aro

M., Dahri, K. Hospital pharmacists perceptions and decisions around drug-drug interactions. 2018. 2. Lau, L., Bagri, H., Legal, M., Dahri, K. Characterization and evaluation of clinical importance of drug interaction identified by hospital pharmacists and computer systems. 2019.





they fully understand their own medications, search study suggests:

difficulty distinguishing a side effect from a ersus a DDI.

rstanding of the risk of DDIs, negative effect ns and health.

icians and pharmacists to identify and resolve

#### ication counselling:

and want to know about side effects.

that side effects can affect their wellbeing.

- essing medication information:
- fortable using the internet to find information, eaking with HCPs.
- red in our study, but it does suggest that there nowledge gap not being addressed between patients.

may explore how different educational an improve patients understanding of DDIs.

m this study may not be representative of pulations, such as non-ambulatory and

ion bias because participants recruited have a are consisting of numerous different HCPs. ysis of qualitative study.

good understanding of side effects from wever, have limited knowledge of the ו DDIs.