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Assessment of geriatric pharmacology information design: a survey

Submission date
27/06/2019

Recruitment status
No longer recruiting

Registration date
08/07/2019

Overall study status
Completed

Last Edited
03/09/2021

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Multiple diseases, medications and age-related changes put older adults at increased risk of harm from drugs. The majority of drug-related hospital visits are due to errors in prescribing and monitoring. Currently available text-based drug information resources can be lengthy for time-pressed clinicians and may not provide sufficient specific information regarding older adults. The researchers have developed concise, evidence-based, geriatric drug information resources (GPIDs) that use graphic design to facilitate learning. The aim of this study is to assess the efficiency and effectiveness of GPIDs. This is achieved by measuring the amount of time it will require prescribing clinicians to answer 5 case-based questions regarding prescribing for complex older adults using either GPIDs or usual drug information resources. Other aims include measuring knowledge retention using a knowledge-retention test, and assessing user-friendliness and overall reading experience of the GPIDs. The researchers will also investigate how various learning styles may impact the effectiveness and efficiency of the GPIDs.

Who can participate?
Prescribing clinicians (physicians, pharmacists, nurse practitioners) of any age currently practicing in Canada

What does the study involve?
The study involves randomly allocating prescribing clinicians (physicians, pharmacists and nurse practitioners) to one of two groups and instructing both to solve 5 identical case-based questions: one group is instructed to use only GPIDs and the other group is instructed to use their usual drug information resources. After this intervention, the researchers examine the required time for each group to answer the 5 questions. Next, both groups complete a series of questionnaires and tests in the following order: demographic questions, Health Professionals Inventory of Learning Styles (HPILS), knowledge retention test, open-ended questions about the GPIDs and finally questions about perceived user-friendliness and overall reading experience.

What are the possible benefits and risks of participating?
There are no risks or direct benefits related to participation in the study.

Where is the study run from?
The study is being run by the principle investigators based out of McMaster University and GeriMedRisk (Waterloo, Ontario) and takes place on the Surveymonkey platform.

When is the study starting and how long is it expected to run for?
October 2017 to July 2019

Who is funding the study?
Peer-reviewed grant from the Centre for Aging and Brain Health Innovation (CABHI)

Who is the main contact?
1. Dr Joanne Ho
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2. Dr Jennifer Tung
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Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number
Nil known

IRAS number

ClinicalTrials.gov number
Nil known

Secondary identifying numbers
Nil known

Study information

Scientific Title
Assessment of geriatric pharmacology information design: a randomized control trial

Study objectives
It is hypothesized that using geriatric pharmacology information design materials (GPIDs) will facilitate learning about prescribing medications to older adults. It is hypothesized that prescribing clinicians will find GPIDs to be a more user-friendly, efficient and effective format of learning about geriatric pharmacology compared to current, text-based formats.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 25/06/2018, Hamilton Integrated Research Ethics Board (HiREB) (293 Wellington Street North, Suite 102, Hamilton ON, L8L 8E7, Canada; Tel: +1 (0)905 521 2100 ext 70014; Email: erebhelpdesk@hhsc.ca), Project #: 4790

Study design
Multicentre double-blind randomized control trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Internet/virtual

Study type(s)
Other

Participant information sheet
Not available in wed format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied
Prescribing practices for older adults

Interventions
The study involves randomly assigning prescribing clinicians (physicians, pharmacists and nurse practitioners) to one of two treatment groups and instructing both to solve 5 identical case-based questions: one group will be instructed to use only GPIDs and the other group will be instructed to use their usual drug information resources. After this intervention, the researchers will examine the required time for each group to answer the 5 questions. Next, both groups will complete a series of questionnaires and tests in the following order: demographics questions, Health Professionals Inventory of Learning Styles (HPILS), knowledge retention test, open-ended questions about the GPIDs and finally questions about perceived user-friendliness and overall reading experience.

Intervention Type

Other

Primary outcome measure
Time required by prescribing clinicians to complete 5 case-based questions about prescribing to older adults (start defined as time when online survey was accessed, stop defined as time when online survey completion button pressed; as measured by Survey Monkey). Measured at a single timepoint.

Secondary outcome measures
Measured at a single timepoint:
1. Learning styles measured using the Health Professionals' Inventory of Learning Styles (H-PILS)
2. Knowledge retention test scores (defined as the % of correct answers to the case-based short answer questions in part 2 of the survey)
3. User-friendliness of the infographics, assessed using a series of closed-ended questions about their reading experience followed by open-ended feedback questions

Overall study start date
20/10/2017

Completion date
31/07/2019

Eligibility

Key inclusion criteria
Prescribing clinicians

Participant type(s)
Health professional

Age group
Adult

Sex
Both

Target number of participants
100

Total final enrolment
43

Key exclusion criteria
Health professionals involved in the development of the Geriatric Pharmacology Information Design Materials

Date of first enrolment
10/02/2019

Date of final enrolment

31/07/2019

Locations

Countries of recruitment
Canada

Study participating centre
McMaster University
3rd Floor, 10B Victoria Street South
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Sponsor information

Organisation
McMaster University

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Sponsor type
University/education

ROR
https://ror.org/02fa3aq29

Funder(s)

Funder type
Research organisation

Funder Name
Centre for Aging and Brain Health Innovation

Results and Publications

Publication and dissemination plan
Planned publication in a high-impact peer-reviewed journal by 31/07/2020. The study protocol can be available upon request to investigators whose use of the data has been approved by an approved review committee for a meta-analysis beginning 9 months and ending 36 months following article publication. Proposals should be directed to joanneho@mcmaster.ca. A data sharing agreement will need to be signed.

Intention to publish date
31/07/2020

Individual participant data (IPD) sharing plan
The data sharing plans for the current study are unknown and will be made available at a later date.

IPD sharing plan summary
Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		12/06/2021	03/09/2021	Yes	No