

Department of Pharmacy

INTRINSIC RISK FACTORS FOR FALLS IN OLDER PATIENTS

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INTRODUCTION

Falls are one of the common geriatric syndromes.¹ The need to reduce the number of falls in the geriatric cohort is of critical importance due to fall-related negative effects on functional independence, quality of life, morbidity, mortality and health-related costs.²

Risk factors for falls may be classified as either intrinsic (person-specific) or extrinsic (environmental). Commonly falls may arise as a combination of these risk factors.

AIM

 To identify key intrinsic risk factors for falls in older patients and to seek to propose systems to reduce falls risk in an attempt to improve patient outcome.

OBJECTIVES

• To determine and quantify intrinsic risk factors for falls in older patients with

Drug interactions and/or polypharmacy have also been found to widely contribute to falls.²

Pharmacists play an important role in falls prevention.³ Within the hospital setting, the clinical pharmacist is well centred to assess polypharmacy, co-morbidities and the use of fall risk increasing drugs (FRIDs).

- recurrent falls and/or fractures
- To identify FRIDs in older people who had 'falls' or 'fractures' as a cause of hospital admission
- To create an assessment tool to identify intrinsic risk factors for falls which may be

utilised by health care professionals to reduce falls risk and improve patient outcome

METHOD

Research Setting

- Karin Grech Rehabilitation Hospital (KGRH), a 290-bed rehabilitation hospital situated in Pieta, Malta
- Specialising in the active rehabilitation of adult patients with various neurological, musculoskeletal, orthopaedic and other medical conditions

Research Design

Retrospective analytical cross-sectional study

Inclusion criteria

Domains of Data Collection Tool

- Patient Code
- Reason for
- Referral
- Patient

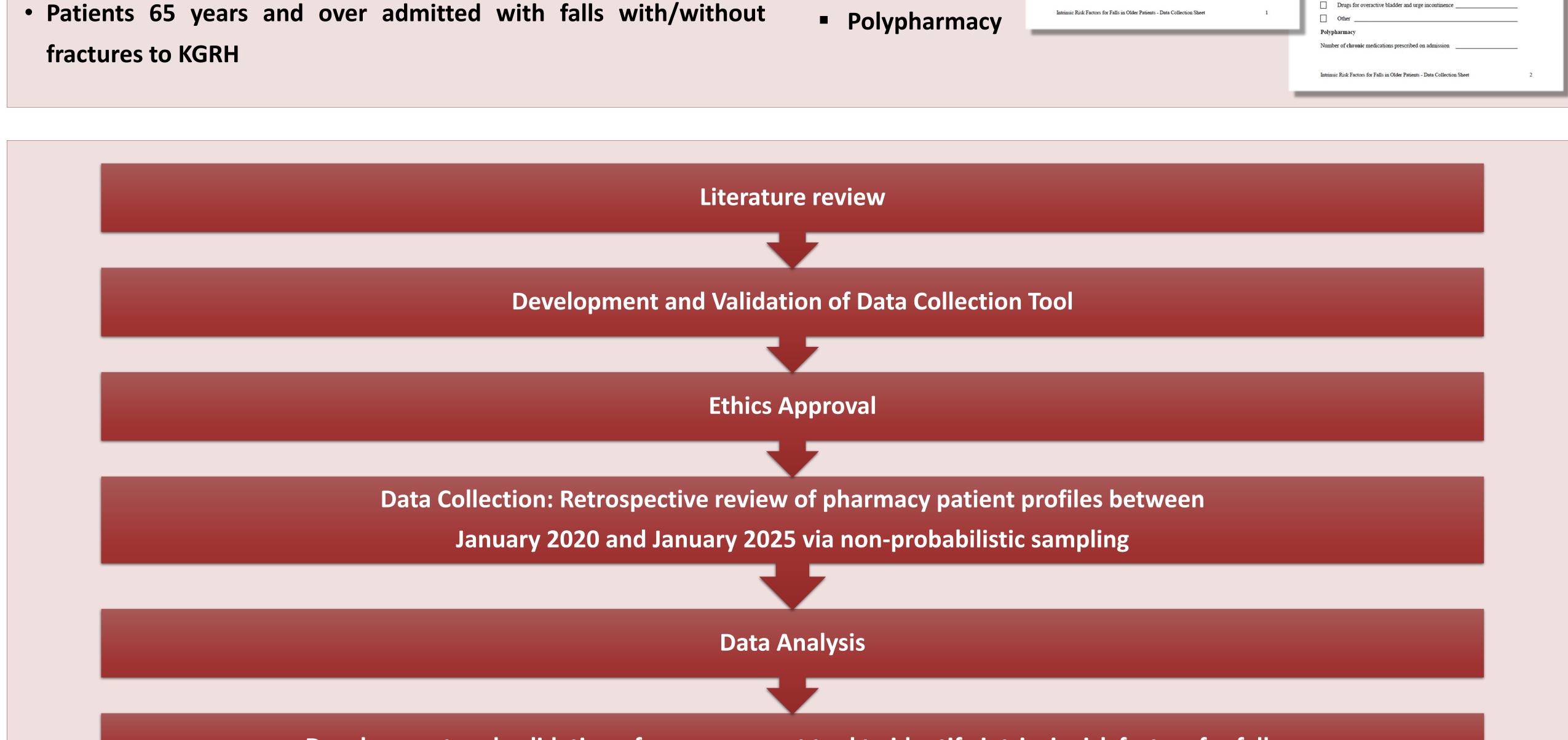
Demographics

Co-Morbidities

FRIDS⁴

Intrinsic Risk Fac	tors for Falls in	Older Patients			
Data	Collection She	et			
A	annelise Goggi				
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tient Code	_				
ason for referral (tick as appropriate)				
Fall/s					
Fall/s with fracture/s					
tient Characteristics					
e	_				
nder M 🗌 F 🗌					
-morbidities (tick as appropriate)					
Cognitive impairment ^{1,3,5}		Depression ^{1.2.3}			
MMSE score/30		Neurological problems			
Visual impairment ^{1,3,4,5}		Parkinson's disease ²			
Hearing impairment ³		Spinal cord injury5			
Pain ^{1.2}		Delirium ^{3,4}			
Hypertension ^{2,4}		Vascular disease (e.g. CAD/PVD) ²			
Syncope syndrome ⁵		Cerebrovascular accident ^{2,4}			
Postural hypotension ⁵		Lower limb peripheral neuropathy ⁵			
Musculoskeletal conditions (e Arthritis / osteoarthritis) ⁵	e.g.	Ankle / foot disorders (e.g. ulcers / deformities)			

Co-n	norbidities <i>cont</i> .		
	Postural instability and/or balance problems ^{1,3,5} History of falls ^{1,2,4,5} Frailty ⁵ Poor nutrition (e.g. Vitamin D deficiency) ⁵ Fear of falling ^{1,5}		Immobility ³ Impairment in gait/mobility ^{1,3,4,5} Fractures ⁵ Osteoporosis ^{1,5} Continence problems ^{4,5} Diabetes/Metabolic disease ² Other
Fall-	Risk-Increasing Drugs (FRIDs) ⁶ (drug ş	group at	
	Benzodiazepine Receptor Agonists Antidepressants		
	Cardiac vasodilators		
	Alpha-blocker for benign prostate hype	~	
	Sedative antihistamines		



Development and validation of an assessment tool to identify intrinsic risk factors for falls

DISCUSSION

By identifying the intrinsic risk factors which may contribute to falls, pharmacists will be in a better position to optimise medication use, liaise with the multidisciplinary team and provide advice regarding effective deprescribing practices.

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