To redesign the identification and education of fall-risk patients, in order to reduce the occurrence of falls at clinic

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Background

- Falls are commonly associated with increased age and frailty.
- In the Neuroscience Clinics (NSOC), medical conditions such as arthritis, osteoporosis, epilepsy, Parkinson's disease, stroke, and dementia, also increases the fall risk in patients.
- Fall prevention measures are made a priority due to the high possibility of fall incidences in NSOC.

Methodology

	FALL RISK ASSE	SSMENT FORM		Date	of visit:
SN	RISK FACTORS FOR FALLS			Circle	Remarks
1	Falls History - Previous falls or near falls in the past 12 months			Y/N	If yes, how many times
2	Medication - Do you take 2.4 prescribed medications daily?			Y/N	
3.	Giddiness Do you sometimes feel dizzy or unsteady when you stand up from a chair or bed?			n/Y br	
4	Gait / Mobility - Do you son stand or w	Problems metimes feel unsteady or weaker when you alk?		Y/N	Use of ambulatory aid? - walking aids (point sti quadstick, umbrella) - wheelchair @clinic
5.	Pain Do you have any arthritic joint/muscle pain which affecting your function that could be made worsen?			Y/N	
6.	Hearing - Do you have	ave trouble hearing? (even use hearing aid)			
7.	 Vision Do you have 	on Do you have difficulty seeing things? (even with glasses)			
8.	Continence problem - Do you sometimes feel that you have to hurry, to go to bathroom?			Y/N	
9.	Cognitive prob	lem ve problems with your memory?		Y/N	
10.	Blood Pressure Measurement				
	Sitting BP	Systolic:mmhg	Diastolic:	mmhg	HR:/ min
	Standing BP	Systolic:mmhg	Diastolic:	mmh	HR:/min
Staf	f Name & Signat		## Score	e: (a	2 indicates increased fail
Dr is	Dr in-charge: Next TCU:			u:	_

Please tick your answer accordingly		Disagree	Agree	Don't know
1	Older people, age over 60 years fall each year	٥	۰	D
2	Most falls happen at home	٥	٥	D
3	A fall is likely to happen again if you have a past history of falls	٥	٥	٥
4	A Fall could fracture bones (break or crack) and cause difficulty in walking	٥	۰	٥
5	A Fall sometimes causes injuries that can lead to death	D	٥	D

Fig. 1 Fall risk assessment form

Fig. 2a Pre-education knowledge scoring form

1. Screening of patients

- Patients aged \geq 65 years, with medical conditions such as movement disorders, stroke, neuromuscular disorders, and dementia were screened using the fall risk assessment form (Fig. 1).
- Bed-ridden and wheelchair-bound patients were excluded.
- Patients with score of ≥ 2 were classified as fall-risk.

2a. Pre-education knowledge test

• Pre-education knowledge scoring (Fig. 2a) was conducted on fall-risk patients while awaiting turn for doctor's consultation.



To reduce fall occurrences at the NSOC through the use of an assessment tool that identifies the intrinsic and extrinsic risk factors contributing to a patient's fall, and then eliminating or reducing these fall risks through patient education



Outcomes





Effect of education on falls: 98% of patients complied with fall prevention measures



Time between falls in NSOC: Significant increase of gap between fall events from 32 to 175 days between June to December 2014.

	-	
Time between events (days)	T-chart of time between falls	
250 -	*	



Fig. 2b Fall prevention education brochures (source: Health Promotion Board)

	National Neuroscience Institute Sontwath		Affix patient's sticker here	
	Date visit or call patient	Dicarree	Azree	Not Sure/Don'
1	Do you think re-arranging the furniture and clearing tangled wires on the floor, will help in avoiding trips/falls, and clears the paths for walking?			know
2	Do you think laying the bathroom floors with non-slip or rubber mats will help in avoiding slips on wet/slippery surfaces?			
3	Do you think wearing non-slip footwear provides better grip on slippery surfaces?			
4	Do you think getting yourself an eye check at least once a year will lower your risk of fall?			
5	Do you think placing frequently used items on lower shelves, and not climbing on stools, can help in avoiding falls from a height?			
6	Do you think maintaining a regular exercise like Tai Chi will help in improving your balance and strength?			

FOLLOW UP INFORMATION (POST-TEST

Please tick your answer accordingly	No	Yes	Not Sure
Have you fallen within the past 30 days or 2-3 months?			
- Did you injure yourself?			
- Did you see a Doctor?			

2b. Fall prevention education

 Education on fall prevention (Fig. 2b) was conducted after patient's consultation with doctor.

2c. Post-education knowledge test

 Post-education knowledge scoring (Fig. 2c) was conducted on the same group of patients 1-3 months later.

Fig. 2c Post-education knowledge scoring form



Conclusion

The fall risk assessment tool acts as the first stage of assessment in reducing the occurrence of falls in NSOC, and eliminating any identified risks that a patient has.

Future plan

Collaborate with physiotherapist services to control fall risk due to gait/mobility problems.