Are you afraid of falling? A prospective analysis of family carers' and older adults' concern about falls during hospitalization and after discharge

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Background

Older adults are at risk of falling after discharge with up to 43% reporting a fall and 15% being readmitted during the first six months postdischarge¹. Fear of falling, which often occurs after a fall, affects up to 85% of older adults and has been known to result in activity restriction, function, and mobility decline².

Many studies have explored the impact of falls and fear of falling on older adults, but little is known about the psychological impact of falls among older adults on their family carers. This study aimed to explore the relationship of fall concern among family carers and their care recipients (older adults) when they were hospitalised and after discharge.

Method

Design: A prospective survey was conducted with family carers and the older adults in a private metropolitan hospital in Western Australia.

- Family carers who were identified as the primary carer for an older adult and provided support in personal care, supervision, and/or shopping were included.
- Care recipients aged 65 and above, identified with a risk of falling during admission were included.

Data collection: Participants were recruited via convenience sampling at 48 hours before discharge and follow-up at one week (only for family carer) and 30-day after discharge.

- Family carers: socio-demographic, perception of fall, fall history of care recipient, fall concern³, psychological distress, and quality of life.
- · Care recipients: socio-demographic, perception of fall, fear of falling⁴, and quality of life.

Data analysis: Descriptive statistics were used to describe the demographic and outcome variables. Association between demographic and outcome variables were analysed using inferential statistics.

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1) Socio-demographic

26 family carers

15 males 11 females

Average age 71 years old

Looking after spouse (21) and parent (5)

Living with care recipient at home (22)

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26 care recipients

11 males 15 females Average age 76

years old Discipline medical (6) and surgical (20)

Average length of stay 5 days

2) Description of survey variables

	48 h before disc	charge	1 week after discharge		30-day after discharge	
Family carer	n = 26	%	n = 23	%	n = 21	%
Care recipient at risk of falling (yes) ^{a,1}	20	76.9	9	39.1	8	38.1
Afraid of care recipient falling (yes) ^a	16	61.5	8	34.8	7	33.3
Fall concern [mean (SD)] ^{b,2}	39.81 (15.93)	ı	32.61 (11.46)	ı	29.95 (11.09)	-
Psychological distress [mean (SD)] ^c	13.19 (3.41)	-	-	1	12.52 (3.59)	-
Quality of life [mean (SD)] ^c	85.73 (10.81)	ı	-	ı	85.95 (7.65)	-
Care recipient	n = 26	%	-	-	n = 21	%
Think you are at risk of falling (yes)d	9	34.6	-	ı	4	19.0
Afraid of falling (yes)d	11	42.3	-	1	6	28.6
Fear of falling [mean (SD)] ^c	11.00 (3.90)	ı	-	-	10.62 (4.07)	-
Quality of life [mean (SD)]c,1	69.42 (16.93)	-	-	-	78.00 (13.86)	-

Comparison using a. Cochran's test, b. Repeated measures ANOVA, c. Wilcoxon Signed Rank Test, d. McNemar's test. 1. P<0.05, 2. P<0.01

3) Relationship between survey variables and fall concern at 48 h

Family carers	Spearman correlation (rho)	P-value	Care recipient	Spearman correlation (rho)	P-value
Psychological distress (48 h)	0.292	0.198	Fear of falling (48 h)	0.460	0.036
Quality of life (48 h)	-0.300	0.187	Quality of life (48 h)	-0.225	0.328
Psychological distress (30 days)	0.362	0.107	Fear of falling (30 days)	0.562	0.008
Quality of life (30 days)	-0.215	0.348	Quality of life (30 days)	-0.362	0.107
Care recipient at risk of falling (48 h)	0.222	0.334	Think you are at risk of falling (48 h)	0.234	0.308
Afraid of care recipient falling (48 h)	0.410	0.065	Afraid of falling (48 h)	0.371	0.098
Care recipient at risk of falling (30 days)	0.138	0.551	Think you are at risk of falling (30 days)	-0.020	0.931
Afraid of care recipient falling (30 days)	0.601	0.004	Afraid of falling (30 days)	0.671	<0.001

Conclusion

Fall concern of family carers decreased one-week after discharge. There was no significant change in fall concern between one-week and 30-day after discharge.

A greater proportion of family carers reported that their care recipients were at risk of falling and were afraid of them falling, compared to the proportion of care recipients who reported being at risk or afraid of falling.

There was a **positive association** between family carers' fall concern and care recipients' fear of falling reported during hospitalization and after discharge.

Implication to practice

- 1. There is a need to tailor fall prevention strategies to the care recipient and their family carer.
- 2. Measuring the fall concern of family carers could indicate the wellbeing of both care recipient and carer after discharge.
- 3. Future studies are needed to explore the relationship of fall concern with other fall-related health variables.

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