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THE ELDERLY BLUES
LIVING IN RURAL MALAYSIA

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INTRODUCTION

Depression is a major public health concern nowadays. However depression among elderly is not in the spotlight. The overall prevalence of depression among elderly was reported to be high. It was shown that elderly living in rural areas has a higher prevalence of depression as compared to urban areas. The risk factor associated with depression might be different among elderly living in rural than living in urban areas.This study was aimed to determine the prevalence of depression among elderly living in rural areas in Malaysia and its associated factors.

METHODOLOGY

Data elderly aged 65 or over was obtained from Malaysia National Health and Morbidity Survey 2018, a cross-sectional study using stratified cluster sampling design. The validated Geriatric Depression Scale-14 questionnaire was used as a screening tool to indicate the presence of depression with a total score of six and above. Quality of life was measured using CASP-19 questionnaire. Data analysis was performed with chi-square test and multiple logistic regression using SPSS version 25.0.

Table 1: Risk factors of elderly depression in rural Malaysia (n=2171)

Variable	No (%) of Respondents *			Crude OR (95% CI)	p-value	Adjusted OR (95% CI)	p-value
	Total	Depression	Normal				
Gender							
Male	1024 (48.0)	155 (15.0)	869 (85.0)	1		1	
Female	1147 (44.8)	166 (13.9)	981 (86.1)	0.92(0.73, 1.16)	0.450	0.76(0.50, 1.15)	0.190
Ethnicity							
Malay	1616 (72.2)	210 (12.2)	1406 (87.8)	1		1	
Chinese	146 (7.4)	24 (18.8)	122 (81.2)	0.49(0.25, 0.95)	0.034	0.61(0.29, 1.27)	0.178
Indian	5 (0.3)	1 (20.0)	4 (80.0)	0.81(0.30, 2.19)	0.671	0.64(0.27, 1.47)	0.282
Other Bumiputra	324 (17.4)	69 (20.4)	255 (79.6)	0.88(0.34, 2.26)	0.780	2.43(0.67, 8.88)	0.173
Others	80 (2.6)	17 (22.2)	63 (77.8)	0.90(0.52, 1.56)	0.697	1.05(0.54, 2.03)	0.895
Marital Status							
Unmarried/Separated/Divorced/Widowed	758 (34.5)	147 (19.2)	611 (80.8)	1.75(1.27, 2.42)	0.001	1.21(0.73, 2.00)	0.455
Married	1410 (65.5)	174 (12.0)	1236 (88.0)	1		1	
Education							
No formal education	554 (25.2)	118 (20.2)	436 (79.8)	3.68(1.28, 10.63)	0.017	1.24(0.39, 3.92)	0.711
Primary education	1200 (56.3)	165 (13.9)	1035 (86.1)	2.34(0.85, 6.45)	0.098	1.42(0.49, 4.12)	0.515
Secondary	347 (15.4)	33 (8.7)	314 (91.3)	1.39(0.51, 3.85)	0.514	1.18(0.42, 3.37)	0.748
Tertiary Education	70 (3.1)	5 (6.4)	65 (93.6)	1		1	
Employment status							
Unemployed/home-maker/retiree/	1506 (68.7)	248 (15.9)	1258 (84.1)	1.51(1.15, 1.57)	0.003	1.14(0.82, 1.59)	0.415
Employed	665 (31.3)	73 (11.2)	592 (88.8)	1		1	
Income Group							
<RM1000	1514 (70.5)	254 (16.6)	1260 (83.4)	2.46(1.31, 4.61)	0.006	0.91(0.44, 1.86)	0.791
RM1000-RM1999	475 (21.6)	51 (9.9)	424 (90.1)	1.35(0.77, 2.36)	0.285	0.71(0.39, 1.32)	0.276
> RM2000	171 (7.9)	15 (7.5)	156 (92.5)	1		1	
Mode of transportation							
Public	157 (8.6)	41 (24.3)	116 (75.7)	1		1	
Own/working	2009 (91.4)	278 (13.5)	1731 (86.5)	2.06(1.21, 3.51)	0.009	1.08(0.46, 2.54)	0.850
Living Status							
Alone	191 (8.9)	40 (22.2)	151 (77.8)	1.80(1.15, 2.80)	0.011	1.45(0.82, 2.56)	0.202
Not Alone	1980 (91.1)	281 (13.7)	1699 (86.3)	1		1	
Quality of Life (CASP-19 score)							
Lowest (<46)	836 (36.7)	243 (30.8)	593 (69.2)	16.20(8.23, 31.89)	<0.001	12.79(5.66, 28.89)	<0.001
Middle (47-51)	773 (36.1)	53 (6.1)	720 (93.9)	2.38(1.28, 4.42)	0.007	2.53(1.05, 6.05)	0.038
Highest (≥52)	540 (27.2)	18 (2.7)	522 (97.3)	1		1	
Social Support							
Low	680 (31.3)	180 (27.7)	500 (72.3)	5.30(3.60, 7.79)	<0.001	3.16(2.10, 4.77)	<0.001
High	794 (37.4)	92 (9.6)	702 (90.4)	1.47(0.87, 2.48)	0.142	1.46(0.86, 2.48)	0.159
Very High	688 (31.3)	47 (6.8)	641 (93.2)	1		1	
Known Diabetic							
Yes	512 (24.0)	91 (16.9)	421 (83.1)	1.29(0.88, 1.91)	0.190	1.42(0.91, 2.21)	0.123
No	1655 (76.0)	229 (13.6)	1426 (86.4)	1		1	
Known Hypertension							
Yes	1112 (52.9)	193 (17.0)	919 (83.0)	1.57(1.12, 2.19)	0.010	1.42(0.93, 2.17)	0.103
No	1055 (47.1)	127 (11.5)	928 (88.5)	1		1	
Known Hypercholesterolemia							
Yes	810 (38.0)	122 (14.5)	688 (85.5)	1.01(0.75, 1.36)	0.936	0.93(0.68, 1.27)	0.645
No	1357 (62.0)	198 (14.4)	1159 (85.6)	1		1	
Elder experiencing abuse							
Yes	196 (10.8)	43 (22.2)	153 (77.8)	2.28(1.56, 3.33)	<0.001	2.01(1.40, 2.89)	<0.001
No	1696 (89.2)	193 (11.1)	1503 (88.9)	1		1	

RESULTS

1. The prevalence of elderly depression in rural areas was 14.4% (95% CI: 12.03, 17.23).
2. Elderly depression were significantly higher among unmarried/separated/divorce/widower (p=0.001), lowest quality of life (p<0.001), low social support (p<0.001) and elders experiencing abuse (p<0.001).
3. Multiple logistic regression revealed that elderly, who had middle and lowest quality of life [OR: 2.53 (95% CI: 1.05, 6.05) and OR: 12.79 (95% CI: 5.66, 28.89)], low social support [OR: 3.16 (95% CI: 2.10, 4.77)] and elders experiencing abuse [OR: 2.01 (95% CI: 1.40, 2.89)] were significantly associated with depression.

DISCUSSION

Previous study was done in Malaysia in 2010 reveals that the prevalence of elderly depression in rural areas was higher 30.1%.[1] In comparison to other countries, the prevalence of elderly depression in rural areas in Korea was 33.3%,[2] while China appears to have lower prevalence 6.0%.[3]

The modifiable risk factors like low quality of life and low social support are found to be significantly associated with elderly depression in rural areas has also been established in numerous previous studies.[1-8]

CONCLUSION

One in seven elderly living in rural Malaysia had depression. The significant risk factors associated with depression are modifiable. To overcome these issues, stakeholders and communities need to be focusing more on enhancing good quality of life and good social support for the elderly living in rural areas.

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