

노인재활

게시일시 및 장소 : 10 월 18 일(금) 08:30-12:20 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 10:00-10:45 Room G(3F)

## **P 1-24**

### **Vulnerability to Ageing in Rural Versus Urban area in South Korea**

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#### **Objectives**

This study purposed to identify the vulnerability to ageing based on the rural-urban disparities, because the ageing process may be various and affected by environmental in addition to individual factors in older person.

#### **Theories and methods**

South Korea today is experiencing ageing in both rural and urban communities. Moreover, influx of young people into the city has been the main cause of rapidly aged rural society. Clarifying the vulnerability to ageing, which means the sensitivity to ageing process, may be meaningful in predicting the future and in settling the coping strategies in vulnerable community. Older person (aged over 65 years) in social networking groups in a rural (n=29) and an urban (n=26) areas in South Korea were surveyed as following domains: physical (body composition by Bio-impedance Analysis, activity level by International Physical Activities Questionnaire, and physical performance by grip strength, Short Physical Performance Battery [SPPB] and timed up and go test), psychological (quality of life by short Form 36 [SF-36], and depression by Beck Depression Inventory [BDI]), and Cognitive (mini mental state examination [MMSE]).

#### **Results**

Pearson's correlation analysis showed significant associations only in rural area. Ageing was related to decreasing body mass index ( $r=-0.596$ ,  $p=0.001$ ), fat mass ( $r=-0.381$ ,  $p=0.04$ ), and lean mass of right ( $r=-0.448$ ,  $p=0.015$ ) and left ( $r=-0.438$ ,  $p=0.017$ ) arms and trunk ( $r=-0.374$ ,  $p=0.046$ ). Moreover, total score of SPPB ( $r=-0.429$ ,  $p=0.02$ ), mental health in SF-35 ( $r=-0.485$ ,  $p=0.008$ ), and MMSE ( $r=-0.572$ ,  $p=0.001$ ) were showed negative correlation with age. Finally, total score of BDI was increased with age ( $r=0.531$ ,  $p=0.003$ ).

#### **Conclusions**

This study proved that older persons in rural area were prone to lose body mass, physical and cognitive function, and mental health with ageing compared to urban area. This vulnerability to ageing in rural area might emphasize the settling the specialized coping strategies based on the related factors in the future.

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Table 1 .Pearson's correlation coefficients between age and demographic characteristics.

			Rural group (n=29)	Urban group (n=26)
Age	Pearson Correlation		1	1
	P-Value		-	-
Body composition	Protein Mass (kg)	Pearson Correlation	-.364	.049
		P-Value	.052	.814
	Mineral Mass (kg)	Pearson Correlation	-.257	.253
		P-Value	.179	.212
	Body Fat Mass (kg)	Pearson Correlation	-.381	-.064
		P-Value	.041*	.757
	Skeletal Muscle Mass (kg)	Pearson Correlation	-.329	.013
		P-Value	.081	.950
	Percent Body Fat (%)	Pearson Correlation	-.381	-.064
		P-Value	.041*	.757
	Body Mass Index (kg/m <sup>2</sup> )	Pearson Correlation	-.596	.015
		P-Value	<.001**	.942
	Lean Mass of Right Arm (kg)	Pearson Correlation	-.448	-.190
		P-Value	.015*	.353
	Lean Mass of Left Arm (kg)	Pearson Correlation	-.438	-.241
		P-Value	.017*	.235
Lean Mass of Trunk (kg)	Pearson Correlation	-.374	-.101	
	P-Value	.046*	.622	
Lean Mass of Right Leg (kg)	Pearson Correlation	-.283	-.081	
	P-Value	.137	.693	
Lean Mass of Left Leg (kg)	Pearson Correlation	-.270	-.009	
	P-Value	.157	.965	
Physical factor	IPAQ (MET)	Pearson Correlation	-.383	-.203
		P-Value	.040*	.321
	Grip Strength (kg)	Pearson Correlation	.078	-.117
		P-Value	.688	.571
	SPPB (0-12)	Pearson Correlation	-.429	-.145
P-Value		.020*	.479	
TUG (s)	Pearson Correlation	.321	-.110	
	P-Value	.090	.593	
Psychological factor	SF-36 PH (0-100)	Pearson Correlation	-.322	-.044
		P-Value	.088	.832
	SF-36 MH (0-100)	Pearson Correlation	-.485	-.016
		P-Value	.008**	.939
	SF-36 Total (0-100)	Pearson Correlation	-.482	-.033
P-Value		.008**	.872	
BDI (0-63)	Pearson Correlation	.531	-.015	
	P-Value	.003**	.942	
Cognitive factor	MMSE-KC(0-30)	Pearson Correlation	-.572	-.297
		P-Value	.001**	.141