題號： 106　　國立臺灣大學 114 學年度碩士班招生考試試題

科目： 社區護理學

節次： 6

1.近年來，心理健康議題受到全球高度關注。世界衛生組織（WHO）提出「沒有心理健康，就沒有真正的健康」，而臺灣衛生福利部也推動了『全民心理健康韌性計畫』，其中針對青壯年族群推出「青壯世代心理健康支持方案」，並修訂《精神衛生法》，以保障職場心理健康。請問國人 30 至 45 歲年齡層常見的精神疾患包括憂鬱症與焦慮症的盛行率為何？(5%)此外，職業衛生護理師可以採取哪些策略與介入措施，來強化工作者的職場心理健康？(20%)

2.美國一項前瞻性研究，針對近六千名美國成年女性進行活動紀錄穿戴裝置與心臟衰竭風險〔incident Heart failure (HF), and its subtypes with preserved ejection fraction (HFpEF) and reduced EF (HFrEF)〕的研究。請根據所提供的圖表回答以下問題：

(1) **Table 1** 是研究者將研究對象依照每天身體活動時間進行分組，並比較不同身體活動程度組別的個案基本資料。請問該研究中，不同身體活動組別的年齡、心房顫動的比例分布，及憂鬱平均得分，分別使用了哪些統計方法？這些比較結果是否達到統計顯著性差異？(3%)

(2)請問根據Table 2結果，每日身體活動時間對於HF、HFpEF與HFrEF的影響分別為何？(6%)

(3)請問根據Table 3結果，每日步數對於HF、HFpEF與HFrEF的影響分別為何？(6%)

(4)請問根據Table 4結果，每日靜態行為時間對於HF、HFpEF與HFrEF的影響分別為何？(6%)

(5)請問根據本研究結果，若要有效降低心臟衰竭的風險，請問您會建議成年女性每日最少要進行身體活動多少分鐘？以及每日最少要走多少步？每日靜態活動最多不超過多少分鐘？(4%)

Table 1. Participant Characteristics at Baseline Overall and by Total Physical Activity (PA) Levels

Characteristic	Overall (N = 5951)	Total PA quartile, min/d				P value[a]
		<276 (n = 1488)	276-336 (n = 1488)	337-397 (n = 1488)	>397 (n = 1488)	
Age, No. (%), y						
<80	3030 (50.9)	552 (37.1)	720 (48.4)	798 (53.7)	960 (64.5)	<.001
≥80	2921 (49.1)	936 (62.9)	768 (51.6)	689 (46.3)	528 (35.5)	
History of diabetes, No. (%)	1186 (19.9)	368 (24.7)	306 (20.6)	317 (21.3)	195 (13.1)	<.001
History of hypertension, No. (%)	4259 (71.6)	1178 (79.2)	1105 (74.3)	1049 (70.5)	927 (62.3)	<.001
History of CHD, No. (%)[b]	497 (8.4)	176 (11.8)	130 (8.7)	112 (7.5)	79 (5.3)	<.001
History of stroke, No. (%)	192 (3.2)	68 (4.6)	59 (4)	33 (2.2)	32 (2.2)	<.001
History of atrial fibrillation, No. (%)	241 (4)	91 (6.1)	64 (4.3)	56 (3.8)	30 (2)	.20
Depression, mean (SD)[c]	0.0 (0.1)	0.1 (0.1)	0.0 (0.1)	0.0 (0.1)	0.0 (0.1)	.27
BMI, ≥30 (Obese), No. (%)	1863 (31.1)	625 (45.5)	466 (33.4)	372 (26.7)	272 (19.2)	<.001
Systolic BP, mean (SD), mm Hg	125.7 (14.2)	128.1 (15.4)	125.8 (13.6)	125.3 (13.8)	123.8 (13.4)	<.001
Diastolic BP, mean (SD), mm Hg	72.4 (8.7)	73.3 (9.3)	72.4 (8.7)	72.5 (8.6)	71.7 (8.1)	<.001
Glucose, mean (SD), mg/dL	97.8 (25.8)	101.0 (30.3)	98.4 (25.9)	98.4 (26.0)	93.7 (19.7)	<.001

見背面

Table 2. Rates and Relative Hazards of Incident Heart Failure (HF) by Total Physical Activity (PA) (N = 5951)

Outcome	Total PA quartile, min/d				Trend *P* value[a]
	<276	276-336	337-397	>397	
Overall HF (407 cases)					
Cases (rate),[c]	164 (16.3)	100 (9.0)	88 (7.7)	55 (4.6)	NA
Model 3,[f] HR (95% CI)	1 [Reference]	0.75 (0.58-0.98)	0.77 (0.58-1.01)	0.67 (0.47-0.94)	.006
HFpEF (257 cases)					
Cases (rate),[c]	112 (11.1)	54 (4.8)	57 (5.0)	34 (2.8)	NA
Model 3, HR (95% CI)	1 [Reference]	0.61 (0.44-0.86)	0.75 (0.53-1.06)	0.63 (0.41-0.97)	.002
HFrEF (110 cases)					
Cases (rate),[c]	31 (3.1)	38 (3.4)	23 (2.0)	18 (1.5)	NA
Model 3, HR (95% CI)	1 [Reference]	1.38 (0.84-2.26)	0.97 (0.54-1.73)	0.97 (0.50-1.86)	.86

Abbreviations: HFpEF, HF with preserved ejection fraction; HFrEF, HF with reduced ejection fraction; HR, hazard ratio; NA, not applicable.

[a] *P* value for trend obtained by modeling PA as a continuous variable.

[c] Crude rate per 1000 person-years.

[f] Model 3 further included body mass index, systolic and diastolic blood pressure, total:high-density lipoprotein cholesterol ratio, log value (triglycerides), log value (C-reactive protein), glucose.

Table 3. Rates and Relative Hazards of Incident Heart Failure (HF) by Steps per Day (N = 5951)

Outcome	Steps per day quartile				Trend *P* value[a]
	<2164	2164-3210	3211-4541	>4541	
Overall HF (407 cases)					
Cases (rate),[c]	186 (19.5)	107 (9.5)	71 (6.1)	43 (3.5)	NA
Model 3,[f] HR (95% CI)	1 [Reference]	0.72 (0.56-0.93)	0.60 (0.44-0.81)	0.54 (0.36-0.79)	<.001
HFpEF (257 cases)					
Cases (rate),[c]	127 (13.3)	61 (5.4)	42 (3.6)	27 (2.2)	NA
Model 3, HR (95% CI)	1 [Reference]	0.61 (0.44-0.84)	0.53 (0.36-0.78)	0.51 (0.31-0.83)	.002
HFrEF (110 cases)					
Cases (rate),[c]	38 (4.0)	34 (3.0)	26 (2.2)	12 (1.0)	NA
Model 3, HR (95% CI)	1 [Reference]	1.03 (0.63-1.70)	0.93 (0.53-1.63)	0.60 (0.28-1.31)	.22

Abbreviations: HFpEF, HF with preserved ejection fraction; HFrEF, HF with reduced ejection fraction; NA, not applicable.

[a] *P* value for trend obtained by modeling sedentary time as a continuous variable.

[c] Crude rate per 1000 person-years.

[f] Model 3 further included body mass index, systolic and diastolic blood pressure, total:high-density lipoprotein cholesterol ratio, log (triglycerides), log (C-reactive protein), and glucose.

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Table 4. Rates and Relative Hazards of Incident Heart Failure (HF) by Total Sedentary Time (N = 5951)

Outcome	Total sedentary time quartile, min/d				Trend *P* value[a]
	<555	555-625	626-694	>694	
Overall HF (407 cases)					
Cases (rate),[c]	63 (5.5)	64 (5.8)	96 (9.0)	162 (16.8)	NA
Model 3,[f] HR (95% CI)	1 [Reference]	0.81 (0.57-1.15)	0.98 (0.70-1.36)	1.40 (1.01-1.94)	.01
HFpEF (257 cases)					
Cases (rate),[c]	37 (3.2)	34 (3.1)	61 (5.7)	111 (11.5)	NA
Model 3, HR (95% CI)	1 [Reference]	0.74 (0.46-1.12)	1.07 (0.70-1.65)	1.68 (1.11-2.55)	.002
HFrEF (110 cases)					
Cases (rate),[c]	23 (2.0)	28 (2.5)	18 (1.7)	37 (3.8)	NA
Model 3, HR (95% CI)	1 [Reference]	0.99 (0.56-1.76)	0.52 (0.27-1.00)	0.95 (0.53-1.72)	.59

Abbreviations: HFpEF, HF with preserved ejection fraction; HFrEF, HF with reduced ejection fraction; NA, not applicable.

[a] *P* value for trend obtained by modeling sedentary time as a continuous variable.

[c] Crude rate per 1000 person-years.

[f] Model 3 further included body mass index, systolic and diastolic blood pressure, total:high-density lipoprotein cholesterol ratio, log (triglycerides), log (C-reactive protein), glucose.

3.2024 年，著名美國醫學期刊《JAMA》發表一份關於「老年人的社交隔離和孤獨感」的文章，該文章簡要說明社交隔離與孤獨感對健康的影響，以及增加社會連結的方法。臺灣已邁入超高齡社會，請問身為社區護理師，您會採取哪些策略與介入措施，降低社區老人的社交隔離和孤獨感呢？(25%)

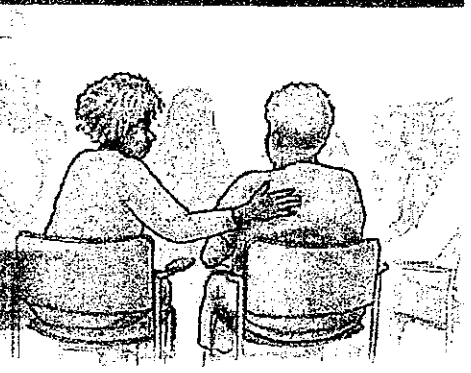
見背面

Social isolation and loneliness in older adults

Social isolation refers to a lack of connections to family, friends, or community, which can lead to loneliness, or feelings of being alone regardless of the amount of social contact.

Older adults are at increased risk of loneliness due to loss of loved ones, disability or worsening quality of life, or lack of access to transportation.

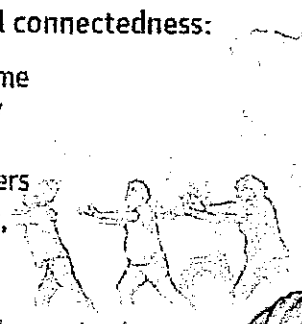
Loneliness can increase risk of heart disease, dementia, stroke, anxiety, and depression.

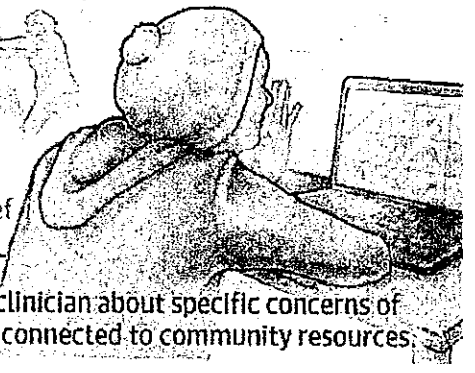


Social connectedness can increase longevity and improve emotional and physical health.

Ways to increase social connectedness:

- Regularly scheduled time with friends and family
- Group programs at libraries or senior centers
- Online spaces, lectures, or faith-based groups
- Group exercise classes
- Volunteering with local organizations
- Support groups for navigating loss or grief





Older adults can also talk with their clinician about specific concerns of social isolation and loneliness to get connected to community resources.

4. The following is excerpted from the Lancet Public Health "Obesity prevention: changing perspectives". Please translate the following excerpt (A), and then answer the questions in (B).

(A) (15%)

Obesity is a serious public health challenge globally and a major determinant of disability and death. According to WHO, overweight and obesity have reached epidemic proportions in the European region, affecting almost 60% of adults and one in three school-aged children. In the USA, 14 million children and adolescents live with obesity. Obesity develops across the life course. Vulnerability to unhealthy body weight can develop in early life, and therefore preventative measures must start early. The Food Foundation report published on Feb 2, 2023, puts prevention at the heart and urges policy makers to include preconception and pregnancy in policies related to diet and obesity, as these are crucial times for a child's healthy growth trajectory. Children with obesity are five times more likely to be obese in adulthood. However, it is essential to take a life-course approach and continue supporting a healthy diet and physical activity later in life. 70% of adults with obesity were not obese in childhood, and obesity prevalence increases with age, with more than half of middle-aged adults being overweight or obese in many countries.

(B) Why is addressing childhood obesity crucial for public health, and what makes early intervention particularly important? (10%)

試題隨卷繳回