“双心医学”模式下社区老年心脏病患者的抑郁症状

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【摘要】目的 探讨双心医学模式下社区老年常见心脏疾病与抑郁症状共患情况。方法 采用横断面调查法，共调查 771 名社区老年患者，采用流调研究用抑郁量表（CES－D）调查抑郁症状，追踪老年患者的门诊或住院病历记录调查其心血管疾病：包括心绞痛、冠心病和高血压。结果 心血管疾病（不包括高血压）总患病率为 22.7%，其中冠心病为 20.5%，心绞痛为 10.9%；高血压患病率为 49.3%。抑郁症状在所有心血管疾病患者中的发生率是 20.9%。伴心血管疾病老年人的抑郁症状发生率（33.1%）高于无心血管疾病者（18.3%），差异有统计学意义（$\chi^2=17.59$，$P<0.001$）；有冠心病者的抑郁症状发生率（34.8%）高于无冠心病者（18.3%），差异有统计学意义（$\chi^2=20.25$，$P<0.001$）；有心绞痛疾病患者的抑郁症状发生率（34.5%）高于无心绞痛疾病者（20.1%），差异有统计学意义（$\chi^2=9.19$，$P=0.002$）；有高血压患者的抑郁症状发生率（25.0%）高于无高血压者（18.4%），差异有统计学意义（$\chi^2=4.93$，$P=0.026$）。结论 社区老年人心血管疾病的罹患率高，在心血管疾病患者中抑郁症状的检出率比无心血管疾病患者高。需加强双心医学模式下对伴心血管疾患老年人的心理干预。

【关键词】 双心医学；心血管疾病；抑郁症状；老年

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The depressive symptoms among elderly people with cardiovascular disease according to the “Psycho－Cardiology” medicine

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【**Abstract**】**Objective** To explore the prevalence of depressive symptoms among the elderly with cardiovascular disease in the community according to the Psycho－Cardiology medical mode. **Methods** A cross－sectional survey was designed for this study. A total of 771 participants completed the self administered questionnaires which were the Center for Epidemiologic Studies Depression Scale (CES－D) and the records of common cardiovascular diseases (CVDs) in outpatient or inpatient, which CVDs were including angina, coronary heart disease (CHD) and hypertension. **Results** The overall prevalence of cardiovascular disorders (except the hypertension) was 22.7%, in which the coronary heart disease was 20.5% and the angina was 10.9%. The prevalence of hypertension was 49.3%. The prevalence of depressive in overall participants was 20.9%. The prevalence of depressive in patients with CVDs was 33.1% (vs. without CVDs was 18.3%), the difference was significant statistics ($\chi^2=17.59$, $P<0.001$). The prevalence of depressive in patients with CHD was 34.8% (vs. without CHD was 18.3%), the difference was significant statistics ($\chi^2=20.25$, $P<0.001$). The prevalence of depressive in patients with angina was 34.5% (vs. without angina was 20.1%), the difference was significant statistics ($\chi^2=9.19$, $P=0.002$). The prevalence of depressive in people with hypertension was 25.0% (vs. without hypertension was 18.4%), the difference was significant statistics ($\chi^2=4.93$, $P=0.026$). **Conclusion** The prevalence of the cardiovascular disease of elderly in community was high. The prevalence of depression symptoms in the CVDs patients was higher than health aging residents. The Psycho－Cardiology medical mode should be studied deeply.

【**Key words**】 Psycho－Cardiology; Cardiovascular disease; Depression symptoms; Aging

1 Introduction

There have been considerable literatures which show a relationship between common cardiovascular diseases (CVDs) and depressive disorders. Some

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studies found that depressive symptoms were associated with hypotension [1-2]. In a community-based study of elderly people, hypotension was found to be associated with increased risk of depressive symptomatology and lower self-esteem [3]. In another study, 14% patients with CHD suffered from current (past month) major depression, and 24% had past (but not current) major depression [4]. As for acute coronary syndrome including unstable angina, 14.6% patients suffered from moderate/severe depression [5].

Psycho-Cardiology, which is also called Behavioral Cardiology, is a new discipline to study the relationship between cardiovascular and psychological disorders. The subject represents a concrete application of the Bio-psycho-social medical model to the cardiovascular and psychiatric psychological disorders [6]. Due to the high prevalence of cardiovascular diseases in elderly people, the comorbid depressive symptoms may occur frequently to a great extent. The interaction between them could lead to the deterioration of intrinsic cardiovascular disorders and the deferment or treatment-resistance of the secondary depression [7]. The primary aim of the present study is to investigate the prevalence of CVD and comorbid depression and their association among elderly Chinese people in the community.

2 Methods

2.1 Study population The study population was derived from the community-based survey of people aged above 60 years in Luzhou City of Sichuan province. The total amount of surveyed people was 771.

2.2 Data collection and assessments

① Social-demographic status: a self-made questionnaire was used to investigate and collect the social-demographic data, including age, gender, educational level, occupation, marriage status. ②Cardiovascular disease: Current cardiovascular diseases incident status questionnaire, including hypertension, CHD and angina. We reviewed the clinical documents of every subject. The definition of hypertension, angina and CHD was according to the clinical documental of hospital. ③ Depressive symptoms: Center for Epidemiologic studies Depression Scale (CES-D) consisted of 20 items was used to assess depressive symptoms [8].

2.3 Statistical analysis The statistical software SPSS17.0 was used in all analysis. The statistical difference was compared using chi-square test for categorical variables.

3 Results

3.1 General conditions The study sample included 771 subjects. The age ranged 60-84 years (mean age =69.34 years, SD = 6.29 years), and 68.0% were females.

3.2 The prevalence of CVDs The overall prevalence of self-reported cardiovascular disorders was 22.7%, in which the coronary heart disease was 20.5% and the angina was 10.9%.

3.3 The prevalence of depressive symptoms among people with CVD.

Table 1 The prevalence of depressive symptoms by CVD

	Depressive symptoms		χ^2	P
	Yes (%)	No (%)		
Hypertension	95/380 (25.0)	72/391 (18.4)	4.93	0.026
coronary heart disease	55/158 (34.8)	112/613 (18.3)	20.25	<0.001
Angina	29/84 (34.5)	138/687 (20.1)	9.19	0.002
Overall of CVDs	58/175 (33.1)	109/596 (18.3)	17.59	<0.001

4 Discussion

In the present study, we found that the prevalence of depressive symptom in the people with CVD was higher (33.1%) than that in people without CVD (18.3%). This result was consistent with many studies. In a Russian study, 42% of patients with ischemic heart disease (IHD) had various degrees of depression and anxiety [9]. Chamberlain et al. found that in hospitalized patients with CVD there were 35% depression i-

dentified, which independently associated with a 28% increased risk of being hospitalized [10]. In hospitalized patients with heart failure, depressive symptoms were present in 69 (67%) patients: 35 (34%) had mild depressive symptoms, 22 (21.3%) had moderate symptoms and 12 (11.6%) patients presented severe symptoms [11]. In elderly people, there are dramatically multi-morbid conditions, which might include cardiovascular metabolic disorders, anxiety/depression/somatoform disorders and neuropsychiatric disorders. In the opinion of Schafer et al., 48% -50% of the aged were assigned to at least one of the above three multi-morbidity patterns [12]. Our data of the prevalence of depressive symptom was much lower than the above studies. This is more likely due to the method of recruitment. The people we investigate were all from the communities and primary health units whose diseases were under a relative remission and might suffer less from it. However, since the highly overlap in the symptomatic presentation of CVD, metabolic disorders and depressive somatic symptoms, the Psycho-Cardiology medical model applied to diagnosis and intervention seems more and more important.

In the present study, the prevalence of depressive symptoms in people with CHDs was the highest (34.5%), the next was angina (34.8) and hypertension (25.0%). Angina is a symptomatic CHD, which often presents as acute heart events. The recurrent attacks of acute heart events might lead people to suffer from anxiety disorder and even depression disorder. In Vural's research, depressive symptoms were present in 87.8% of patients with CVD. Depression and anxiety disorder may be prevalent in patients who had been treated for acute coronary syndrome (ACS) [13]. In Doering's study, 61.7% patients who had experienced ACS were found reported persistent symptoms of depression, anxiety, or both, which increased substantially the risk of death in patients after ACS [14-15]. Depression carries an independent two- to four-fold increased risk of early morbidity and mortality after ACS. Depression symptom severity predicts endothelin-1 elevation that has previously been linked to post-ACS survival [16]. Angina is a symptomatic CHD, which often presents as acute heart events. People with CHD might suffer from not only angina but also dyspnoea, chest pain during anger or emotion, irregular heartbeats, perspiration without physical exercise, and jerking of muscles [17]. The recurrent attacks of acute heart events and severe somatic symptoms might lead people to anxiety and even depression. The substantial symptoms and secondary functional impairment were the main cause of depressive symptoms, on which we should lay more stress.

The prevalence of depressive symptoms in people with hypertension was 25.0%, which was higher than that in people without hypertension (18.4%). In Findley's study about veterans, persistent depression was significantly more likely among those with multimorbidity than among those with only hypertension [18]. This result is consistent with ours that the prevalence of depressive symptoms in hypertensive individuals might be lower than other cardiovascular conditions or diabetes. In an African study, hypertension was associated with 12-month anxiety disorder but not 12-month depressive disorders or 12-month comorbid anxiety-depression, except for the interaction with other chronic physical condition [19]. The relationship between hypertension and depressive disorder is not exactly clear. Someone suggest that depressive symptom is more relevant to the abnormal circadian blood pressure regulation than to hypertension [20]. In our study, we did not investigate people with hypertension only ad hoc. The higher detective rate of depressive symptoms might be due to the complications of it. Further research will be necessary in the subsequent study.

Our results can offer a statistically definitive data for the prevalence of heart-psychological disease among elderly Chinese people living in the general community under the "Psycho-Cardiology" medical model. Further studies might include more variety of diseases and prospective study in order to found the potential regulation of heart-psychological disease. More implications of "Psycho-Cardiology" medical model will be developed in cardiovascular and mental depart-

ment under a multi – discipline connective consultant pattern.

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