

中老年慢性病患者生活满意度现状及其影响因素分析

朱国辰¹, 陈卓铭^{2*}

¹ 暨南大学管理学院, 广东 广州 510632;

² 暨南大学附属第一医院, 广东 广州 510630

* 通信作者: 陈卓铭, E-mail: zm120tchzm@qq.com

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摘要 **目的** 基于 2020 年中国健康与养老追踪调查 (CHARLS) 数据, 探讨我国 45 周岁以上中老年慢性病患者生活满意度现状及其影响因素, 以为中老年慢性病患者健康管理提供科学依据, 揭示提升其生活满意度的潜在路径。**方法** 采用 CHARLS 最新发布的 2020 年第 5 次全国调查数据, 筛选出 13 487 例 45 周岁以上中老年慢性病患者为研究对象, 采用调查原问卷编码为 da007 的题目收集慢性病数据; 纳入性别、年龄、受教育水平、居住地、与伴侣共同生活、患慢性病数量、子女满意度、社交活动数量、吸烟、饮酒、养老保险、医疗保险、躯体生活自理能力 (BADL)、工具性日常生活能力 (IADL)、夜晚睡眠时间和日间睡眠时间为人口学变量。采用原问卷编码为 dc026 的题目收集中老年慢性病患者生活满意度情况。**结果** 共纳入 13 487 例慢性病患者。中老年慢性病患者生活满意度在其性别、年龄、受教育水平、居住地、是否与伴侣共同生活、患慢性病数量、子女满意度、有无饮酒、是否有养老保险、是否有医疗保险、BADL 受损情况、IADL 受损情况、夜晚睡眠时间和日间睡眠时间上差异均有统计学意义 ($P < 0.05$); 在社交活动数量和是否吸烟上, 差异无统计学意义 ($P > 0.05$)。中老年慢性病患者所患慢性病种类较多, 患高血压、胃或其他消化系统疾病的概率超过 50%。中老年慢性病患者患 1 种慢性病的有 3 914 例, 患 2 种慢性病的有 3 445 例, 患 3 种慢性病的有 2 468 例, 患 4 种及以上慢性病的有 3 660 例。生活满意度状况为不满意的有 1 232 例, 满意的有 12 255 例。二元 Logistic 回归分析结果显示, 年龄为 55~64 岁 (95%CI=0.49~0.77)、65~74 岁 (95%CI=0.37~0.59)、75~84 岁 (95%CI=0.28~0.46) 和 85 岁及以上 (95%CI=0.19~0.41), 夜晚睡眠时间 6~8 h (95%CI=0.72~0.95)、 ≥ 8 h (95%CI=0.62~0.88), 日间睡眠时间 1~2 h (95%CI=0.65~0.86) 和 ≥ 2 h (95%CI=0.56~0.86) 是中老年慢性病患者对生活满意的保护因素 ($P < 0.05$); 居住在农村 (95%CI=0.65~0.89)、不与伴侣共同生活 (95%CI=1.39~1.81)、患 4 种及以上慢性病 (95%CI=1.17~1.64)、对子女不满意 (95%CI=3.27~4.66)、没有医疗保险 (95%CI=1.22~2.04)、BADL 受损 (95%CI=1.20~1.62)、IADL 受损 (95%CI=1.26~1.70) 是中老年慢性病患者对生活满意的危险因素 ($P < 0.05$)。**结论** 我国中老年慢性病患者对生活总体满意度较高, 需要从家庭环境、社会支持的角度入手, 创造良好家庭氛围, 完善医疗保障体系, 加强心理健康的监测和干预, 为中老年慢性病患者的身心健康而努力。

关键词 慢性病; 生活满意度; 中老年; CHARLS; 影响因素

随着社会的发展, 中老年人口比例逐渐增大, 人口老龄化随之而来的慢性病问题也日益显著。生活满意度是主观幸福感的认知评价组成部分, 是

指一个人对自己生活质量好或坏的看法^[1], 它反映了人们如何看待自己的现实生活, 以及他们在一些重要领域 (如功能和活动参与等) 中的需求或愿望

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与实际情况之间的差异^[2]。高生活满意度和更长的生存期联系紧密,有研究发现,患有慢性病的老年人生活满意度较低^[3-4]。因此,生活满意度直接关系到中老年慢性病患者的身心健康和整体福祉。目前,关于慢性病患者的研究主要集中在以下几个方面:①慢性病的病理和生理机制,例如肠道微生物在慢性病中的作用^[5];②慢性病患者的管理问题^[6];③慢性病的诊断方法,如使用机器学习预测模型等^[7]。关于中老年慢性病患者生活满意度及其影响因素的研究尚不充分。因此,本研究基于中国健康与养老追踪调查(China health and retirement longitudinal study, CHARLS)第5次全国调查数据,以45周岁以上中老年慢性病患者为研究对象,分析其生活满意度现状及其影响因素,以期引起更多关注和重视,为构建更加健康和谐的老龄化社会贡献一份力量。

1 资料与方法

1.1 数据来源

本研究数据来源于CHARLS最新发布的2020年第5次全国调查数据^[8]。CHARLS数据库代表我国45周岁以上人群的高质量公共微观数据库。本研究采用问卷健康状况部分编码为da007的题目收集慢性病数据,该题题干为“是否有医生曾经告诉过您有以下这些慢性病?”共纳入高血压、胃或其他消化系统疾病、血脂异常(如高血脂或低血脂)、哮喘、糖尿病或高血糖(包括糖耐量异常和空腹血糖升高)、心脏问题(如心肌梗死、冠心病、心绞痛、充血性心力衰竭和其他心脏疾病)、慢性肺部疾病(如慢性支气管炎或肺气肿、肺心病)、肾脏疾病、肝脏疾病、中风(包括脑梗死和脑出血)、情绪、神经或精神问题、癌症或恶性肿瘤、关节炎或风湿病和记忆相关疾病(如老年痴呆症、脑萎缩、帕金森病)共14种慢性病患者数据,剔除有缺失值的样本,共收集13 487例中老年慢性病患者数据。CHARLS本轮调查已获得北京大学生物医学伦理委员会的批准(审批号:IRB00001052-11015)。

1.2 研究内容

1.2.1 人口学变量 纳入性别、年龄、受教育水平、居住地、与伴侣共同生活、患慢性病数量、子女满意度、社交活动数量、吸烟、饮酒、养老保险、医疗保险、躯体生活自理能力(basic activities of daily living, BADL)、工具性日常生活能力(instrumental activities

of daily living, IADL)、夜晚睡眠时间和午间睡眠时间为人口学变量。BADL纳入问卷第四部分健康状况和功能中编码为db001~db011的题目,包含上下床、穿衣、进食、如厕、洗澡和控制大小便6项;IADL纳入问卷第四部分健康状况和功能中编码为db012~db022的题目,包括购物、做家务、理财、打电话、吃药和做饭6项。BADL和IADL中,完成其中任何一项“不是无困难自主完成者”为功能受损,均为“无困难自主完成者”为功能未受损^[9];社交活动数量纳入问卷第四部分健康状况和功能中编码为da038的问题,题干为“过去一个月是否进行了下列社交活动”,进行任意1种活动计为1种。

1.2.2 生活满意度 采用问卷第四部分健康状况和功能中编码为dc026的题目评价生活满意度状况,该题题干为“总体来看,您对自己的生活是否感到满意”,题目为5点计分,分别为:“1”(非常满意)、“2”(比较满意)、“3”(有些满意)、“4”(比较不满意)和“5”(非常不满意)。将原问卷“非常满意”“比较满意”和“有些满意”选项重新编码为“1”(表示满意),将“比较不满意”和“非常不满意”选项重新编码为“2”(表示不满意)。

1.3 统计学方法

采用SPSS 26.0统计学软件进行数据分析。计数资料采用 $n(\%)$ 表示,采用 χ^2 检验;生活满意度的影响因素分析采用二元Logistic回归分析。 $P<0.05$ 为差异具有统计学意义。

2 结 果

2.1 一般人口学变量信息

共纳入13 487例慢性病患者。见表1。

2.2 中老年慢性病患者生活满意度在人口学变量上分布比较

中老年慢性病患者生活满意度在其性别、年龄、受教育水平、居住地、是否与伴侣共同生活、患慢性病数量、子女满意度、有无饮酒、是否有养老保险、是否有医疗保险、BADL受损情况、IADL受损情况、夜晚睡眠时间和午间睡眠时间上差异均有统计学意义($P<0.05$),在社交活动数量和是否吸烟上,差异无统计学意义($P>0.05$)。见表1。

2.3 慢性病患者现状和生活满意度状况

中老年慢性病患者所患慢性病种类较多,患高血压、胃或其他消化系统疾病的概率超过50%。见表2。

表1 中老年慢性病患者生活满意度在人口学变量上的分布比较(n,%)
Table1 Distribution of life satisfaction among middle-aged and elderly
chronic disease patients on demographic variables (n,%)

变量		例数	满意	不满意	χ^2 值	P值
性别	男	6 224	5 767(92.66)	457(7.34)	44.72	<0.001
	女	7 263	6 488(89.33)	775(10.67)		
年龄	45~54岁	858	738(86.01)	120(13.99)	36.55	<0.001
	55~64岁	4 490	4 050(90.20)	440(9.80)		
	65~74岁	4 778	4 366(91.38)	412(8.62)		
	75~84岁	2 699	2 486(92.11)	213(7.89)		
	85岁及以上	662	615(92.90)	47(7.10)		
受教育水平	文盲	3 887	3 530(90.82)	357(9.18)	13.39	0.004
	小学及以下	5 234	4 723(90.24)	511(9.76)		
	初中	2 806	2 547(90.77)	259(9.23)		
	高中及以上	1 560	1 455(93.27)	105(6.73)		
居住地	农村	10 035	9 044(90.12)	991(9.88)	25.92	<0.001
	城镇	3 452	3 211(93.02)	241(6.98)		
与伴侣共同生活	是	10 315	9 497(92.07)	818(7.93)	76.66	<0.001
	否	3 172	2 758(86.95)	414(13.05)		
患慢性病数量	1种	3 914	3 615(92.36)	299(7.64)	54.47	<0.001
	2种	3 445	3 169(91.99)	276(8.01)		
	3种	2 468	2 253(91.29)	215(8.71)		
	4种及以上	3 660	3 218(87.92)	442(12.08)		
子女满意度	满意	12 730	11 715(92.03)	1 015(7.97)	368.59	<0.001
	不满意	757	540(71.33)	217(28.67)		
社交活动数量	无社交活动	6 750	6 123(90.71)	627(9.29)	4.10	0.130
	1种	3 903	3 530(90.44)	373(9.56)		
	2种及以上	2 834	2 602(91.81)	232(8.19)		
吸烟	是	5 255	4 754(90.47)	501(9.53)	1.65	0.200
	否	8 232	7 501(91.12)	731(8.88)		
饮酒	是	4 769	4 391(92.07)	378(7.93)	12.98	<0.001
	否	8 718	7 864(90.20)	854(9.80)		
养老保险	有	11 593	10 572(91.19)	1 021(8.81)	10.68	0.001
	无	1 894	1 683(88.86)	211(11.14)		
医疗保险	有	12 930	11 781(91.11)	1 149(8.89)	23.28	<0.001
	无	557	474(85.10)	83(14.90)		
BADL	未受损	10 151	9 381(92.41)	770(7.59)	118.67	<0.001
	受损	3 336	2 874(86.15)	462(13.85)		
IADL	未受损	10 037	9 284(92.50)	753(7.50)	125.98	<0.001
	受损	3 450	2 971(86.12)	479(13.88)		
夜晚睡眠时间	≤6 h	5 300	4 692(88.53)	608(11.47)	59.28	<0.001
	6~8 h	5 436	5 005(92.07)	431(7.93)		
	≥8 h	2 751	2 558(92.98)	193(7.02)		
午间睡眠时间	≤1 h	7 723	6 906(89.42)	817(10.58)	45.62	<0.001
	1~2 h	4 159	3 855(92.69)	304(7.31)		
	≥2 h	1 605	1 494(93.08)	111(6.92)		

表 2 中老年慢性病患者慢性病患病情况($n=13\,487$)

Table 2 Chronic disease prevalence in middle-aged and elderly patients with chronic diseases ($n=13\,487$)					
慢性病种类	例数	患病率/%	慢性病种类	例数	患病率/%
高血压	7 728	57.30	肾脏疾病	2 005	14.87
胃或其他消化系统疾病	7 416	54.99	肝脏疾病	1 397	10.36
血脂异常	6 094	45.18	中风	1 385	10.27
哮喘	5 106	37.86	记忆相关疾病	781	5.79
心脏问题	4 020	29.81	情绪、神经或精神问题	587	4.35
糖尿病或高血糖	2 857	21.18	癌症或恶性肿瘤	494	3.66
慢性肺部疾病	2 762	20.48	关节炎或风湿病	273	2.02

中老年慢性病患者患 1 种慢性病的有 3 914 例, 患 2 种慢性病的有 3 445 例, 患 3 种慢性病的有 2 468 例, 患 4 种及以上慢性病的有 3 660 例。生活满意度状况为不满意的有 1 232 例, 满意的有 12 255 例。见表 3。

2.4 中老年慢性病患者生活满意度影响因素分析

年龄在 55 岁以上、夜晚睡眠时间在 6 h 以上、午

间睡眠时间在 1 h 以上是中老年慢性病患者对生活满意的保护因素($P<0.05$); 居住在农村、不与伴侣共同生活、患 4 种及以上慢性病、对子女不满意、没有医疗保险、BADL 受损、IADL 受损是中老年慢性病患者对生活满意的危险因素($P<0.05$)。性别、受教育水平、饮酒和养老保险的回归分析结果差异无统计学意义($P>0.05$)。见表 4。

表 3 生活满意度各选项编码前情况($n=13\,487$)

Table 3 Pre coding status of life satisfaction options ($n=13\,487$)					
选项	“1” (非常满意)	“2” (比较满意)	“3” (有些满意)	“4” (比较不满意)	“5” (非常不满意)
例数	884	4 656	6 715	979	253

表 4 中老年慢性病患者生活满意度影响因素的回归分析($n=13\,487$)

Table 4 Regression analysis of influencing factors on life satisfaction of middle-aged and elderly patients with chronic diseases (n=13 487)							
变量		参照变量	β	SE	Wald χ^2 值	P 值	OR 值(95%CI)
性别	女	男	0.13	0.07	3.51	0.06	1.14(0.99~1.31)
年龄/岁	55~64	45~54	-0.48	0.12	17.72	<0.001	0.62(0.49~0.77)
	65~74		-0.77	0.12	42.62	<0.001	0.46(0.37~0.59)
	75~84		-1.04	0.13	62.71	<0.001	0.36(0.28~0.46)
	≥85		-1.27	0.19	44.09	<0.001	0.28(0.19~0.41)
受教育水平	小学及以下	文盲	0.09	0.08	1.28	0.260	1.09(0.94~1.26)
	初中		0.06	0.09	0.45	0.500	1.06(0.89~1.26)
	高中及以上		-0.22	0.12	3.35	0.070	0.80(0.63~1.02)
居住地	城镇	农村	-0.27	0.08	11.82	0.001	0.76(0.65~0.89)
与伴侣共同生活	否	是	0.46	0.07	46.11	<0.001	1.59(1.39~1.81)
患慢性病数量/种	2	1	0.01	0.09	0.02	0.900	1.01(0.85~1.21)
	3		0.67	0.10	0.48	0.490	1.07(0.89~1.29)
	≥4		0.33	0.09	14.68	<0.001	1.39(1.17~1.64)
子女满意度	不满意	满意	1.36	0.09	227.58	<0.001	3.91(3.27~4.66)
饮酒	否	是	0.04	0.07	0.28	0.600	1.04(0.90~1.20)
养老保险	无	有	0.14	0.09	2.70	0.100	1.15(0.98~1.36)
医疗保险	无	有	0.46	0.13	12.10	0.001	1.58(1.22~2.04)
BADL	受损	未受损	0.33	0.08	19.26	<0.001	1.40(1.20~1.62)
IADL	受损	未受损	0.38	0.08	25.35	<0.001	1.47(1.26~1.70)

续表 4

变量	参照变量	β	SE	Wald χ^2 值	P 值	OR 值(95%CI)
夜晚睡眠时间/h	6~8	-0.19	0.07	6.89	0.009	0.83(0.72~0.95)
	≥ 8	-0.30	0.09	11.19	0.001	0.74(0.62~0.88)
午间睡眠时间/h	1~2	-0.29	0.07	16.03	<0.001	0.75(0.65~0.86)
	≥ 2	-0.37	0.11	11.33	0.001	0.70(0.56~0.86)

3 讨 论

本研究基于 2020 年 CHARLS 全国调查数据,结果显示中老年慢性病患者生活不满意比率为 9.13% (1 232/13 487)。与相似研究相比偏低,如芜湖农村老年人对生活不满意比率为 37.10%^[10]、中老年慢性病患者生活不满意比率为 11.50%^[11]。这反映了我国中老年慢性病患者对生活大致满意,但仍存在一定程度的不满意现状。对于不同研究中生活不满意比率的差异,可能存在以下原因:首先,不同研究采用的调查工具不同,导致其测量被试真实生活满意度的程度也有所不同;其次,样本差异(如群体特征、个人特征等)也会产生影响;最后,研究期间是否经历重大事件(如新型冠状病毒感染),亦会导致被试生活满意度的差异。

女性较男性对生活不满意的概率更高,这与女性的生活满意度显著低于男性的相关研究结果相似^[12]。但就生活满意度在性别的差异方面,不同的研究结果不同,也有研究表明老年女性的生活满意度高于老年男性^[13],而另一些研究则表明在生活满意度上无性别差异^[14],这可能与不同文化和社会背景下不同性别扮演的社会角色有关。

研究发现年龄高是生活满意度的保护因素,年龄越高,则对生活越满意,这与高收入国家老年人比中年人生活满意度更高的结果相似^[15];然而也有部分研究发现,较高的年龄与生活满意度呈负相关^[16],即年龄越高生活满意度越低^[17]。这种研究的差异可能与个体的主观年龄差异有关,美国中年面板数据显示,年轻的主观年龄能提高中老年人的生活满意度^[18],当个体有着较自己客观年龄更小的主观年龄时,就具有较强的心理弹性和适应力。他们更容易接受和适应慢性病带来的变化和限制,能够积极寻找方法改善生活质量;也有可能个体的年龄认同有关,有研究发现积极的年龄认同与生活满意度显著正相关^[19]。当个体积极认同自己的年龄时,可能倾向于接受自己处于中老年阶段,并将其视为生命旅程中的一部分。这种身份认同可以帮助他们更好地适应并接受与年龄相关的变化和挑战。

居住地为城市以及有医疗保险是生活满意度

的保护因素。这与现有研究结果相似,有研究发现城市居民的生活满意度显著高于农村居民^[20]、城乡医保融合政策显著提高农村居民的生活满意度等^[21]。从社会支持的角度来看,城市拥有更为完善的医疗资源和便利设施,医疗保险既减轻经济负担又能获得更多医疗服务和医疗资源。因此,中老年慢性病患者可以更容易地获得高质量的医疗服务和治疗,从而提高对疾病的控制和管理,减轻病痛带来的不适,增强生活质量,进而提高生活满意度。

与伴侣共同生活以及子女满意度高是中老年慢性病患者生活满意的保护因素。这与现有研究结果相似,有研究发现与配偶或子女同住的老年人的生活满意度显著高于独居的老年人^[22],以及与收容老人相比,与家庭同住的老年人生活满意度要更高^[23]。这可能是因为与伴侣共同生活可以提供稳定的情感支持和实际照顾,对子女感到满意意味着伴随着良好的家庭关系,有持续的社会互动,而社会互动对生活满意度有积极影响^[24],因此伴侣和子女的关心理解 and 实际照顾可以减轻患者的负担,提高其生活满意度。

患慢性病数量越多、BADL 受损、IADL 受损是生活不满意的危险因素。有研究表明慢性疾病的存在,日常生活中的身体限制对生活满意度有显著的负向影响^[25],这与本研究结果相似。身体疾病以及生活功能的受损直接影响个体的正常生活,使其受到疾病症状带来的痛苦、生活压力以及失控感,从而降低其生活满意度。

夜晚和午间睡眠时间越短,对生活不满意的概率更高,对睡眠质量的不满意与生活满意度降低显著相关的结果相似^[26]。睡眠时间是反映睡眠质量的一个重要指标,睡眠时间越短,个体感知的睡眠质量越低,越容易对生活产生不满意的感知。

本研究相较于既往研究有几个创新点,第一,本研究从综合因素出发,不仅聚焦于传统的健康因素如身体功能障碍等,还综合考虑了性别、年龄、居住地、医疗保险、家庭方面、慢性病数量等对中老年慢性病患者生活满意度的影响。多维度的分析框架,能更深入地揭示各因素对中老年慢性病患者生活满意度的影响,展现出更高的全面性与系统性,为进一步的干预和政策制订提供理论指导。第二,本研究的

重点是中国各地区的中老年慢性病患者,是一个多元、跨地区的样本,与单一地区或小规模样本的研究相比,更充分地考虑了文化与政策的差异,增强了研究结果的可靠性和适用性^[12]。第三,不同于将关注点集中在中老年群体,本研究聚焦于中老年慢性病患者群体,通过缩小研究范围,更加深入地揭示了这一特定群体的生活满意度现状及其影响因素,这种精准的聚焦使得研究结论更具现实意义。第四,本研究综合了社会学、医学和心理学多个学科的框架,对中老年慢性病患者生活满意度的影响因素进行了全面细致的剖析,跨学科的视角为更精准地理解和解决中老年群体在健康、心理以及社会层面上的挑战提供研究基础。

本研究也存在一定的局限性,第一,本研究采用横向数据,在因果关系上解释度没有纵向数据高,未来研究可基于跨时间角度,研究中老年慢性病患者生活满意度情况及其影响因素。第二,本研究的人口学变量选取不够完善细致,进一步研究可以从其他角度的变量,如宗教信仰、社会支持、生活安排质量、感知歧视等出发^[27]。第三,现有文献表明,家庭经济因素对中老年慢性病患者的健康状况干预效果不佳^[28],因此本文纳入养老保险和医疗保险作为社会相关经济层面影响因素进行研究,是将研究聚焦于慢性病患者。但家庭经济因素对于中老年慢性病患者健康的影响不可忽视,如个人收入等^[29]。未来研究应将全方面的经济因素纳入考虑,并进一步探讨其影响机制。第四,本研究中采用CHARLS问卷中一个条目作为中老年慢性病患者生活满意度的测量工具,存在缺乏全面性、主观性强、影响测量信效度等问题,未来研究可使用多维度量表,结合定量和定性方法,收集更客观、不同方面的生活满意度资料。

综上所述,中老年慢性病患者生活满意度受到年龄、居住地、与伴侣共同生活与否、患慢性病数量、子女满意度、医疗保险、BADL、IADL、夜晚睡眠时间和午间睡眠时间的影响。这提示针对中老年慢性病患者的心理健康,需要从家庭环境、社会支持的角度入手,创造良好家庭氛围,完善医疗保障体系,加强心理健康的监测和干预,如推动多学科团队合作,医生、心理学者和社会工作者合作,提供综合性护理,确保中老年慢性病患者在生理、心理上得到全方位看护;在政策制订上,要优化医疗保险覆盖范围,确保中老年群体负担起医疗保险服务,减轻其经济负担;在社区规划上,建立社区互助小组,形成患者及其家属的支持网络,互相分享经验,提供情感支持,并且定期开展健康讲座,提升中

老年人对慢性病管理的认识;在临床上,加强对患者健康状况的评估,如定期体检,采取个性化的治疗方案,及时调整药物和治疗计划等,以确保患者病情稳定,从而提升患者的生活满意度;在健康管理上,加强疾病管理教育,帮助患者掌握疾病管理知识,鼓励患者参与适合的运动项目,提供营养和饮食指导等,重视慢性病的综合管理。

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Analysis of the Current Status and Influencing Factors of Life Satisfaction among Middle-Aged and Elderly Patients with Chronic Diseases

ZHU Guochen¹, CHEN Zhuoming^{2*}

¹ School of Management, Jinan University, Guangzhou, Guangdong 510632, China;

² The First Affiliated Hospital of Jinan University, Guangzhou, Guangdong 510630, China

*Correspondence: CHEN Zhuoming, E-mail: zm120tchzm@qq.com

ABSTRACT Objective This study used the 2020 China health and retirement longitudinal study (CHARLS) data to explore the current status and influencing factors of life satisfaction among middle-aged and elderly patients with chronic diseases aged 45 and above in China, in order to provide scientific basis for health management and reveal potential paths to improve their life satisfaction. **Methods** The latest 2020 wave 5 national survey data released by CHARLS was used, and 13 487 middle-aged and elderly patients with chronic diseases over 45 years old were selected as the research subjects. Chronic disease data were collected using the question with the original questionnaire code da007; gender, age, education level, place of residence, living with a partner, number of chronic diseases, child satisfaction, number of social activities, smoking, alcohol consumption, pension insurance, medical insurance, basic activities of daily living (BADL), instrumental activities of daily living (IADL), nighttime sleep duration, and midday sleep duration were included as demographic variables. The life satisfaction of middle-aged and elderly patients with chronic diseases was collected using the original questionnaire code dc026. **Results** A total of 13 487 patients with chronic diseases were included. There were significant differences in life satisfaction among middle-aged and elderly patients with chronic diseases in the following aspects: gender, age, education level, place of residence, whether living with partners, number of chronic diseases, child satisfaction, alcohol consumption, whether having pension insurance, whether having medical insurance, BADL impairment, IADL impairment, nighttime sleep duration and midday sleep duration ($P < 0.05$). There were no statistically significant differences in the number of social activities and whether smoking ($P > 0.05$). Middle aged and elderly patients with chronic diseases suffered from a wide range of chronic diseases, with a probability over 50% for hypertension, stomach or other digestive system diseases. There were 3 914 middle-aged and elderly patients with one chronic disease, 3 445 patients with two chronic diseases, 2 468 patients with three chronic diseases,

and 3 660 patients with four or more chronic diseases. A total of 1 232 patients were dissatisfied with their lives, and 12 255 patients were satisfied. The results of binary logistic regression analysis showed that age range of 55-64 years (95%CI=0.49-0.77), 65-74 years (95%CI=0.37-0.59), 75-84 years (95%CI=0.28-0.46), and 85 years and above (95%CI=0.19-0.41), with a nighttime sleep duration of 6-8 hours (95%CI=0.72-0.95) and ≥ 8 h (95%CI=0.62-0.88), and a midday sleep duration of 1-2 hours (95%CI=0.65-0.86) and ≥ 2 h (95%CI=0.56-0.86) were protective factors for life satisfaction among middle-aged and elderly patients with chronic diseases ($P<0.05$); Living in rural areas (95%CI=0.65-0.89), not living with a partner (95%CI=1.39-1.81), having four or more chronic diseases (95%CI=1.17-1.64), being dissatisfied with children (95%CI=3.27-4.66), not having medical insurance (95%CI=1.22-2.04), impaired BADL (95%CI=1.20-1.62), and impaired IADL (95%CI=1.26-1.70) were risk factors for life satisfaction among middle-aged and elderly patients with chronic diseases ($P<0.05$). **Conclusion** Middle aged and elderly patients with chronic diseases in China have a high overall satisfaction with their lives. It is necessary from the perspective of family environment and social support to create a good family atmosphere, improve the medical security system, strengthen monitoring and intervention of mental health, and strive for the physical and mental health of middle-aged and elderly patients with chronic disease.

KEY WORDS chronic diseases; life satisfaction; middle aged and elderly; CHARLS; influencing factor

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(上接第 74 页)

Effect of Combined Treatment of Acupuncture and Tuina Massage on Rehabilitation of Joint Function after Ankle Fracture Surgery

LONG Teng¹, XU Ming¹, ZUO Yuxuan¹, ZHOU Qian², LU Qiyang¹, LI Naping^{2*}

¹ Hunan University of Chinese Medicine, Changsha, Hunan 410208, China;

² The First Hospital of Hunan University of Chinese Medicine, Changsha, Hunan 410011, China

*Correspondence: LI Naping, E-mail: 675265385@qq.com

ABSTRACT Objective To observe the effect of acupuncture and tuina combination therapy on postoperative joint function rehabilitation in patients with ankle fractures. **Methods** A total of 98 patients with ankle fractures admitted to the Department of Limb and Joint of the First Hospital of Hunan University of Chinese Medicine from June 2021 to June 2023 were selected. They were divided into two groups according to the envelope method, including 48 cases in the control group and 50 cases in the observation group. The control group was given rehabilitation function training from the day after surgery; the observation group was given combined acupuncture and massage treatment in addition to rehabilitation function training from the second to the seventh day after surgery. The differences in ankle Visual Analogue Scale (VAS) scores between two groups were evaluated on the first day after surgery, the first week after surgery, and the fourth week after surgery. The ankle swelling values and toe nailfold microcirculation indicators of the two groups were measured on the first day after surgery, the fourth week after surgery, and the twenty-fourth weeks after surgery. The differences in ankle joint range of motion, American Orthopaedic Foot & Ankle Society (AOFAS) scores, and activities of daily living (ADL) scores between two groups were compared on the first day after surgery, the fourth week after surgery, and the twenty-fourth weeks after surgery. **Results** Compared with the first day after surgery, the ankle pain scores and swelling values of both groups decreased at the first and fourth weeks after surgery ($P<0.05$). There was no statistically significant difference in the ankle pain score and swelling value between two groups on the first day after surgery ($P>0.05$), but the ankle pain scores and swelling values of the observation group decreased at the first week and fourth week after surgery compared with the control group ($P<0.05$). Compared with the first day after surgery, the number of vascular arches, the diameter of the arch top and the length of the input branches increased in both groups at the first week and fourth week after surgery ($P<0.05$). There was no statistically significant difference in the microcirculation indicators of the toe nailfold between two groups on the first day after surgery ($P>0.05$), but the number of vascular arches, the diameter of the arch top and the length of the input branches increased at the first week and fourth week after surgery compared with the control group ($P<0.05$). Compared with the first day after surgery, the range of motion of dorsiflexion, plantar flexion, eversion and inversion of both groups increased at the fourth week and twenty-fourth weeks after surgery ($P<0.05$). Compared with the control group, there was no statistically significant difference in the range of motion of the ankle joint in the observation group on the first day after surgery ($P>0.05$), but the range of motion of dorsiflexion, plantar flexion, eversion and inversion of the observation group increased significantly at the fourth week and twenty-fourth week after surgery ($P<0.05$). Compared with the first day after surgery, the AOFAS and ADL scores of both groups increased at the fourth week and twenty-fourth week after surgery ($P<0.05$). Compared with the control group, there was no statistically significant difference in the AOFAS and ADL scores between two groups on the first day after surgery ($P>0.05$), but the AOFAS and ADL scores of the observation group increased at the fourth and twenty-fourth week after surgery ($P<0.05$). During the treatment period, no adverse events such as subcutaneous ecchymosis or infection occurred. **Conclusion** Combined acupuncture and tuina therapy can promote the recovery of ankle joint function and improve the activities of daily living in patients after ankle fracture surgery.

KEY WORDS ankle fracture; ankle function, acupuncture; tuina; rehabilitation training; activities of daily living

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