

· 临床研究 ·

冠状动脉支架植入患者与家属疾病不确定感现况及其影响因素

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【摘要】目的 明确冠状动脉支架植入患者及家属疾病不确定感现况,探讨患者与家属疾病不确定感影响因素及其之间的相互影响。**方法** 采用整群抽样法选取 2020 年 5 月至 12 月空军军医大学第一附属医院心血管内科行冠状动脉支架术的 182 例患者及家属 182 名作为调查对象。通过中文版疾病不确定感患者量表 (MUIS-A) 和中文版疾病不确定感家属量表 (MUIS-FM),分别了解患者与家属的疾病不确定感现况,结合多元线性回归明确其影响因素。采用 SPSS 20.0 统计软件进行数据分析。根据数据类型,组间比较分别采用 *t* 检验、方差分析及 χ^2 检验。**结果** 冠状动脉支架术后 MUIS-A 得分为 (77.77±11.68) 分, MUIS-FM 得分为 (95.31±11.76) 分。不确定性是影响患者疾病不确定感的重要因素,不可预测性是影响家属疾病不确定感的重要因素。患者疾病不确定感的影响因素:患者学历 (初中和小学)、有并发症、家属对患者疾病的了解程度、患者收入、家属收入、家属不确定感总分 (均 $P<0.05$);家属疾病不确定感的影响因素:患者疾病不确定总分、家属家庭收入、家属健康状况较差及患者居住地 (农村和城市) (均 $P<0.05$)。**结论** 冠状动脉支架植入患者与家属存在不同程度的疾病不确定感,且二者之间有较强的相互作用,提示医护人员在实施干预的时候,需同时关注患者与家属这两个群体,以达到最佳效果。

【关键词】 冠状血管;支架;疾病不确定感;冠心病

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Uncertainty in illness in patients with coronary artery stenting and their families and its influencing factors

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【Abstract】Objective To clarify the current status of disease uncertainty in patients with coronary artery stenting and their families and explore the influencing factors of the uncertainty and their mutual influence. **Methods** A total of 182 patients who underwent coronary artery stent implantation in the Department of Cardiology of the First Affiliated Hospital of Air Force Military Medical University from May to December 2020 were subjected by cluster sampling, and their 182 family members were enrolled at the same time. Mishel uncertainty in illness scale for adults (MUIS-A) and Mishel uncertainty in illness scale for family member (MUIS-FM) were used to understand the current status of the disease uncertainty of patients and family members. Multiple linear regression analysis was employed to clarify its influencing factors. SPSS statistics 20.0 was applied for statistical analysis. Data comparison between two groups was performed using student's *t* test, Fisher exact test or *Chi*-square test depending on date type. **Results** The MUIS-A was (77.77±11.68) points in the patients after coronary stent implantation, and the MUIS-FM was (95.31±11.76) points in the family members. Uncertainty was an important factor affecting patient's disease uncertainty, and unpredictability was an important factor affecting family member's disease uncertainty. The influencing factors for the patient's disease uncertainty were educational level (junior high school *vs* elementary school), complications, patient's income, and family member's income, knowledge on the disease and total score of uncertainty (all $P<0.05$). The influencing factors of family member's disease uncertainty were total score of patient's disease uncertainty, family member's income, family members in poor health, and place of patient's residence (rural *vs* urban areas) (all $P<0.05$). **Conclusion** The patients with coronary artery stenting and their family members have varying degrees of disease uncertainty, and there is a strong interaction between them. Our results suggest that medical staffs should pay special attention to the patients and their family members at the same time when implementing interventions to achieve the optional outcomes.

【Key words】 coronary vessels; stents; disease uncertainty; coronary heart disease

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根据《中国心血管病报告心血管健康与疾病报告 2019》显示^[1], 心血管疾病是我国目前首要致死疾病, 其中冠心病患者约 1 100 万。目前, 经皮冠状动脉介入术(percutaneous coronary intervention, PCI) 已成为治疗冠心病患者的重要措施之一。但是, 与药物治疗相比, 患者和家属缺乏对于病程、住院、疾病手术治疗等相关事务的了解, 无法准确预测疾病预后而产生的一种认知体验, 也就是疾病不确定感^[2]。这不仅会影响患者的心理健康, 亦会对疾病康复造成负面影响。因此, 本研究调查冠状动脉支架植入患者及其家属的疾病不确定感, 分析其影响因素, 为医护人员的干预措施提供理论依据。

1 对象与方法

1.1 研究对象

采用整群抽样法选取 2020 年 5 月至 12 月空军军医大学第一附属医院心血管内科行冠状动脉支架术的患者及其家属作为调查对象。采用一对一配对方法, 在取得调查知情同意后, 在患者术后第 1 天对向患者及家属发放调查问卷, 共收集数据 188 份, 剔除无效问卷及未成问卷后, 有效问卷为 182 份。

1.2 方法

1.2.1 一般情况调查表 由调查者自行设计, 并通过专家组审核。包括患者及家属的一般情况、患者患病情况和家庭情况等 3 个方面共 32 个条目。

1.2.2 中文版疾病不确定感患者量表 采用由美国护理学家 Mishel^[3] 开发, 许淑莲等^[4] 翻译并修订的中文版疾病不确定感患者量表(Mishel uncertainty in illness scale for adults, MUIS-A), 共 25 条目, 包含不明确性(15 条目)与复杂性(10 条目)2 个维度。量表采用 Likert5 级评分法; 从“非常不同意”到“非常同意”分别计 1~5 分, 得分越高, 表示疾病不确定感水平越高。经检验^[5], 该量表脑卒中患者人群中具有较好的信度, Cronbach's α 系数为 0.85。

1.2.3 中文版疾病不确定感家属量表 采用由美国护理学家 Mishel^[6] 开发, 崔洪艳翻译并修订的中文版疾病不确定感家属量表(Mishel uncertainty in illness scale for family member, MUIS-FM)^[7], 共 30 条, 包括不明确性、复杂性、信息缺乏性及不可预测性 4 个维度。量表采用 Likert5 级评分法; 从“非常不同意”到“非常同意”分别计 1~5 分, 分数越高表示疾病不确定感水平越高。经检验^[5], 该量表脑卒中患者人群中具有较好的信度, Cronbach's α 系数为 0.85。

1.3 统计学处理

采用 SPSS 20.0 统计软件进行数据分析。计量资料用均数 $\pm$ 标准差($\bar{x}\pm s$)表示, 采用 t 检验或者方差分析。计数资料用例数(百分率)表示, 采用 χ^2 检验。相关性分析采用 Pearson 相关分析。选用多元线性逐步回归分析法进一步明确影响因素。 $P<0.05$ 为差异有统计学意义。

2 结果

2.1 患者与家属的疾病不确定感

患者疾病不确定感得分为 44~117 (77.77 $\pm$ 11.68) 分, 家属疾病不确定感等分为 70~136 (95.31 $\pm$ 11.76) 分, 详见表 1。

表 1 患者及家属疾病不确定感及各维度得分

Table 1 Patients and their families' disease uncertainty and scores in various dimensions (points)

Item	Scoring range	Score range	Average score ($\bar{x}\pm s$)	Item average score ($\bar{x}\pm s$)
MUIS-A				
Total score	20-125	33-106	72.23 $\pm$ 11.68	2.89 $\pm$ 0.47
Ambiguity	15-75	23-75	45.59 $\pm$ 8.35	3.04 $\pm$ 0.56
Complexity	10-50	10-38	26.64 $\pm$ 4.52	2.66 $\pm$ 0.45
MUIS-FM				
Total score	30-150	44-107	83.63 $\pm$ 11.44	2.79 $\pm$ 0.38
Ambiguity	13-65	16-57	37.37 $\pm$ 6.49	2.87 $\pm$ 0.50
Complexity	8-40	9-29	21.05 $\pm$ 3.77	2.63 $\pm$ 0.47
Lack of information	5-25	5-20	13.26 $\pm$ 2.63	2.65 $\pm$ 0.53
Unpredictability	4-20	4-20	11.95 $\pm$ 2.22	2.99 $\pm$ 0.55

MUIS-A; Mishel uncertainty in illness scale for adults; MUIS-FM; Mishel uncertainty in illness scale for family member.

2.2 患者与家属一般资料对疾病不确定感的影响

调查对象 182 例, 其中男性 153 例, 女性 29 例; 患者年龄(58.06 $\pm$ 11.73)岁; 家属年龄(41.72 $\pm$ 11.09)岁, 男性 73 名, 女性 109 名; 患者及家属学历均以初中或高中学历为主。单因素分析结果显示: MUIS-A 评分在患者婚姻状况、患者文化程度、患者自评经济压力、患者居住地、患者对疾病了解程度、患者家庭月收入及有无并发症方面比较, 差异均有统计学意义(均 $P<0.05$); MUIS-FM 评分在患者职业、患者自评经济压力、患者居住地、患者对疾病了解程度、住院次数及患者家庭月收入方面比较, 差异均有统计学意义(均 $P<0.05$; 表 2)。MUIS-A 评分在家属文化程度、住院费用承受状况、家属自评经济压力、家属对疾病了解程度及家属健康状况方面比较, 差异均有统计学意义(均 $P<0.05$); MUIS-FM 评分在家

属文化程度、家属职业、住院费用承受情况、家属自评经济压力、家属居住地、家属对疾病的了解程度、家属健康状况及家属家庭月收入等方面,差异均有统计学意义(均 $P<0.05$;表 3)。

2.3 患者与家属疾病不确定感的多元线性回归分析

以 MUIS-A 和 MUIS-FM 分别为因变量,将表 2 和表 3 中有统计学差异的变量作为自变量,根据自变量

类型设置哑变量(表 4),进行多元回归分析。结果显示,患者疾病不确定感的影响因素为患者学历(初中和小学)、有并发症、家属对患者疾病的了解程度、患者收入、家属收入、家属不确定感总分(表 5);家属疾病不确定感的影响因素为患者疾病不确定总分、家属家庭收入、家属健康状况较差、患者居住地(农村和城市),详见表 6。

表 2 患者一般人口学资料

Table 2 General demographic data of patients

Item	n(%)	MUIS-A			MUIS-FM		
		Score(points, $\bar{x}\pm s$)	t/F	P value	Score(points, $\bar{x}\pm s$)	t/F	P value
Marital status			3.319	0.038		2.047	0.132
Married	173(95.05)	72.42±11.59			83.88±11.36		
Divorced	4(2.20)	58.25±13.33			72.25±11.59		
Not married	5(2.75)	76.60±7.09			84.00±11.45		
Education			3.315	0.012		1.926	0.108
Primary school or below	26(14.29)	77.00±9.57			84.58±12.32		
Junior high school	65(35.71)	73.51±9.16			85.86±8.99		
Senior high school	50(27.47)	72.10±13.32			83.38±12.83		
Junior college	20(10.99)	68.25±11.85			80.65±12.87		
Bachelor degree and above	21(11.54)	66.42±14.09			78.95±11.18		
Occupation			1.936	0.077		2.394	0.030
Institution/Institution staff	22(12.09)	66.41±15.76			79.18±15.06		
Medical staff	3(1.65)	63.00±26.66			76.00±19.28		
Worker	21(11.54)	74.95±14.98			85.81±9.50		
Farmer	63(34.62)	74.33±9.11			86.98±8.01		
Individual	18(9.89)	72.67±8.36			80.28±15.26		
Retirees	48(26.37)	71.88±10.81			81.81±11.58		
Other	7(3.85)	68.57±6.11			85.14±7.58		
Self-assessment economic pressure			5.822	0.004		6.019	0.003
None/Mild	27(14.84)	70.04±11.21			79.04±14.40		
Moderate	81(44.51)	69.78±12.82			82.22±10.86		
Severe	74(40.66)	75.70±9.64			86.84±10.02		
Residence			3.783	0.025		4.484	0.013
City	74(40.66)	69.41±12.80			81.01±12.49		
County seat	40(21.98)	73.75±13.46			83.33±11.14		
Rural area	68(37.36)	74.39±8.36			86.65±9.70		
Understanding of disease			8.290	0.000		6.640	0.002
Know very well	41(22.53)	69.12±14.52			78.88±12.98		
General	120(65.93)	71.73±10.19			84.27±10.95		
Don't understand	21(11.54)	81.14±9.57			89.24±7.14		
Number of hospitalizations			0.743	0.477		4.353	0.014
Once	73(40.11)	73.01±9.34			86.11±9.95		
2-3 times	90(49.45)	71.20±13.46			81.14±12.29		
≥4 times	19(10.44)	74.01±10.79			85.84±10.50		
Patient's family monthly income(yuan)			4.652	0.004		7.403	0.000
Income <3 000	109(59.89)	74.16±10.79			85.80±10.23		
3 000≤ income <5 000	46(25.27)	71.22±12.12			82.48±11.98		
5 000≤ income <10 000	23(12.64)	64.61±12.91			74.48±11.80		
Income≥ 10 000	3(1.65)	74.67±4.73			90.33±8.74		
Complication			2.561	0.011		0.920	0.359
Yes	26(14.29)	77.58±8.15			85.54±10.59		
No	156(85.71)	71.33±11.96			83.31±11.57		

MUIS-A; Mishel uncertainty in illness scale for adults; MUIS-FM; Mishel uncertainty in illness scale for family member.

表 3 家属一般人口学资料

Table 3 General demographic data of family members

Item	n(%)	MUIS-A			MUIS-FM		
		Score(points, $\bar{x}\pm s$)	t/F	P value	Score(points, $\bar{x}\pm s$)	t/F	P value
Education			3. 192	0. 015		6. 548	0. 000
Primary school or below	7(3. 85)	76. 14±7. 47			90. 29±9. 11		
Junior high school	41(22. 53)	76. 29±7. 89			88. 56±6. 92		
Senior high school	46(25. 27)	73. 67±10. 54			85. 59±9. 99		
Junior college	36(19. 78)	69. 61±12. 52			81. 83±11. 48		
Bachelor degree and above	52(28. 57)	69. 02±13. 82			78. 35±13. 36		
Occupation			1. 067	0. 384		2. 778	0. 013
Institution/Institution staff	42(23. 08)	69. 62±13. 41			79. 86±12. 43		
Medical staff	8(4. 40)	68. 00±24. 80			77. 38±16. 67		
Worker	19(10. 44)	71. 47±7. 91			81. 79±11. 37		
Farmer	41(22. 53)	74. 17±7. 91			88. 37±8. 10		
Individual	27(14. 84)	75. 30±7. 87			84. 44±11. 55		
Retirees	19(10. 44)	72. 95±9. 34			86. 21±8. 22		
Other	26(14. 29)	71. 50±13. 78			82. 77±12. 17		
Relationship with patients			0. 879	0. 478		2. 084	0. 085
Spouse	67(36. 81)	70. 76±11. 36			84. 87±10. 70		
Parents	13(7. 14)	72. 46±7. 21			83. 46±8. 76		
Child	90(49. 45)	72. 60±12. 40			81. 76±12. 45		
Brothers and sisters	10(5. 49)	76. 90±12. 25			91. 30±6. 07		
Other	2(1. 10)	79. 50±6. 36			89. 00±4. 24		
Hospitalization expense acceptance status			3. 262	0. 041		5. 171	0. 007
Totally bearable	27(14. 84)	68. 67±11. 08			79. 19±12. 93		
Can bear	123(67. 58)	71. 96±12. 47			83. 34±11. 49		
Unbearable	32(17. 58)	76. 25±7. 35			88. 47±7. 91		
Self-assessment of economic pressure			7. 074	0. 001		7. 244	0. 001
None/Mild	31(17. 03)	70. 35±12. 35			79. 32±13. 53		
Moderate	85(46. 70)	69. 67±11. 92			82. 15±11. 87		
Severe	66(36. 26)	76. 39±9. 92			87. 55±8. 39		
Residence			2. 648	0. 074		7. 701	0. 001
City	82(45. 05)	70. 05±12. 83			80. 36±12. 91		
County seat	38(20. 88)	74. 24±13. 06			84. 18±10. 63		
Rural area	62(34. 07)	73. 87±8. 45			87. 61±8. 22		
Understanding of disease			12. 750	0. 000		16. 503	0. 000
Know very well	63(34. 62)	67. 13±13. 00			77. 70±13. 41		
General	107(58. 79)	74. 19±9. 91			86. 23±8. 54		
Don't understand	12(6. 59)	81. 50±8. 14			91. 50±9. 98		
Health status			3. 648	0. 028		8. 467	0. 000
Good	120(65. 93)	70. 58±12. 24			81. 22±12. 08		
General	54(29. 67)	75. 61±10. 28			88. 26±8. 85		
Poor	8(4. 40)	74. 00±6. 59			88. 50±4. 17		
Family monthly income(yuan)			1. 378	0. 251		7. 498	0. 000
Income <3 000	100(54. 95)	73. 61±9. 95			86. 83±9. 91		
3 000≤ income <5 000	48(26. 37)	70. 54±12. 04			80. 67±10. 72		
5 000≤ income<10 000	26(14. 29)	69. 42±14. 49			76. 81±13. 42		
Income ≥ 10 000	8(4. 40)	74. 13±18. 09			83. 50±14. 11		

MUIS-A; Mishel uncertainty in illness scale for adults; MUIS-FM; Mishel uncertainty in illness scale for family member.

表 4 多因素分析中自变量赋值表

Table 4 Assignment table of independent variables in multi-factor analysis

Independent variable	Assignment method
Patient education	Set dummy variables with reference to "primary school and below": junior high school (1, 0, 0, 0), high school (0, 1, 0, 0), junior college (0, 0, 1, 0), Bachelor degree and above (0, 0, 0, 1)
Patient occupation	Set dummy variables with reference to "institution/institution staff": medical staff (1, 0, 0, 0, 0, 0), workers (0, 1, 0, 0, 0, 0), farmer (0, 0, 1, 0, 0, 0), individuals (0, 0, 0, 1, 0, 0), retirees (0, 0, 0, 0, 1, 0), others(0,0,0,0,0,1)
Patient's marital status	Set dummy variables based on "not married": married (1, 0), divorced (0, 1)
Patient residence	Set dummy variables based on "city": county seat (1, 0), rural area (0, 1)
Family members' education	Set dummy variables with reference to "primary school and below": junior high school (1, 0, 0, 0), high school (0, 1, 0, 0), junior college (0, 0, 1, 0), Bachelor degree and above (0, 0, 0, 1)
Family members' marital status	Set dummy variables based on "not married": married (1, 0), divorced (0, 1),
Family members' occupation	Set dummy variables with reference to "institution/institution staff": medical staff (1, 0, 0, 0, 0, 0), workers (0, 1, 0, 0, 0, 0), farming (0, 0, 1, 0, 0, 0), individuals (0, 0, 0, 1, 0, 0), retirees (0, 0, 0, 0, 1, 0), others(0,0,0,0,0,1)
Family residence	Set dummy variables based on "city": county seat (1, 0), rural area (0, 1)

表 5 患者疾病不确定感的多元线性回归分析

Table 5 Multiple linear regression analysis of patients' disease uncertainty

Independent variable	Partial regression coefficient	SE	Standardized regression coefficient	t	P value
Constant	29.359	6.836		4.295	0.000
Patient education (junior high school <i>vs</i> primary school and below)	3.889	1.895	0.117	2.052	0.042
Have complications	5.244	1.870	0.157	2.805	0.006
Family's understanding of patient's disease	3.093	1.261	0.151	2.452	0.015
Patient's monthly income	-3.006	1.143	-0.199	2.630	0.009
Family monthly income	-2.974	1.021	-0.223	2.914	0.004
Family members' uncertainty score	0.555	0.064	0.543	8.697	0.000

$R^2=0.456$, Adjusted $R^2=0.437$, $F=24.330$, $P=0.000$.

表 6 家属疾病不确定感的多元线性回归分析

Table 6 Multiple linear regression analysis of family members' disease uncertainty

Independent variable	Partial regression coefficient	SE	Standardized regression coefficient	t	P value
Constant	45.461	4.515		10.070	0.000
Patient's uncertainty score	0.531	0.057	0.543	9.403	0.000
Family monthly income	-2.015	0.787	-0.155	-2.560	0.011
Family members being in poor health	3.196	1.159	0.159	2.757	0.006
Family residence (rural <i>vs</i> urban)	2.818	1.389	0.123	2.028	0.044

$R^2=0.448$, Adjusted $R^2=0.436$, $F=35.746$, $P=0.000$.

3 讨 论

本研究中,患者和家属在术前接受过手术及疾病相关知识的健康教育,患者也亲身经历过手术,但和其他慢性病^[8-10]相似,冠状动脉支架术后患者与家属的疾病不确定感的总均分均依旧高于各自总分的平均值,其中 85.2%的患者和 86.8%的家属依旧处于中等水平。在患者与家属疾病不确定的各自维度中,不确定性和不可预测性维度得分最高,这可能是由于冠状动脉支架术后患者的疾病病程长、并发症多、愈后不明确,使得患者与家属对疾病的相关情况了解不足,对愈后以及治疗效果存在担忧与焦虑,极易产生疾病不确定感。由此可见,术前的健康教育未能有效的消除术后患者与家属的疾病不确定

感。因此,在临床护理工作过程中,医护人员应根据患者和家属不同时期的特征与需求,开展具有针对性和时效性的健康教育。使用通俗易懂的语言介绍冠状动脉支架术后可能出现的不良反应,更重要的是教会患者和家属自我护理的方法,综合使用各种手段方法来降低患者与家属的疾病不确定感。

单因素分析结果显示,患者学历是影响其疾病不确定感的重要因素。进一步分析发现,当患者学历为小学时,其疾病不确定感最高,这与程书栋等^[11]、柏婷^[12]和周梅^[13]研究结果一致。与未发生并发症的患者相比,出现并发症后,患者疾病不确定感会增加。同时,患者疾病不确定感会受经济收入情况及家属对疾病了解程度的影响,患者和家属经济条件越好、家属对疾病越了解,患者的疾病不确定

感越低。分析原因可能是学历较低的患者,对疾病的了解程度有限,一旦出现并发症,必然会增加患者的经济负担和疾病不确定感,严重时甚至会引起患者紧张及焦虑,不利于疾病的治疗及预后,从而形成恶性循环。

本研究结果显示,家属收入和健康状况、患者居住地是影响家属疾病不确定感的主要因素,与既往研究结果一致^[14]。这可能是因为冠状动脉支架术后的患者需要长期治疗、定期复诊,治疗费用大。虽然医保现已全面普及,但手术中仍有些无法报销的费用,且手术住院期间,需要家属时刻陪伴。如果患者居住在农村,其就诊、复诊路途遥远,获取疾病相关知识的渠道相应较少,无形中增加了家属的照护压力,导致家属疾病不确定感增加。

本研究中,通过多元线性回归分析证实了冠状动脉支架术后患者疾病不确定感和家属疾病不确定感会相互影响,此研究结果也在肝癌住院患者、心脏瓣膜术前患者中得到证实^[15]。可见,在疾病治疗过程中,患者与家属不仅存在焦虑、抑郁、担忧等负性情绪方面的相互影响,其对疾病的认知也存在相互作用。当患者疾病不确定感增加时,会增加家属的疾病不确定感,使得家属对患者的照护质量下降、情感支持减弱,也会影响患者的治疗和愈后,进而增加患者的疾病不确定感。

综上,大部分冠状动脉支架术后患者和家属的疾病不确定感仍处于中等水平,且存在显著性的相互作用。因此,医护人员在治疗疾病的同时要关注这两个群体的疾病不确定感,在进行健康教育时,要及时对患者及其家属进行准确评估,制定科学有效的干预措施,降低二者的疾病不确定感,促进患者疾病康复。

【参考文献】

- [1] 《中国心血管健康与疾病报告 2019》编写组.《中国心血管健康与疾病报告 2019》要点解读[J]. 中国心血管杂志, 2020, 25(5): 401-410. DOI: 10.3969/j.issn.1007-5410.2020.05.001.
The Writing Committee of the Report on Cardiovascular Health and Diseases in China. Interpretation of Report on Cardiovascular Health and Diseases in China 2019[J]. Chin J Cardiovasc, 2020, 25(5): 401-410. DOI: 10.3969/j.issn.1007-5410.2020.05.001.
- [2] Mishel MH. Uncertainty in illness[J]. Image J Nurs Sch, 1988, 20(4): 225-232. DOI: 10.1111/j.1547-5069.1988.tb00082.x.
- [3] Mishel MH. Uncertainty in Illness Scales Manual[M]. Chapel Hill: University of North Carolina at Chapel Hill, 1997: 6-7.
- [4] 许淑莲, 黄秀梨. Mishel 疾病不确定感量表之中文版测试[J]. 护理研究, 1996, 4(1): 59-68. DOI: 10.26265/199603-4-1-59-68-a.
Xu SL, Huang XL. Chinese version test of Mishel disease uncertainty scale[J]. Chin Nurs Res, 1996, 4(1): 59-68. DOI: 10.26265/199603-4-1-59-68-a.
- [5] 彭晶. 脑卒中住院患者与家属疾病不确定感及其影响因素研究[D]. 西安: 第四军医大学, 2016: 23.

- Peng J. Study on the uncertainty and influencing factors of disease in hospitalized stroke patients and their families [D]. Xi'an: Fourth Military Medical University, 2016: 23.
- [6] Mishel MH. Adjusting the fit: development of uncertainty scales for specific clinical populations[J]. West J Nurs Res, 1983, 5(4): 355-370.
- [7] 崔洪艳. 慢性病患者家属疾病不确定感与社会支持、应对方式的相关性研究[D]. 延吉: 延边大学, 2010: 7-8.
Cui HY. The relationship among uncertainty in illness, social support and coping style about family members of patients with chronic disease[D]. Yanji: Yanbian University, 2010: 7-8.
- [8] 邵悦, 丁飏, 何英姿, 等. 老年冠心病住院患者疾病不确定感现状及影响因素分析[J]. 中国医学前沿杂志(电子版), 2020, 12(12): 145-149. DOI: 10.12037/YXQY.2020.12-29.
Shao Y, Ding B, He YZ, et al. Analysis of the current status and influencing factors of disease uncertainty in elderly patients with coronary heart disease [J]. Chin J Med Front (Electron Ed), 2020, 12(12): 145-149. DOI: 10.12037/YXQY.2020.12-29.
- [9] Byun E, Riegel B, Sommers M, et al. Caregiving immediately after stroke: a study of uncertainty in caregivers of older adults[J]. J Neurosci Nurs, 2016, 48(6): 343-351. DOI: 10.1097/JNN.0000000000000238.
- [10] 郝璐璐, 潘兴邦, 尹育华, 等. 健康教育对老年冠心病患者疾病不确定感及应对方式的影响[J]. 中国健康教育, 2021, 37(1): 67-70. DOI: 10.16168/j.cnki.issn.1002-9982.2021.01.014.
Hao LL, Pan XB, Yin YH, et al. Effect of health education on disease uncertainty and coping style among elderly patients with coronary heart disease [J]. Chin J Health Edu, 2021, 37(1): 67-70. DOI: 10.16168/j.cnki.issn.1002-9982.2021.01.014.
- [11] 程书栋, 彭丹丹, 张会君, 等. 高尿酸血症患者疾病不确定感与影响因素[J]. 中国老年学杂志, 2019, 39(2): 444-448. DOI: 10.3969/j.issn.1005-9202.2019.02.062.
Cheng SD, Peng DD, Zhang HJ, et al. Disease uncertainty and influencing factors in patients with hyperuricemia [J]. Chin J Gerontol, 2019, 39(2): 444-448. DOI: 10.3969/j.issn.1005-9202.2019.02.062.
- [12] 柏婷. 脑卒中患者卒中后抑郁与疾病不确定感、心理弹性的相关性研究[D]. 长沙: 湖南师范大学, 2019: 33.
Bai T. Post-stroke depression and uncertainty in illness, resilience in stroke patients [D]. Changsha: Hunan Normal University, 2019: 33.
- [13] 周梅. 喉癌患者疾病不确定感现状及影响因素分析[J]. 当代护士(中旬刊) 2021, 28(2): 62-65. DOI: 10.19792/j.cnki.1006-6411.2021.05.025.
Zhou M. The current status of disease uncertainty in patients with laryngeal cancer and analysis of influencing factors [J]. Contemp Nurse, 2021, 28(2): 62-65. DOI: 10.19792/j.cnki.1006-6411.2021.05.025.
- [14] 王彬, 阮丽娟, 马景丹, 等. 乳腺癌术后化疗患者家属疾病不确定感现状及影响因素[J]. 国际护理学杂志, 2021, 40(3): 421-425. DOI: 10.3760/cma.j.cn221370-20191206-00125.
Wang B, Ruan LJ, Ma JD, et al. Current status and influencing factors of disease uncertainty in family members of breast cancer patients undergoing chemotherapy [J]. Int J Nurs, 2021, 40(3): 421-425. DOI: 10.3760/cma.j.cn221370-20191206-00125.
- [15] 魏雪. 心脏瓣膜病患者和家属术前疾病不确定感现状及影响因素研究[D]. 合肥: 安徽医科大学, 2019: 52.
Wei X. Research on the status quo and influence factors of uncertainty of the diseases of patients with valvular heart diseases and their relatives [D]. Hefei: Anhui Medical University, 2019: 52.

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