



SCIENTIFIC LETTER

Correlation between self-efficacy and readiness to return to work in patients with type 2 diabetes mellitus



Correlación entre la autoeficacia y la disposición para volver al trabajo en pacientes con diabetes mellitus tipo 2

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Currently, the incidence of T2DM has shown a trend towards younger demographics, with an increasing proportion of young and middle-aged patients,¹ and the problem of returning to work after illness has attracted attention. For a long time, the harm of diabetes to human body may be underestimated to a great extent. The prolongation of the course of T2DM will increase the probability of absenteeism and unemployment, and the chance of returning to work is low.² Patients' return to work is influenced by many factors, involving individuals, families, society and other aspects, among which the readiness for return to work and self-efficacy play an important role in their return to work.³

The aim of this study is to investigate the current situation of T2DM patients' readiness to return to work and its related factors, and the correlation between readiness to

return to work and self-efficacy, so as to provide reference for formulating targeted intervention programs. For this purpose, 300 T2DM inpatients were selected as the research objects for a questionnaire survey from March 2023 to August 2023. The readiness for return-to-work (RRTW) scale⁴ and the return to work self-efficacy (RTW-SE) scale⁵ were used to investigate the research objects. The Pearson correlation test was used to analyze the correlation between the total score of RRTW scale and the total score of RTW-SE scale. Univariate analysis and multivariate linear regression were used to analyze the influencing factors of return to work readiness of the research objects.

The age range of 300 patients with T2DM was 20–64 years, with the average age was (46.31 ± 9.79) years. The total score of patients' readiness to return to work is (44.71 ± 4.97), the average item score of total score is (3.44 ± 0.38), the average item score of intention dimension is the highest, that is (3.96 ± 0.55), and the average item score of former intention dimension is the lowest, that is (3.09 ± 0.77). The results of univariate analysis show that

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Table 1 Results of univariate analysis and multivariate linear regression analysis of patients' readiness to return to work.

Variable	Univariate analysis				Multivariate linear regression analysis	
	<i>n</i> (%)	Total score of RRTW scale	Statistic	<i>P</i>	β (95%CI)	<i>P</i>
Total score of RTW-SE scale					0.60 (0.50 to 0.70)	<0.001
<i>Gender</i>			$t = -1.00$	0.318		
Male	223 (74.33)	44.54 \pm 4.95				
Female	77 (25.67)	45.19 \pm 5.01				
<i>Education level</i>			$F = 2.60$	0.076		
Junior high school and below	110 (36.67)	43.89 \pm 4.78				
High school or technical	89 (29.67)	45.44 \pm 5.27				
<i>Associate degree or above</i>						
College or above	101 (33.67)	44.95 \pm 4.81				
<i>Marital status</i>			$t = 0.45$	0.655		
Married	277 (92.33)	44.74 \pm 4.96				
Unmarried or divorced	23 (7.67)	44.26 \pm 5.13				
<i>Type of residence</i>			$t = -2.91$	0.004		
Village	12 (4.00)	40.67 \pm 4.03			Reference	
Cities and towns	288 (96.00)	44.88 \pm 4.94			2.29 (-0.44 to 5.03)	0.101
<i>Payment method of medical expenses</i>			$F = 0.98$	0.376		
Pay one's own expenses	47 (15.67)	44.70 \pm 5.97				
Residents' medical insurance	74 (24.67)	44.03 \pm 5.16				
Employee medical insurance	179 (59.67)	44.99 \pm 4.59				
<i>Occupation type</i>			$F = 4.22$	0.006		
Self-employed entrepreneur/businessman	41 (13.67)	42.78 \pm 4.87			Reference	
Worker	93 (31.00)	45.80 \pm 5.51			2.24 (-0.49 to 4.97)	0.109
Employees in enterprises/institutions	144 (48.00)	44.76 \pm 4.37			0.51 (-2.17 to 3.19)	0.710
Others	22 (7.33)	43.36 \pm 5.31			0.03 (-3.78 to 3.84)	0.986
<i>Personal monthly income</i>			$F = 18.32$	<0.001		

Table 1 (Continued)

Variable	Univariate analysis				Multivariate linear regression analysis	
	n (%)	Total score of RRTW scale	Statistic	P	β (95%CI)	P
Below 3000 yuan	18 (6.00)	43.61 \pm 3.60			Reference	
3000–5000 yuan	76 (25.33)	42.03 \pm 3.93			–2.13 (–4.37 to 0.12)	0.064
More than 5000 yuan	206 (68.67)	45.79 \pm 5.03			–0.48 (–2.73 to 1.78)	0.679
<i>Main source of income</i>			F = 3.21	0.042		
Individual income	40 (13.33)	43.35 \pm 5.51			Reference	
Salary	242 (80.67)	45.06 \pm 4.83			–0.82 (–3.43 to 1.79)	0.540
Family support or other	18 (6.00)	43.00 \pm 4.93			0.35 (–3.74 to 4.44)	0.866
<i>Course of diabetes mellitus</i>			F = 0.61	0.546		
Less than 1 year	66 (22.00)	44.65 \pm 5.57				
1–5 years	102 (34.00)	45.13 \pm 4.64				
More than 5 years	132 (44.00)	44.41 \pm 4.91				
<i>Have diabetic complications</i>			t = 2.87	0.004		
No	168 (56.00)	45.41 \pm 5.33			Reference	
Yes	132 (44.00)	43.81 \pm 4.32			–0.11 (–1.06 to 0.84)	0.823
<i>Accompanied by other diseases</i>			t = 2.28	0.024		
No	113 (37.67)	45.59 \pm 5.67			Reference	
Yes	187 (62.33)	44.17 \pm 4.42			0.04 (–0.93 to 1.00)	0.943
<i>Have a family history of diabetes</i>			t = –1.09	0.278		
No	191 (63.67)	44.47 \pm 4.80				
Yes	109 (36.33)	45.12 \pm 5.24				
<i>Smoking</i>			t = 0.40	0.688		
No	171 (57.00)	44.81 \pm 5.09				
Yes	129 (43.00)	44.57 \pm 4.81				
<i>Drinking wine/alcohol</i>			t = –0.95	0.344		
No	177 (59.00)	44.48 \pm 5.07				
Yes	123 (41.00)	45.03 \pm 4.82				

there are significant differences in the scores of readiness to return to work among different types of residence, occupation type, personal monthly income level, main sources of income, diabetic complications and complicated with other diseases ($P < 0.05$). As shown in Table 1, there is no significant correlation between age and readiness to return to work ($r = 0.014$, $P = 0.810$).

The total score of patients' self-efficacy in returning to work was (44.91 ± 4.70). Pearson correlation analysis showed that the correlation coefficients between the total score of patients' self-efficacy in returning to work and the total score of action preparation-action dimension, action preparation-self-evaluation dimension, intention dimension, former intention dimension and total score of return to work readiness scale were 0.48, 0.52, 0.17, 0.39 and 0.63, respectively, which were significant ($P < 0.001$). Multivariate linear regression analysis showed that the self-efficacy of returning to work was an independent influencing factor of patients' readiness to return to work ($P < 0.05$). The higher the self-efficacy level of returning to work, the higher the level of patients' readiness to return to work. As shown in Table 1, this study found that the level of return-to-work readiness of T2DM patients needs to be improved, and it is suggested that clinical medical staff should pay more attention to the return-to-work readiness of patients with occupational types, income, economic sources, having diabetic complications and accompanied with other diseases. There is a significant correlation between the self-efficacy of T2DM patients returning to work and their readiness to return to work. By strengthening medical and social support and enhancing their sense of self-efficacy, we can improve the patients' readiness to return to work, so as to promote their adaptation and return to their work roles.

Ethics approval and consent to participate

This study obtained ethical approval from the medical ethics committee of the First Affiliated Hospital of the University of Science and Technology of China, under the approval ID: 2023-KY-035. The study adhered to the principles delineated in the "Declaration of Helsinki". All the subjects signed the informed consent form for the study and agreed to participate in the questionnaire survey voluntarily.

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Conflict of interests

The authors assert the absence of any competing interests.

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