

재활정책

게시일시 및 장소 : 10 월 18 일(금) 08:30-12:20 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 10:16-10:20 Room G(3F)

## **P 1-29**

### **Job maintenance and related factors among workers with work-related injury who had returned to work**

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#### **Purpose**

Return to work(RTW) is a important for work-related injury workers, in that it enables economic income and psychological stability. However, even if they return to work, there is a considerable amount of cases in which employment does not continue due to reasons such as physical disability, aftermath of injury, poor work performance, and conflicts. In the Readiness for change model to return-to-work, proposed by Franche and Krause(2002), five stage in return-to-work process were conceptualized; precontemplation, contemplation, preparation for action, action, and maintenance. The Readiness for Return-To-Work (RRTW) scale based on this model can be used to identify the stage of maintenance after returning to work. This study aims to evaluate the validity of the Korean version of the Readiness of Return-to-work scale for workers who had returned to work, and explore related factors of maintenance stages.

#### **Methods**

Participants in this study were injured workers who had an accepted claim from the workers' compensation system following a work-related musculoskeletal injuries in Korea. They were recruited from patient lists who had returned to work after functional capacity evaluation or work hardening program. A total of 72 injured workers completed survey questionnaires. The RRTW scale for a sample of workers who had returned to work, developed by Franche and colleagues(2007), is a self-report measure and consists of 9 items with 2 sub-scales(proactive maintenance, uncertain maintenance). Exploratory factor analysis (EFA)(principal-axis factoring and Oblimin rotation) of RRTW items and logistic regression was used.

#### **Results**

The exploratory factor analysis using the original 9 items for the working sample revealed 2-factor model: item 1,2,3,4,5,and 8 for the Uncertain Maintenance dimension, and item 6 and 7 for the Proactive Maintenance dimension. In the total sample, 45.8%(n=33) belonged to the Uncertain Maintenance stage and 54.2%(n=39) to the Proactive Maintenance stage. The t-test results showed that PM group and UM groups differ among groups in areas of depression, fear-avoidance-work, social support, perceived job

performance, and workplace satisfaction. Logistic regression analysis showed that the workers who were over 40 years, returned to pre-injury job, and had lower depression were more likely to be in proactive maintenance stage than in uncertain maintenance stage.

## Conclusion

Psychometric properties of the Korean version of the RRTW scale for a working sample suggests that the readiness for change model to return-to-work is applicable to Korean workers with work-related injury. Policy attention should be paid to the maintenance phase after return-to-work and stage-specific services should be provided to meet workers' needs.

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Table 1. Mean item scores and factor loadings from Principal-axis factoring analysis of the RRTW (N=72)

	Item	Mean	SD	Factor loading	
				Factor1	Factor2
1	You are doing everything you can to stay at work	4.25	1.071	.652	.084
2	You learned different ways to cope with your pain so that you can stay at work	3.65	1.247	.642	.085
3	You are taking steps to prevent having to go off work again due to your injury	3.67	1.364	.735	.104
4	You found strategies to make your work manageable so you can stay at work	3.78	1.103	.921	-.042
5	You are back at work but not sure you can keep up the effort*	2.15	1.307	-.529	.402
6	You worry about having to stop working again due to your injury	2.88	1.528	-.356	.653
7	You still find yourself struggling to stay at work due to the effects of your injury	4.13	1.221	.189	.624
8	You are back at work and it is going well	3.97	1.100	.688	-.156
9	You feel you may need help in order to stay at work**				

note: Factor 1: Proactive Maintenance / Factor 2: Uncertain Maintenance

\* Item scale is reversed

\*\* Item 9 has been deleted as a result of factor analysis

Original scale : PM(1, 2, 3, 4), UM(5, 6, 7, 8, 9)

Table 2. Socio-demographic, Social, Physical and Psychological Frequency Analysis

Variable		Uncertain Maintenance	Proactive Maintenance	t
		(n=33)	(n=39)	
		n (%)	n (%)	
Gender	Male	26 (78.8)	35 (89.7)	
	Female	7 (21.2)	4 (10.3)	
Age	< 40	15 (45.5)	10 (25.6)	
	≥ 40	18 (54.5)	29 (74.4)	
	Mean(SD)	42.3 (10.26)	46.4 (8.91)	
Work hardening program participation status	Absence	5 (15.6)	15 (38.5)	
	Participation	27 (84.4)	24 (61.5)	
Change of workplace	Pre-injury	22 (66.7)	30 (76.9)	
	Another	11 (33.3)	9 (23.1)	
Working time	Part time	27 (84.4)	37 (97.4)	
	Full time	5 (15.6)	1 (2.6)	
Variable		Mean (SD)	Mean (SD)	
Pain (Monthly average)		5.48 (2.22)	5.00 (2.78)	.806
Depressive symptom		6.97 (5.76)	2.90 (3.49)	3.706***
Fear-Avoidance-Work		27.58 (8.40)	21.77 (7.73)	3.053**
Perceived social support		5.69 (0.91)	6.17 (0.68)	-2.472**
perceived job performance		6.48 (2.18)	8.11 (1.62)	-3.579**
Workplace satisfaction		3.02 (0.70)	3.58 (0.78)	-3.165**

Table 3. Predictive Factors of Proactive maintenance stage in RRTW (Logistic Regression)

Dependent variable	Independent variable	B	S.E	Wals	Exp(B)	P	
Stage of work maintenance (0=PM/ 1=UM)	Gender	1.460	1.006	2.107	4.308	.147	
	Age	-2.236	.784	8.140	.107**	.004	
	Work hardening program participation status	-1.460	.796	3.361	.232	.067	
	Change of workplace	1.884	.825	5.218	6.579*	.022	
	Pain (Monthly average)	.079	.160	.247	1.082	.620	
	Depressive symptom	-.275	.097	8.001	.759**	.005	
	Fear-Avoidance-Work	-.049	.054	.812	.952	.368	
	Perceived Social Support	1.193	.651	3.361	3.298	.067	
	Constant		-5.593	4.583	1.489	.004	.222
	Accuracy of classification		7.18%				
$\chi^2$		7.429					
-2 log likelihood		59.944					
Nagelkerke $R^2$		.552					

\* p<.05, \*\* p<.01, \*\*\*p<.001