



Factors related
to work
participation after hand
injuries among manual
workers

By:

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Scientific background statement of the problem:

epidemiology of hand injury

The incidence rate of hand injuries in manufacturing environments ranged from 4 to 11 per 100 workers per year.

(Sorock G, et al, 2001, Shi et al, 2014, Rosberg et al 2013)

HI account for approximately fifth of all cases presented to emergency departments in hospitals.

(Dias JJ et al, 2006, Atroshi I, et al, 2001, Rosberg et al, 2013)



Scientific background statement of the problem:

epidemiology of hand injury

We could not find information regarding the number of people who do not return to work after HI.

HI cause long duration of treatment and great community cost, Therefore, it is important to examine the factors that are affect participation in work after HI.

Scientific background factors relating RTW after HI

It is agreed that information related to medical conditions and objective medical findings are not the only factors that can predict RTW.

Current literature emphasizes the integration between medical, psychosocial, personal, and environmental variables in RTW.



Objectives

To determine time of return to work (TRTW) in relation to multivariable predictors among, male manual workers after hand injury (HI) over 12-month follow-up.



R esults

Sample: 178 subjects (90 Arabs, 88 Jews).

Age: $M = 37.4$, $SD = 11.0$.

Nature of work	N (%)
Skilled workers	78 (43.8)
Production, agriculture, unskilled labor	39 (21.9)
Construction	25 (14.0)
Driver	21 (11.8)
Service industry	15 (8.4)

R esults

70.1% occurred during working hours

Type of injury	N (%)
Fracture	69 (38.8)
Tendon Injury	34 (19.1)
Soft tissue Injury	34 (19.1)
Amputation	19 (10.7)
Injury involving >1 compartment of the hand	19 (10.7)

Employment profile of the study cohort (N=178)

Employment profile	All study cohort		Jewish		Arab		Value (X ²)	Sig
	N	%	N	%	N	%		
RTW by 3 months	66	37.1	40	45.5	26	28.9	5.23	.030
Not working	112	62.9	48	54.5	64	71.1		
RTW by 6 months	115	65	62	70.5	53	59.6	2.31	.128
Not working	62	35	26	29.5	36	40.4		
RTW by 9 months	130	73.9	69	78.4	61	69.3	1.88	.170
Not working	46	26.1	19	21.6	27	30.7		
RTW by 12 months	134	75.3	70	79.5	64	71.1	3.10	.212
Not working	42	24.7	18	20.5	24	26.7		

Results

Subjects who RTW after 12m

Mean time of RTW: 121 days, SD = 68.3 days.

Median TRTW: 94 days.

90% returned to the same workplace and same work position.

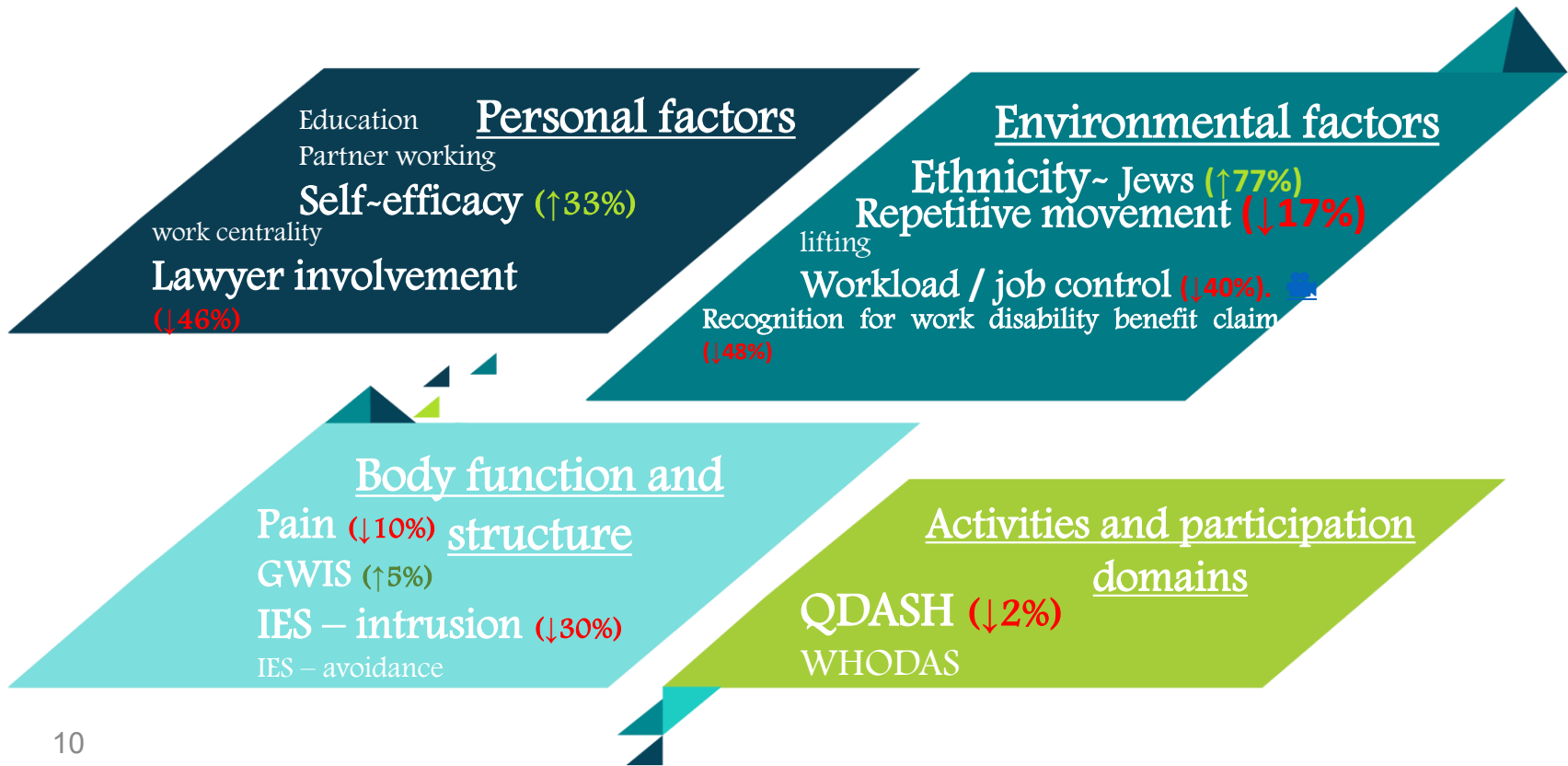


13.8% returned to reduced working hours.

10.6% of participants had work restrictions.

Only two participants were in NII work rehabilitation programs or in the process of entering such a program.

TRTW as a function of variables, divided to ICF domains: multiple Cox regressions of 12-month follow-up





D

iscussion:

In practice, some of the predictors are beyond the control of care givers but:


It should become central in understanding its effect on work participation.

It should be taken into account in the assessment and intervention process in order to promote RTW

C onclusions:

Underling the multi aspects in
the rehabilitation process

Some of the predictors can be modified with specific interventions

- ✓ Physical capability of the hand.
- ✓ Pain management.
- ✓ Psychosocial aspects.
- ✓ Personal and environmental aspects.
- ✓ Focus on work activities 

C onclusions:

- ✓ Developing treatment programs (work hardening programs) for those who are at risk for not RTW, taking into consideration these factors.
- ✓ Explore and use coping strategies during the rehabilitation process.
- ✓ Examine novel interventions to improve employment outcomes, specifically interventions that take in consideration the cultural uniqueness of different ethnic groups (attitudes and beliefs about illness and disability).



Thank
You