

Correlation of pain and life satisfaction among persons with haemophilia

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INTRODUCTION

The fact, proven by many research, is that in their lives persons with haemophilia are often faced with severe or slight pain. In this paper we tried to examine relation between it's severity and frequency, as well as discover what is the pain frequency and intensity's influence on the life satisfaction among persons with haemophilia.

RESULTS

Negative correlation with life satisfaction is shown by both pain intensity ($r=-0,243$; $p=0,005$) and frequency ($r=-0,348$; $p=0,000$), while the regression analysis pointed only to pain frequency as significant predictor of life satisfaction ($\beta=-0.347$; $p=0.003$ / $\beta=0.001$; $p=0.990$). In relation to some other determinants of life satisfaction, such as 3 domains of the personal well-being scale: life accomplishments ($\beta=0.288$; $p=0.005$), material conditions ($\beta=0.240$; $p=0.010$) and social relationships ($\beta=0.191$; $p=0.020$), pain frequency remained significant predictor of life satisfaction ($\beta=-0.207$; $p=0.036$) and pain intensity insignificant ($\beta=0,137$; $p=0.166$). In addition, we also separately analysed the influence of pain on various aspects of daily functioning: mood, mobility, sleeping, work, and recreation. All deficiencies caused by pain are in negative correlation with life satisfaction, but observed concurrently, in a regression model, sleep deprivation will take priority and remain the only significant predictor of (lesser) general life satisfaction ($\beta=-0.403$; $p=0.002$).

Table 2: Descriptive statistics

	Minimum	Maximum	Mean	Std. Deviation
Pain frequency	1 (Never)	4 (Every day)	2,56	1,012
Pain intensity	1 (No pain)	5 (Extreme pain)	2,64	0,932
General life satisfaction	1 (Not at all)	5 (Completely)	3,63	0,952
Satisfaction: material conditions	1 (Not at all)	10 (Completely)	5,47	2,740
Satisfaction: life accomplishments	1 (Not at all)	10 (Completely)	6,29	2,439
Satisfaction: social relationships	1 (Not at all)	10 (Completely)	7,81	2,174
Influence of pain on mood	1 (Not at all)	5 (Very strong)	2,55	1,051
Influence of pain on mobility	1 (Not at all)	5 (Very strong)	2,62	1,143
Influence of pain on sleeping	1 (Not at all)	5 (Very strong)	2,27	1,149
Influence of pain on work	1 (Not at all)	5 (Very strong)	2,46	1,329
Influence of pain on recreation	1 (Not at all)	5 (Very strong)	2,85	1,333

CONCLUSION

The negative correlation of pain intensity and frequency with daily functioning and life satisfaction makes evident, as expected, that the presence of pain degrades the level of life satisfaction among persons with haemophilia. Additional analyses point to the probability of becoming relatively accustomed to pain in certain contexts; however, it seems that this is not possible if the pain causes sleep deprivation.

METHODS

Survey among adults with haemophilia was conducted in Croatia (N=135). General life satisfaction was assessed on a 5-point rating scale, whereas 10-point scales, extracted from the Personal Wellbeing Index – PWI (Cummins, 2002), were used to measure satisfaction with material and social aspects of life and life accomplishments. Pain frequency was measured on a 4-point scale, while pain intensity and its influence on mood, mobility, sleeping, work and recreation was measured on 5-point scales (Sherbourne, 1992).

Table 1: Clinical and demographic characteristics

Type of hemophilia	N	%
Hemophilia A	110	81,48
Hemophilia B	24	17,78
Level of hemophilia		
Severe	55	40,74
Moderate	21	15,56
Mild	30	22,22
Unknown	29	21,48
Inhibitors		
Yes	15	11,11
No	67	49,63
Unknown	53	39,26
Age		
≤ 30 years	43	31,85
31-40 years	35	25,93
41-50 years	24	17,78
≥ 51 years	31	22,96
Unknown	2	1,48

Table 3: Correlations of variables included in the analysis with pain frequency and intensity

		Pain frequency	Pain intensity
General life satisfaction	r	-0,358	-0,243
	p	0,000	0,005
Satisfaction with material conditions	r	-0,317	-0,290
	p	0,000	0,001
Satisfaction with life accomplishments	r	-0,342	-0,379
	p	0,000	0,000
Satisfaction with social relationships	r	-0,260	-0,185
	p	0,002	0,034
Influence of pain on mood	r	0,586	0,624
	p	0,000	0,000
Influence of pain on mobility	r	0,692	0,723
	p	0,000	0,000
Influence of pain on sleeping	r	0,563	0,522
	p	0,000	0,000
Influence of pain on work	r	0,638	0,645
	p	0,000	0,000
Influence of pain on recreation	r	0,694	0,653
	p	0,000	0,000

Table 4: Determination of general life satisfaction (regression analyses)

	Predictors	Beta	p
1st analysis	Pain frequency	-0.347	0.003
	Pain intensity	-0.001	0.990
2nd analysis	Pain frequency	-0.207	0.036
	Pain intensity	-0.137	0.166
	Life accomplishments	0.288	0.005
	Material conditions	0.240	0.010
	Social relationships	0.191	0.020
3rd analysis	Influence of pain on mood	-0.178	0.170
	Influence of pain on mobility	0.079	0.600
	Influence of pain on sleeping	-0.403	0.002
	Influence of pain on work	-0.095	0.522
	Influence of pain on recreation	0.022	0.860

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