

# Identifying variables associated with self-reported emotional reactivity among cancer patients

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## Conclusion

Emotional reactivity was associated with:

1. Anxiety
2. Married/co-habiting
3. Avoidance
4. Prostate cancer
5. Co-morbidity

## Aim

To identify variables, before start of an individual stress management intervention, associated with emotional reactivity among patients with different cancer diagnosis

## Patients

Consecutive 291 patients ( $\geq 18$  years) with a recent diagnosis of cancer were included [Table 1]. They were scheduled for adjuvant oncology treatment

## Data collection

Data were collected by self-report questionnaires including background data, the Hospital and Anxiety Scale (HADS), the Impact of Event Scale (IES) and the Everyday Life Stress Scale (ELSS)

Independent variables for the model was selected according to results from previous studies and clinical expedencies

Table 1: Descriptive results for dependent and independent variables

Total N=291(%)	Breast cancer N=123(42%)	Prostate cancer N=124(43%)	Colorectal cancer N=24(8%)	Testis cancer N=11(4%)	Lymphoma N=9(3%)
Co-morbidities	45(38)	60(49)	8(33)	4(36)	3(33)
Missing	4(3)	2(2)			
Age					
Mean (SD)	57(9)	68(5)	59(10)	37(11)	58(12)
Minimum(Maximum)	30(81)	55(77)	35(76)	22(55)	32(68)
Marital status					
Married/co-habited	90(73)	104(84)	19(79)	8(73)	7(78)
Widow/separated					
/divorced/single	33(27)	20(16)	5(21)	3(27)	2(22)
Houshold $\geq 2$	98(81)	104(85)	20(83)	11(100)	8(89)
Missing	2	1			
Children <18 year living at home	31(28)	4(4)	6(27)	5(50)	2(33)
Missing	13	29	2	1	3
Income - Nkr					
Mean (SD)	799.000 (609.000)	598.000 (329.000)	764.000 (548.000)	843.000 (468.000)	553.000 (272.000)
Physical Activity – fitness centres /sports team	37(30)	17(49)	7((29)	2(18)	4(44)
Missing		2			
HADS-Anxiety					
Mean(SD)	5(4)	3(3)	4(3)	5(2)	5(3)
HADS-Depression					
Mean(SD)	3(10)	2(2)	2(2)	4(3)	2(1)
IES-Intrusion					
Mean(SD)	9(7)	6(6)	9(8)	10(8)	9(4)
Missing	1	1			
IES-Avoidance					
Mean(SD)	11(8)	8(7)	10(7)	9(7)	9(5)
Missing	1	1			
ELSS					
Mean(SD)	16(10)	18(11)	14(11)	19(9)	16(8)

Table 2: Results of the stepwise regression analyses

ELSS	Unstandardized coefficients B	95% Confidence Interval for B	Standardized coefficients Beta
HADS-Anxiety	1.239	.846 – 1.633	.386***
HADS-Anxiety	1.203	.815 – 1.591	.375***
Marital status (married=1 and single=0)	4.758	1.529 – 7.988	.178**
HADS-Anxiety	.866	.409 – 1.323	.270***
Marital status	4.721	1.535 – 7.906	.177**
IES-Avoidance	.276	.071 - .480	.191**
HADS-Anxiety	.971	.511 – 1.430	.302***
Marital status	4.175	.998 – 7.353	.156**
IES-Avoidance	.293	.090 - .496	.203**
Diagnosis (breast =0 and prostate =1)	3.247	.687 – 5.807	.155*
HADS-Anxiety	.935	.477 – 1.392	.291***
Marital status	4.446	1.279 – 7.613	.166**
IES-Avoidance	.286	.085 - .488	.199**
Diagnosis	2.902	.337 – 5.467	.139*
Co-morbidities (=1 and no co-morbidities=0)	2.556	.051 – 5.061	.121*

Abbreviation: \*ps.05; \*\*ps.01; \*\*\*ps.0001

## Result

Descriptive results are presented in Table 1

A stepwise regression analysis were performed to determine how much of the variance in self-rated emotional reactivity at baseline could be explained by the independent variables

Emotional reactivity was primarily associated with anxiety [Table 2] which explained 14% of the variance and thereafter with marital status (3%), avoidance (2%), diagnosis (2%) and co-morbidities (1%) [Table 2]

## Trial registration

ClinicalTrials.gov  
no.: NCT01588262

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