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DEPRESSIVE MOOD AND ITS INFLUENCE ON PERCEIVED HEALTH COMPETENCE AND QUALITY OF LIFE IN ESSENTIAL HYPERTENSION[1]

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RESUMEN

150 pacientes hipertensos fueron evaluados sobre estado de ánimo negativo (depresión), competencia percibida en salud y calidad de vida (80 de ellos fueron evaluados en una segunda ocasión). Los resultados demuestran que los pacientes con altos niveles de depresión informan de una menor competencia percibida en salud, sin diferencias prospectivas entre ellos. Resultados similares se encontraron en las puntuaciones sobre calidad de vida.

Palabras clave: ***ESTADO DE ÁNIMO DEPRESIVO EN HIPERTENSIÓN, COMPETENCIA PERCIBIDA EN SALUD Y CALIDAD DE VIDA EN HIPERTENSIÓN.***

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SUMMARY

150 hypertensive patients are assessed (80 in a second trial) for negative mood state, perceived health competence (PHC) and quality of life (QOL). Results show that patients with high levels of depression reported lower concurrent PHC, without prospective differences among them. Similar results are found in the QOL scores.

Key words: ***DEPRESSIVE MOOD IN HYPERTENSION, PERCEIVED HEALTH AND QUALITY OF LIFE IN HYPERTENSION.***

INTRODUCTION

- Depression is a negative emotion highly prevalent in cardiovascular disease (CAD). Increasing evidence has focused on the psychological outcomes, linked to this emotional state, and that can affect cardiovascular events over time (Swenson, & Clinch, 2000; Wielgosz, & Nolan, 2000).
- One possible outcome is Perceived Health Competence (PHC; Smith et al., 1995). This factor has demonstrated to be an important personal resource against depressive state in chronic disease (Arora et al., 1995).
- Another relevant outcome is Quality of Life (QOL). Both concurrent and prospective studies have supported the deleterious effects of depression on physical and psychological well-being in CAD (Brink et al., 2002; Landreville, & Vezina, 1994).
- Essential Hypertension (EA) represents an important risk factor for CAD. There is great consensus about the role of depression in the etiology of hypertension (Simonsick et al., 1995). Nevertheless, the influence of this emotional state on PHC and QOL over time has been somewhat neglected.
- Some investigations have revealed that hypertensive patients with high level of depression report lower perception of mastery over health issues (Powers, & Jalowiec, 1987), and lower scores on emotional functioning and mental well-being (Chambers et al., 2002). These findings have been, however, cross-sectional.

- In order to detect patterns of adjustment and design effective interventions, longitudinal research concerning the prospective effects of depression on PHC and QOL is needed.

AIMS

- To investigate differences in PHC and QOL in high vs. low depressed hypertensive patients
- To analyse if differences between high and low depressed patients on the above-mentioned variables are maintained after a short period of time

HYPOTHESIS

- High depressed hypertensive patients will report lower levels of PHC and QOL compared with low depressed patients (Time1)
- The differences between high vs. low depressed patients on PHC and QOL will be found after a short period of time (Time2)

METHOD

Subjects

- 150 hypertensive patients at Time1. Mean age= 53 years (SD= 11.84). Gender distribution: 50% males – 50% females.
- 80 patients continued at Time2. Mean age= 53 years (SD= 11.84). Gender distribution: 55% males – 45% females.

Procedure

- Participants were selected from the patients who went to the hypertension unit of San Carlos hospital for a periodical check-up, or to undergo treatment.
- When finished the medical check-up, they were delivered a questionnaire to complete at home and return by post (Time1)

- After three months (Time2), another questionnaire was mailed to the participants who had agreed to continue in the research (N=116). The rate response was 70%.
- Depressive mood state, PHC and QOL (dimensions of Well-Being and Satisfaction) were measured at both Times.

Measures

- *Negative Mood State* (HAD; Zigmond, & Snaith, 1983). This questionnaire comprises two subscales (Depression and Anxiety). In this study only depression subscale was considered (7 items). Higher scores indicated high depression
- *Perceived Health Competence* (PHCS; Smith et al., 1995). This 8-item instrument assesses the competence beliefs about managing health issues
- *Quality of Life* (QOLQ; Ruiz, & Baca, 1993). This scale consists of four subscales (Social Support, Satisfaction, Well-Being and Free Time). In this research only Satisfaction and Well-Being were considered.

Table 1.- Reliability coefficients for all the scales at Time1 and Time2

	DEPRESSION		*PHC*		*SATISFACTION*		*WELL-BEING*	
	Time1	Time2	Time1	Time2	Time1	Time2	Time1	Time2
Cronbach´s α	.80	.87	.69	.58	.90	.90	.88	.88

RESULTS

Two MANOVAs were performed to determine whether high and low depressed patients differed on PHC, Satisfaction and Well-Being at both moments

TIME1:

- Two groups were formed based on the Median (Mdn=11) of the Depression scale at Time1: High depressed group (N=64) – low depressed group (N=83)
- The MANOVA on PHC and dimensions of QOL was significant: $F_{(3,143)=}14.87$, $p<.001$ (Table 2)
- Posteriori ANOVAS revealed that high depressed participants reported lower scores on PHC, Satisfaction and Well-Being (Figure 1).

Table 2.- Multivariate analyses for PHC and QOL (Time1)

Measures	df	F	HIGH DEPRESSED GROUP	LOW DEPRESSED GROUP
Multivariate	3,143	14.87***		
PHC	1,146	18.01***	26.05	29.27
SATISFACTION	1,146	33.30***	40.30	48.37
WELL-BEING	1,146	34.42***	20.73	26.55

***p<.001

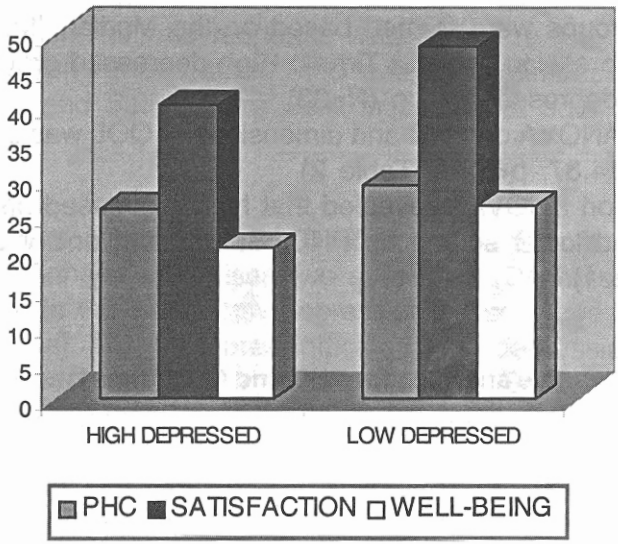

Figure 1.- Comparison between high depressed and low depressed group (Time1)

TIME2:

- Both levels of depression at Time1 and Time2 were used as independent variables in this MANOVA
- Another two groups were formed, based on the Median (Mdn=10) of the Depression scale at Time2: High depressed group (N=33) – low depressed group (N=44)
- The MANOVA on PHC and dimensions of QOL was only significant for depression at Time2: $F_{(3,71)}=6.27$, $p<.001$ (Tables 3 and 4)
- Posteriori ANOVAS revealed that:
  - High depressed participants at Time2 reported lower scores on PHC and Well-Being (Figure 2).
  - High depressed participants at Time1 tended to be lower on Satisfaction (Figure 2).

Table 3.- Multivariate analysis for PHC and QOL (Time2)

Measures	df	F	HIGH DEPRESSED (Time1)	LOW DEPRESSED (Time1)
Multivariate	3,71	1.69		
PHC	1,76	2.04	27.08	28.41
SATISFACTION	1,76	3.52+	43.02	46.91
WELL-BEING	1,76	1.68	23.56	25.41

+p=.06

Table 4.- Multivariate analysis for PHC and QOL (Time2)

Measures	df	F	HIGH DEPRESSED (Time2)	LOW DEPRESSED (Time2)
Multivariate	3,71	6.27***		
PHC	1,76	6.72*	26.54	28.95
SATISFACTION	1,76	3.18	43.11	46.81
WELL-BEING	1,76	17.56***	21.49	27.48

***p<.001 *p<.05

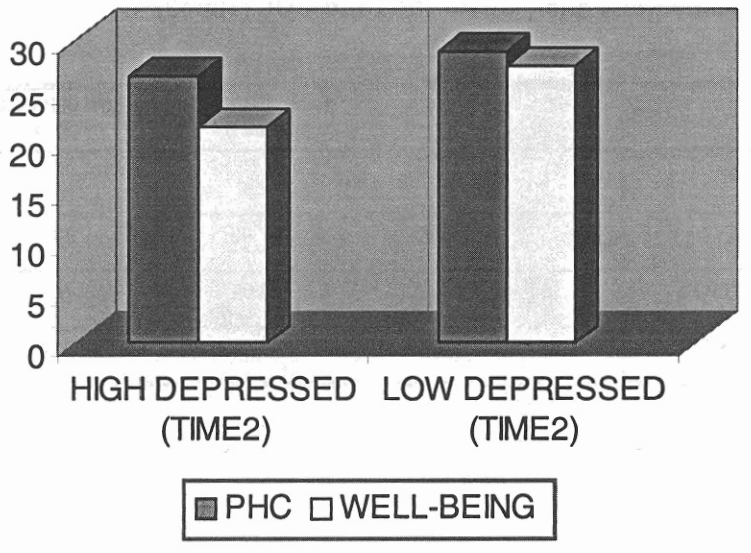

Figure 2.- Comparison between high depressed and low depressed groups (Time2)

DISCUSSION

- The findings show that patients with high levels of depression at Time1 and Time2 reported lower concurrent PHC. No prospective differences were found
- These results supports the notion that depressive mood state is accompanied by a sense of helplessness at different moments of the course of EH (Powers, & Jalowiec, 1987)
- Following helplessness theory (Abramson et al., 1978), it is likely that this negative emotion promotes in hypertensive patients, either the perception of being incapable of managing health successfully, or the belief that the performed actions are not appropriate to control it
- Concerning QOL, high depressed participants at both Times scored lower on concurrent well-being. Less general satisfaction was only reported by high depressed participants at Time1.

- These data reflect the deleterious effects of depressive mood state on various domains of QOL (Chambers et al., 2002), broadening the type consequences that depression can have on EA
- On the other hand, they evidenced that well-being is one of the most negatively affected dimension. As depression tends to erode adherence (Wing et al., 2002), it is possible that high depressed patients felt worse as a result of their unhealthy lifestyle, and due the lack of adherence to medical therapy.

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