

Health-Related Quality of Life for Patients with Chronic Conditions: Revealing the Profile of Burden Associated with Comorbid Physical and Mental Conditions in Respondents from Five European Countries

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Background

- Studies often examine the impact of specific chronic conditions (CC) in isolation or in conjunction with another specific CC.
- A few studies examining the effect of mental-physical comorbidity on disability [1-3], across conditions and countries, suggested that physical-mental comorbidity has a synergistic impact on disability.
- In a recent study [4] of the US general population those with mental CCs had further reductions in mental health in the presence of physical comorbid CCs. Similarly, those with physical CCs had further reductions in physical health when mental conditions co-occurred.
- There is a need to better understand the additional burden associated with physical-mental comorbidity.

Objectives

The objectives of this study were to compare:

- the effect of 1+ physical CC in the presence of 1+ mental CC versus the effect of 1+ physical CC only on physical and mental health;
- the effect of mental CCs in addition to physical CCs to the effect of mental CCs only on physical and mental health; and
- effects across gender and 5 European countries.

Methods

Data

Individuals (N=57,805; France, Germany, Italy, Spain, and the United Kingdom) who participated in the 2010 European National Health and Wellness Survey, an internet-based survey.

Respondents were categorized as: 'Healthy' (no mental or physical CC); 'Physical' (indicated 1+ physical but no mental CCs); 'Mental' (indicated 1+ mental but no physical CCs); 'Physical and Mental' (1+ mental and 1+ physical CCs).

Physical and mental health were assessed with SF-12v2® Health Survey summary measures (PCS & MCS).

Statistical Analysis

Differences across groups were assessed using multivariate regression with PCS or MCS as outcomes and controlling for age and gender.

The effect of 1+ physical [mental] CC on physical [mental] health was evaluated as the difference between the estimated mean PCS [MCS] of healthy respondents and the estimated mean PCS [MCS] of individuals with 1+ physical [mental] CC.

The effect of physical [mental] comorbidity on mental [physical] health was evaluated as the difference between the estimated mean MCS [PCS] of those with 1+ physical [mental] CC and those with 1+ physical condition and 1+ mental CC.

Table 1 Sample Characteristics, by country

	Healthy	Mental	Physical	Physical & Mental	Age (mean)	Male (%)	N
France	30%	6%	41%	24%	45	44%	14.818
Germany	39%	6%	41%	14%	45	49%	14.821
Italy	33%	6%	41%	20%	49	53%	7.479
Spain	37%	9%	35%	19%	47	51%	4.977
UK	31%	10%	36%	23%	47	50%	14.853

Results

Relative to 'Healthy' respondents, the presence of 1+ mental CC was associated with large decreases in MCS (-7.1 to -13.3, p<.05; **Figure 1**) and, in some cases, PCS (-1.0 to -3.3, p<.05). Similarly, the presence of 1+ physical CC was associated with a significant decrement in both PCS (-3.0 to -5.2, p<.05; **Figure 2**) and MCS (-1.2 to -2.5, p<.05).

Relative to those with 1+ mental CC (but no physical conditions), the impact of physical comorbidity was associated with significant decrements in PCS (-4.3 to -6.9, p<.05) and, some cases, also in MCS (-0.9 to -4.6, p<.05; **Figure 1**).

Relative to those with 1+ physical CC (but no mental CCs), the impact of mental comorbidity was associated with large decrements in MCS (-8.5 to -11.7, p<.05) and also significant decrements in PCS (-1.6 to -3.6, p<.05; **Figure 2**).

Figure 1 Decrements in mental health (MCS)

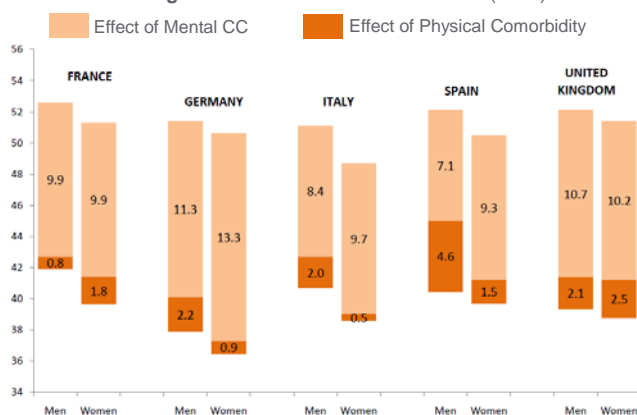
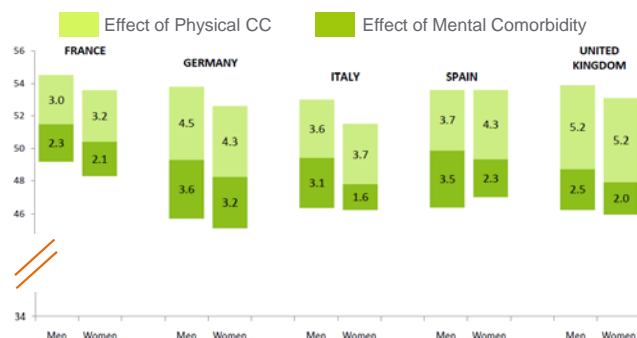


Figure 2 Decrements in physical health (PCS)



Discussion

As expected, the presence of 1+ physical CC (absent of mental CC) was associated with decrements in physical health and slight decrements in mental health. Similarly, the presence of 1+ mental CC (absent of physical CC) was associated with decrements in mental health and slight decrements in physical health.

More importantly, among those with 1+ physical CC physical health was significantly impacted by the presence of 1+ mental CC. In some cases, physical comorbidity had a similar impact on mental health.

Our study underscores the importance of screening patients with physical CCs for co occurring mental health conditions.

References

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