

Diagnosis and Management of Depression in Three Different Health Care Systems

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Background

- Differences in disease prevalence in different countries are often reported and are thought to reflect different lifestyles, genetic backgrounds, and cultural variations in help-seeking.
- However, they also may be produced by different health care systems.

Objectives

- This research investigated differences in the diagnosis and management of a "patient" with symptoms suggestive of depression in three different health care systems.
 - Germany (with decentralized care administered by social security agencies)
 - the United Kingdom (with a government supported tax-based National Health Service), and
 - the United States (with a largely employment based private insurance system).

Methods

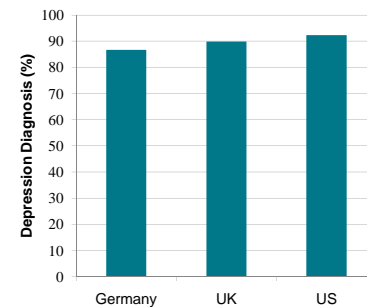
- A factorial experiment was conducted in three countries in which a primary care physician viewed a video vignette of an actor patient presenting with 7 symptoms strongly suggestive of depression.

Classic Symptoms of Depression that were included	
Sleep Disturbance	
Decreased Interest	
Guilt	
Reduced Energy	
Inability to Concentrate	
Poor Appetite	
Psychomotor Retardation	
Symptoms of Depression that were not included	
Suicidal Ideation	

- The actor patient's gender, race, age, and socioeconomic status (as depicted by current or former occupation) were systematically varied.
- A total of 384 primary care physicians (128 per country) were recruited for this study.
- Equal numbers of physicians were enrolled by gender and clinical experience.

Findings

Depression diagnosis by country (health care system)

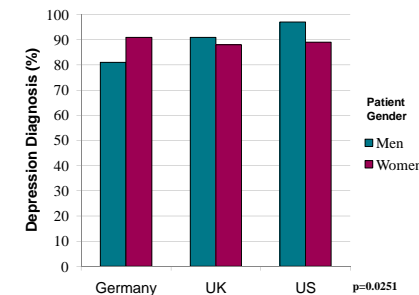


- The vast majority of physicians (90%) gave a diagnosis of depression with no significant variation by country ($p = .2361$).

- However, there was a significant interaction between country and patient gender.

- German physicians were more likely to diagnose depression in female patients.

- British and American physicians were more likely to diagnose depression in male patients.



Management of depression by country (health care system)

- American physicians were more likely to prescribe an anti-depressant than British physicians, with German physicians in between.
- German physicians were more likely to refer the patient to a mental health professional compared to British physicians with American physicians in between.
- American physicians offered more lifestyle advice than the British or German physicians.
- German physicians would want to see their patient sooner than either British or American physicians.

Management of depression by country (health care system)

	Country ¹			p value
	Germany	UK	US	
Anti-depressant prescription (%)	25.8 ^{ab}	18.0 ^a	33.6 ^b	.0241
Referral (%)				
mental health professional	28.9 ^a	5.5 ^b	18.0 ^a	<.0001
other medical professional	28.9 ^a	7.8 ^b	7.0 ^b	<.0001
Pieces of lifestyle advice	1.3 ^a	1.4 ^a	1.7 ^b	<.0001
Advice about				
exercise	13.3 ^a	6.2 ^b	28.9 ^a	<.0001
alcohol	1.6 ^a	7.8 ^{ab}	9.4 ^b	.0321
diet	6.2 ^a	7.0 ^a	12.5 ^a	.1050
Time to next appointment (days)	7.6 ^a	11.0 ^b	16.4 ^c	<.0001

¹ Means (by country) with the same superscript letter can not be considered statistically different at the .05 level using Tukey's multiple comparisons.

- There is considerable variation in the management of the same "patient" in the three different health care systems studied.
- British physicians are least likely to prescribe an anti-depressant or refer their patient to a mental health professional.
- German physicians would see their patient sooner (possibly due to shorter visit lengths).

Conclusions

- Differences between health care systems in the clinical management of the same signs and symptoms of disease may contribute to reported international differences in disease rates.
- These system influences deserve the attention of epidemiologists and policy makers as much as differences in individual patient characteristics.

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