

Gender- and Age-Related Differences in the Quality of Mental Health Care Among Inpatients With Unipolar Depression: A Nationwide Study

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Introduction

Within several somatic areas, observational studies have examined gender and age related differences in the quality of care. The evidence from these studies indicates that gender and age can affect the extent to which patients are offered evidence-based treatment. To the best of our knowledge, only six published studies have examined the association between either gender or age and the quality of mental health care. However, the design and results of these studies are inconsistent, which makes it difficult to draw conclusions.

This study examined the association between gender, age and the quality of mental health care as reflected by the fulfilment of process performance measures of care reflecting clinical guideline recommendations among Danish patients admitted with depression

TABLE 1. Definitions of nine process performance measures for inpatients with depression

Care process	Definition
Examination by psychiatrist	Indication of whether the patient's psychopathological assessment was performed by a specialist in psychiatry within 7 days after admittance to the hospital ward.
Somatic examination	Neurological examination, relevant laboratory tests and other examinations within 2 days.
Assessment by a social worker	Assessment of need for acute or longer-term support, such as help with changing housing, financial help to purchase medicine, educational guidance, rehabilitation, and application for disability benefits.
HAM-D17 ^a assessment (I)	Initial assessment using HAM-D17 within 7 days.
HAM-D17 ^a assessment (II)	Assessment using HAM-D17 at discharge from hospital.
Suicide risk assessment (I)	Using structured interview at admittance.
Suicide risk assessment (II)	Clinician's assessment of the patient's risk of suicide when discharge from hospital is planned.
Contacts with relatives	Staff contact with the patient's relatives during hospitalization.
Psychiatric aftercare	Concrete agreement involving professional support for inpatients after discharge.

^aHamilton Depression Scale (HAM-D17)

Materials and methods

The study population included 17,971 patients admitted to psychiatric hospital wards between 2011 and 2016 and was identified in the Danish Depression Database, to which it is mandatory by law to report data on all treated patients with depression. Patients were divided into four age groups (18-39, 40-59, 60-79 and ≥80). Quality of mental health care was defined as having fulfilled process performance measures of care reflecting national clinical guidelines recommendations. The association was examined by setting a pragmatic cut point of 80%; high overall quality of care was defined as a patient's receipt of 80% or more of all relevant recommended process performance measures. Furthermore, the association was examined with alternative cut points varying from 60% to 90%. The association between gender, age and the quality of mental health care – the individual process performance measure and the overall quality – was examined by using binomial regression while adjusting for inpatient volume. The analysis was stratified by age and gender where men in the youngest age group (18-39) served as the reference.

Table 2. The association between gender, age and the quality of mental health care among patients with depression.

Gender and age group	Total inpatients	Received high-quality care (%) ^a	RR ^b	95% CI
Men 18-39	2,274	14.2	1.00	
Women 18-39	4,005	15.5	1.09	.97-1.23
Men 40-59	3,422	16.2	1.14	.97-1.34
Women 40-59	3,986	15.6	1.10	.95-1.27
Men 60-79	2,253	19.2	1.35	1.12-1.63
Women 60-79	3,442	20.1	1.42	1.17-1.72
Men ≥80	453	23.4	1.65	1.18-2.29
Women ≥80	1,285	19.8	1.39	1.02-1.89

^a Received 80%-100% of relevant recommended process performance measures

^b Adjusted for patient volume

Results

The proportion of patients receiving ≥80% of the recommended process performance measures varied between 14.2% and 23.4%. Compared with men in the age group 18-39, men and women in the age category 60-79, respectively, had an inpatient volume adjusted relative risk [RR] of 1.34 (95% confidence interval [CI]=1.12; 1.60) and 1.40 (95% CI=1.16; 1.69) for receiving high overall quality of care (≥80% of the relevant recommended process performance measures). Likewise, in the age category ≥80 the RR for men was 1.64 (95% CI=1.18; 2.29) and the RR for women was 1.37 (95% CI=1.00; 1.88).

Patients in the age category 18-39 were in general less likely to have received care fulfilling the individual process performance measures, however not all associations reached statistical significance. The process performance measure for assessment by a social worker were statistical significant for all categories, getting assessed with HAM-D17 at discharge were statistical significant for age categories 40-59 and 60-79 and being seen by a psychiatrist within 7 days, contact with relatives and getting psychiatric aftercare were statistical significant in the age categories 60-79 and ≥80 compared to men in age category 18-39.

Conclusions

Older patients had a higher chance of receiving high quality care as reflected by a higher proportion of fulfilled guidelines supported process measures among patients admitted with depression. In contrast, we found no gender-related differences.

