LA QUALITÀ DELLA CURA DEI PAZIENTI CON DISTURBO MENTALE GRAVE NEI TRATTAMENTI SOMATICI

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BACKGROUND

Adherence with recommended healthcare for the treatment of somatic disorders has been reported to be poorer in patients living with severe mental illness (SMI) than those without evidence of mental disorders [[1–3]. In addition, mental disorders have been associated with two- or three-fold increased risk of morbidity and mortality within six months after the occurrence of a cardiac event [4]. Both these issues pertain the so-called "physical healthcare gap" of patients living with SMI. It is still unclear whether and how much the worse prognosis following a cardiac event among SMI patients may be explained (i) by their limited adherence with recommended healthcare, for example due to the well-known mental health-related stigma discouraging the provision care to patients affected by SMI [5], and/or (ii) by other factors [6], such as those related to the unhealthy behaviour and worst general physical conditions at baseline of SMI patients.

An important first step in improving patient adherence and the outcomes of medical treatment, could be assessing the extent to which non-adherence to recommended treatments for chronic somatic disorders might be a potentially avoidable concomitant effect of a non-somatic treatable condition [1].

OBJECTIVES

To clarify the mechanisms underlying the physical healthcare gap among SMI patients. Specifically, to evaluate whether worse prognosis of patients with SMI after experiencing an acute myocardial infarction (AMI) could be fully or partially mediated by their reduced adherence to recommended healthcare.

METHODS

This study retrospective cohort population-based study was based on computerized Healthcare Utilization (HCU) databases of Lombardy region. HCU data include a variety of information on residents, such as hospital diagnosis, outpatient drug prescriptions, outpatient visits and diagnostic exams. In addition, a specific automated system concerning mental health care gathers data from regional Departments of Mental Health accredited by the NHS; providing demographic information and diagnostic and therapeutic codes for patients receiving specialist MHC.

All beneficiaries of the NHS residents in Lombardy Region aged 18 years or older, who experienced a hospital admission with diagnosis of AMI between 2007 and 2019 were identified. Among them, patients with a diagnosis of a SMI (i.e., depression, schizophrenia, bipolar or personality disorder) were identified. Each of these SMI patients was matched with up to 5 cohort members without evidence of SMI (referents) for sex, age (± 3 years), date (± 30 days) and length (± 5 days) of the index hospital admission.

Out-of-hospital recommended healthcare dispensed in the first year after the date of index hospital discharge were assessed: cardiac medicaments (i.e., RAS blockade agents, beta-blockers, other blood pressure-lowering drugs, statins and other lipid-lowering drugs, antiplatelet, antiarrhythmic, and anticoagulant agents) and selected outpatient services (i.e., cardiologic visit, echocardiogram, electrocardiogram (ECG), lipid profile testing and a cardiac rehabilitation program). The occurrence of

hospital admissions with diagnosis of CV disease and death for any cause were separately considered as endpoints of interest.

Cox proportional hazard model was fitted for estimating the hazard ratios (HR), and 95% CI, for the association between mental illness and the considered endpoints. Whereas, logistic regression, or log-binomial regression where suitable, were used for estimating the odds ratios (OR), or risk ratios (RR), and 95% CI, for the association between mental illness and post-discharge recommended healthcare. Furthermore, mediation analysis was performed to investigate whether post-discharge use of recommended healthcare may be considered a mediator [7] of the relationship between mental health status (exposure) and endpoint occurrence (outcome). The proportion mediated was estimated, indicating how much of the whole outcome excess in SMI patients can be explained by the indirect effect of the mediator, in which the mental illness status drives a change in the healthcare use and the change in the latter then affects the clinical outcome.

RESULTS

Among the 103,389 patients with an hospital admission for AMI, 1,549 had evidence of SMI. The initial cohort was formed by 1,497 SMI patients and 7,119 matched referents patients. Compared with referents, during the first year after the index discharge, SMI cohort members had lower adherence with recommended healthcare. Indeed, they less frequently (i) started drug therapy with cardiac medicaments, and (ii) experienced almost all the considered outpatient services. Compared with referents, SMI cohort members had adjusted risk excesses of 39% and 73% for CV events and all-cause mortality.

Mediation analysis showed that the percentage for the excess risk of CV events and all-cause deaths in SMI patients mediated through reduced healthcare delivered to these patients was 4.1% and 11.3%, respectively.
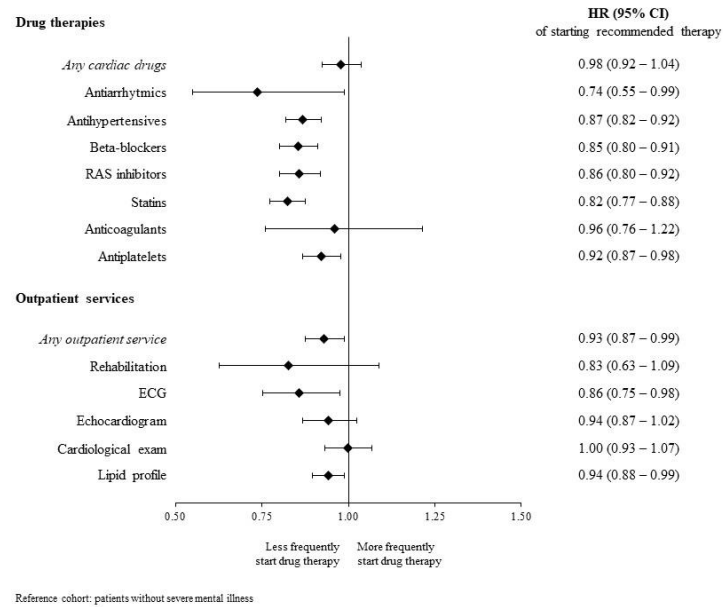
CONCLUSIONS

Compared with patients without evidence of mental disorders, those living with SMI experience reduced adherence with recommended healthcare and poorer clinical outcomes. The reduced use of recommended outpatient healthcare from SMI patients had a marginal effect on their worse prognosis. Other key factors mediating the prognostic gap between patients with and without SMI should be implicated. Global approaches focusing not only on the physical treatments should be recommended; and specific interventions should be planned to overcome the stigmatising attitudes and behaviors towards mental health patients.

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Figure 1. Effect of the presence of severe mental illness on the hazard ratio (HR) of starting recommended post-discharge healthcare. Italy, Lombardy Region, 2007-2020.

Drug therapies

	HR (95% CI) of starting recommended therapy
Any cardiac drugs	0.98 (0.92 – 1.04)
Antiarrhytmics	0.74 (0.55 – 0.99)
Antihypertensives	0.87 (0.82 – 0.92)
Beta-blockers	0.85 (0.80 – 0.91)
RAS inhibitors	0.86 (0.80 – 0.92)
Statins	0.82 (0.77 – 0.88)
Anticoagulants	0.96 (0.76 – 1.22)
Antiplatelets	0.92 (0.87 – 0.98)

Outpatient services

Any outpatient service	0.93 (0.87 – 0.99)
Rehabilitation	0.83 (0.63 – 1.09)
ECG	0.86 (0.75 – 0.98)
Echocardiogram	0.94 (0.87 – 1.02)
Cardiological exam	1.00 (0.93 – 1.07)
Lipid profile	0.94 (0.88 – 0.99)

0.50   0.75   1.00   1.25   1.50

Less frequently start drug therapy — More frequently start drug therapy

Reference cohort: patients without severe mental illness

Footnote. Hazard ratio (HR) of recommended post-discharge healthcare, and 95% CI, was estimated according to the Cox proportional hazard model.