First Episode of Self-Harm in Older Age: A Report From the 10-Year Prospective Manchester Self-Harm Project

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Objective: Self-harm is closely related to completed suicide, especially in older age. As empirical research of self-harm in older age is scarce, with no studies confined to first-ever episodes in older age, we examined the clinical characteristics and the risk of repetition in first-ever self-harm in older age.

Method: The Manchester Self-Harm (MaSH) project, a prospective cohort study, gathered data from September 1, 1997, through August 31, 2007, for individuals presenting with self-harm at emergency departments of 3 large hospitals in North West England. The characteristics of older patients (aged ≥ 55 years) who presented with a first-ever episode of self-harm are described and compared to those of middle-aged patients (35–54 years) presenting with a first-ever episode of self-harm. Following each episode, the MaSH form, a standard assessment form developed for the MaSH project, was completed by a clinician. Potential risk factors for repetition were examined by Cox regression analyses.

Results: A total of 374 older patients and 1,937 middle-aged patients presented with a first-ever episode of self-harm. The circumstances at the time of self-harm suggested higher suicidal intent in older age. In comparison with middle-aged patients, the rate of repetition in older-aged patients was lower (15.4% versus 11.8%, respectively; hazard ratio for older age = 0.65; 95% CI, 0.45–0.93; $P = .019$), although repetition was more often fatal among the older group (3.3% versus 13.6%, respectively; $P = .009$). The most important predictor of repetition in older age, ie, physical health problems, had no predictive value in middle-aged patients, whereas psychiatric characteristics had little impact on the risk of repetition in old age.

Conclusions: High suicidal intent and different predictors of repetition in first-ever self-harm in older age highlight the need for age-specific interventions beyond the scope of psychiatric care alone.

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Self-harm is the most important risk factor for completed suicide,[1] especially among older people.[2] The ratio of rates of self-harm to suicide is estimated at 36.0 for all age groups, falling to 8.3 in people over 60 years of age.[3] It is claimed that self-harm in older people is often associated with high suicidal intent and that the characteristics of these patients are similar to those who commit suicide.[4] Older adults may be predisposed to self-harm by social isolation, bereavement, and physical disease.[5] Compared to self-harm at a younger age, self-harm in later life is associated with a longer stay at the intensive care unit and a 9-fold increase in the mortality rate.[6]

More than one-third of older people who die by suicide have a history of self-harm.[7] Episodes of self-harm may increase the risk of repetition as a result of cognitive sensitization, habituation to the negative aspects, and acquired competence regarding suicide.[8,9] Neglecting differences between first-ever episodes and repeated episodes may mask the effect of risk factors of repetition specific for first-ever self-harm in older age. For example, at a younger age, the relevance of life-events as a precipitator decreases with repeated episodes of self-harm.[10,11] Furthermore, at a population level, negative life events are more closely associated with first-ever suicidal thoughts, whereas mental illness is more closely associated with recurrent suicidality.[12] Recently, a bimodal distribution of age at onset of self-harm was found in a sample of 368 patients—an early-onset group with a mean age at onset of 19 years and a late-onset group with a mean age at onset of 38 years. The cutoff between the age groups was found to be at 26 years of age, with no further overlap between groups after the age of 35 years.[13] However, only 28 patients in this particular study were over 55 years of age, so statistical power was insufficient to identify a possibly very late onset group.

The objectives of the present study were to examine the clinical characteristics and risk of repetition of first-ever self-harm in later life and to compare first-ever self-harm in older-aged patients versus middle-aged patients.

METHOD

Study Design

The Manchester Self-Harm (MaSH) project is an ongoing collaboration between the University of Manchester and all 3 hospitals providing emergency care in the city of Manchester, United Kingdom (MaSH Web site: http://www.medicine.manchester.ac.uk/mentalhealth/research/suicide/prevention/mash/). Detailed information is collected on individuals who present to these emergency departments as a result of self-harm. Case definition is based on the term most often used to describe nonfatal suicidal behavior in the United Kingdom—*self-harm. Self-harm* is defined as "an act of intentional self-poisoning or injury irrespective of the apparent purpose of the act."[14(p988)] This term is

Clinical Points

- More than half of all older people who present to a hospital with self-harm are presenting with the first episode of self-harm.
- The rate of repetition is lower among older people presenting with the first episode of self-harm, but repetition is more often fatal.
- Physical health problems as a precipitant of self-harm are a key predictor of repetition among older people presenting with the first episode of self-harm.

approximately synonymous with the terms *attempted suicide* and *parasuicide* used in other countries.[15–17] Currently, the data for this prospective cohort study are available for subjects aged 15 years and over who presented with self-harm between September 1, 1997, and August 31, 2007. The completion rate for assessment forms is monitored continuously and runs at approximately 80% of episodes treated in the emergency department. The MaSH project has approval under Section 251 of the UK National Health Service (NHS) Act 2006 (formerly section 60 of the Health and Social Care Act 2001) regarding the use of identifiable patient information.

Case Ascertainment

The index episode of self-harm was defined as the first self-harm presentation at an emergency department by an individual between September 1, 1997, and August 31, 2007. To examine characteristics of self-harm by age in an older population, we excluded patients below 35 years of age as the clinical characteristics related to self-harm are quite specific in young adolescents and in persons up to the age of 25 years and gradually disappear thereafter.[3,13] Previous studies[18,19] (mainly with a specific interest in younger age) also have used a cutoff point of 35 years of age in analyses of self-harm or suicide by age. The age cutoff for defining older people varies across studies from 50 to 65 years of age.[20] We a priori set our definition at 55 years, as a post hoc subgroup analysis in a previous article including all patients with self-harm (irrespective of having a first-ever episode or not) showed that the repetition rate over a 4-year period of time did not vary between patients aged 55–64 years and those aged 65 years and over.[21]

The presence of a history of self-harm before the index episode was based on self-report data, given by the patient during his or her assessment at the emergency department. As we had a 10-year follow-up monitoring system within MaSH, we checked whether a patient who denied a history of previous self-harm could be identified as having had a previous episode in the MaSH database. Identified cases were subsequently excluded.

Outcome Measures

Clinical assessment. Following an episode of self-harm, a standard assessment form was completed by the emergency doctor and/or psychiatric staff for those patients who received a psychiatric assessment. The form included detailed sociodemographic data, clinical data (such as previous suicidal behavior, past psychiatric treatment, and alcohol or drug misuse), and episode-specific variables such as the main precipitating factors, circumstances of the attempt, and mental state at the time of assessment. The MaSH form was developed on the basis of existing clinical schedules for assessing self-harm, published research, and practice guidelines.[22] (The MaSH form was created [and piloted] in 1997 by a multidisciplinary team led by J.C. The MaSH form is copyrighted by the University of Manchester, Manchester, United Kingdom. It is unpublished and is available from the authors upon request [mash@manchester.ac.uk]). A reliability check by a clinician blinded to pro forma responses (N.K.) showed excellent agreement between the information obtained from the form and the clinical case record ($\kappa \geq 0.80$ for individual variables).

Repetition of self-harm. Any repeat attempt by any subject (dichotomous), including both fatal and nonfatal self-harm, was considered of interest. To identify previous and subsequent admissions for the same patient, we created unique patient identifiers. These identifiers were derived from the patient's NHS number, postcode, date of birth, and sex, and enabled us to track individual patients within any year and in subsequent years.

Nonfatal repetition of self-harm was defined as a subsequent episode of self-harm that resulted in re-presentation to the emergency department in one of the 3 hospitals in Manchester. A recent audit of local emergency departments showed that less than 5% of all hospital visits by Manchester residents occurred at hospitals outside the study area. Fatal repetition of self-harm (suicide) was identified by combining MaSH data with data from the Office for National Statistics for England and Wales, Newport, South Wales. Cases in which a death had received a coroner's verdict of either suicide or undetermined cause were considered as a repetition of self-harm. Open verdicts, recorded as deaths from undetermined external cause, are often reached in cases of suicide in the United Kingdom and are conventionally included in research on suicide and in official suicide statistics.[23–25] The Office for National Statistics additionally provided information about those who had emigrated from England and Wales, moved to Ireland or Scotland, or left the register for other reasons (eg, natural death).

Statistical Analyses

Characteristics of middle-aged and older patients were compared using the χ^2 test or the Mann-Whitney *U* test. As correcting for multiple comparisons may increase the risk of type II error, we have chosen to present all individual *P* values.[26] However, due to the high number of comparisons, we considered only *P* values $\leq .001$ as significant.

We performed Cox regression analyses to assess independent predictors of repetition of self-harm. Patients were

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censored at the end of follow-up, ie, August 31, 2007, or earlier in the case of natural death or emigration. First, we generated multivariate models within each domain (sociodemographic characteristics, clinical characteristics and circumstances, precipitants, and mental state) using backward elimination procedures. Subsequently, the independent predictors from all domain-specific models were fitted in a final multivariate model. Since suicide rates increase with age in white men,[27] we checked interactions between sex and all independent predictors. Explanatory variables were retained in the domain-specific and final models if the *P* value was < .05. The proportional hazards assumption was tested for each variable of interest, and the final model was tested for influential outliers. All analyses were conducted using SPSS version 15.0 (SPSS Inc, Chicago, Illinois).

RESULTS

Sample Characteristics

Our final study sample (Figure 1) consisted of 1,937 middle-aged patients aged 35 to 54 years (mean = 42.4 years, SD = 5.6 years; male sex, 47.0%) and 374 older patients aged 55 years and over (mean = 66.1 years, SD = 10.0 years; range, 55–97 years; 118 patients were aged >70 years; male sex, 50.5%). Compared to middle-aged patients, older patients were more likely to live alone (23% vs 47%, respectively; *P* < .001), were less often employed (43% vs 15%, respectively; *P* < .001), and were less likely to belong to a nonwhite ethnic group (9% vs 2%, respectively; *P* < .001).

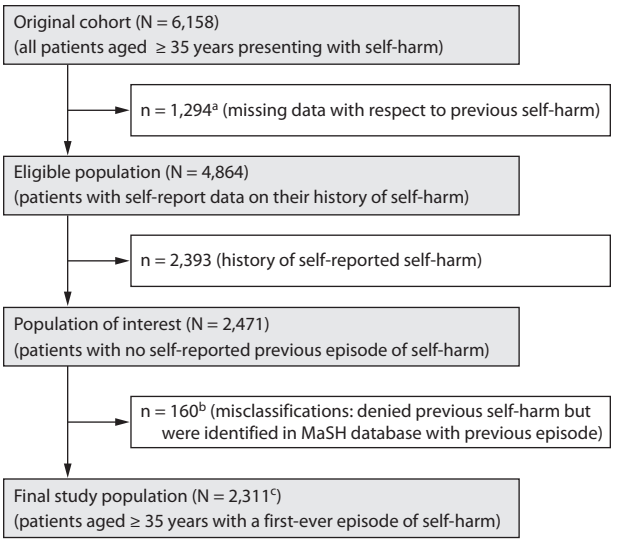
Differences Between Middle-Aged and Older Patients

Table 1 presents the clinical characteristics and circumstances, mental state, and precipitants at the time of self-harm. Compared to middle-aged patients, older patients used alcohol less frequently at the time of self-harm, more often tried to avoid discovery, more often premeditated their attempt, and, finally, more often expressed an intention to die or left a suicide note (all *P* values ≤ .001).

The methods of self-harm, however, did not differ between middle-aged and older patients, and self-poisoning was involved in 9 of every 10 episodes overall. In cases of self-poisoning, older patients took antidepressants and antipsychotics less frequently compared with middle-aged patients (*P* = .001 and *P* = .015, respectively).

Although older patients experienced a greater number of symptoms indicative of mental health problems at the time of self-harm, only the prevalence of hopelessness was significantly higher in older patients (*P* < .001). The total number of precipitants was slightly higher in middle-aged patients (Mann-Whitney *U* test: *Z* = −2.6, *P* = .010) but did not reach our preset level of significance. With respect to type of precipitants, we found in older patients significantly fewer relationship problems (with partner, family, or friends) (*P* < .001) and significantly more physical health problems (*P* < .001) in comparison to middle-aged patients. No differences were found with respect to the other precipitants (Table 1).

Figure 1. Flowchart of Patient Recruitment



[a]These patients did not differ with respect to sex from patients with a known history of self-harm (male sex: 48.8% vs 46.5%, respectively; $\chi^2_1 = 2.0$; $P = .16$) but were slightly older (mean ± SD age: 46.4 ± 11.0 years vs 45.5 ± 10.0 years, respectively; $t_{6156} = 2.9$; $P = .004$).
[b]Extrapolation of the 160 of 2,471 misclassifications (6.5%) to the whole study population yielded an estimated overall misclassification percentage of 5.9% for our final study sample (on the basis of the finding that the percentage of detected misclassifications increases with each additional year of follow-up and gradually decreases after a follow-up of 5 years or more).
[c]The proportion of patients presenting with a first-ever episode of self-harm was significantly higher in older patients (374 of 705 [53.0%]) compared with middle-aged patients (1,937 of 4,159 [46.6%]) ($\chi^2_1 = 10.1$; $P = .001$).
Abbreviation: MaSH = Manchester Self-Harm project.

A total of 1,424 patients (61.6% of 2,311) were assessed by a mental health staff member. A psychiatric diagnosis was made for 964 patients (67.7% of 1,424). Within this selected group, older patients differed significantly from middle-aged patients by more often having a diagnosis of a depressive illness (42% vs 25%, respectively; *P* < .001) and by less often having no diagnoses at all (24% vs 34%, respectively; *P* < .001). The prevalence of the other diagnostic groups was too low for meaningful analyses.

Management

As shown in Table 2, older patients were less often referred to primary care by emergency physicians and more often admitted to a psychiatric hospital.

Repetition of Self-Harm

The proportion of patients repeating self-harm within the 10-year study period and presenting to hospital was 15.4% for middle-aged patients (299 of 1,937) and 11.8% for older patients (44 of 374). The median time to first repetition for those who repeated was 241 days (interquartile range, 36–755 days) in middle-aged patients and 173 days (interquartile range, 20–466 days) in older patients, yielding incidence rates of 37.3 and 30.2 repetitions per 1,000 person-years, respectively. A total of 16 repetitions (4.7% of 343 repetitions) were due to suicide, 10 in middle-aged

Table 1. Clinical Characteristics, Circumstances, Mental State, and Precipitants by Age Group at the Time of the First Episode of Self-Harm[a]

Variable	Middle-Aged Patients (35–54 years of age), N = 1,937	Older-Aged Patients (≥ 55 years of age), N = 374	*P* Value
Clinical characteristics and circumstances, n/N (%)			
Method of self-harm			.22
Self-poisoning (drugs)	1,777/1,936 (92)	335/374 (90)	
Self-poisoning (other)	12/1,936 (1)	5/374 (1)	
Self-injury (cutting)	104/1,936 (5)	21/374 (6)	
Other (eg, drowning, asphyxiation)	43/1,936 (2)	13/374 (4)	
Alcohol used at time of self-harm	1,207/1,888 (64)	155/364 (43)	< .001
Drug taken (in cases of self-poisoning)			
Antidepressant	505/1,768 (29)	66/332 (20)	.001
Antipsychotic	84/1,767 (5)	6/332 (2)	.015
Benzodiazepine	262/1,768 (15)	62/332 (19)	.074
Acetaminophen (paracetamol)	785/1,765 (45)	156/332 (47)	.40
Other analgesic	370/1,766 (21)	61/332 (18)	.29
Opiate (street drug)	46/1,766 (3)	5/331 (2)	.24
Nature of act			
Avoided discovery	211/1,848 (11)	81/351 (23)	< .001
Premeditated attempt	352/1,872 (19)	101/359 (28)	< .001
Wanted to die	1,005/1,822 (55)	232/346 (67)	< .001
Suicide note present	234/1,877 (13)	67/357 (19)	.001
Psychiatric treatment history			
Lifetime history of psychiatric treatment	601/1,882 (32)	126/359 (35)	.24
Current psychiatric treatment	352/1,882 (19)	80/359 (22)	.12
Current alcohol misuse	637/1,861 (34)	81/356 (23)	< .001
Current substance abuse	141/1,866 (8)	2/363 (1)	< .001
Mental state at time of self-harm, n/N (%)			
Feels depressed	1,241/1,897 (65)	258/364 (71)	.044
Looks depressed	888/1,883 (47)	185/363 (51)	.18
Sleep disturbances	1,114/1,890 (59)	232/360 (64)	.051
Appetite problems	819/1,880 (44)	176/359 (49)	.056
Hopelessness	616/1,867 (33)	156/357 (44)	< .001
Suicidal thoughts	531/1,886 (28)	126/358 (35)	.007
Suicidal plans	200/1,883 (11)	47/356 (13)	.15
Hallucinations/delusions	82/1,875 (4)	18/354 (5)	.55
Precipitants of self-harm, n/N (%)[b]			
No. of precipitants, median (range)	1 (1–8)	1 (1–5)	.010
Relationship problems	1,212/1,816 (67)	130/352 (37)	< .001
Bereavement	196/1,816 (11)	54/352 (15)	.014
Housing problems	153/1,816 (8)	27/352 (8)	.64
Problems at work	201/1,816 (11)	20/352 (6)	.002
Legal problems	69/1,816 (4)	8/352 (2)	.16
Victim of crime	32/1,816 (2)	8/352 (2)	.52
Physical health problems	175/1,816 (10)	102/352 (29)	< .001
Financial problems	246/1,816 (14)	34/352 (10)	.047
Abuse	48/1,816 (3)	4/352 (1)	.091

[a]Missing data varied from n = 1 to n = 214 per variable (93.8% completeness).
[b]All data shown as n/N (%) except where noted otherwise.

patients (3.3% of 299) and 6 in older patients (13.6% of 44) (Fisher exact test, $P = .009$).

Performing a block-wise (first block: sociodemographic variables; second block: clinical variables; third block: mental state variables; fourth block: precipitants), multivariate Cox regression correcting for all baseline characteristics that differed (at $P < .05$) between middle-aged and older-aged patients (model statistics: −2 log likelihood = 4,260.2; $\chi^2_6 = 42.7$; $P < .001$) yielded a significant difference between middle-aged and older-aged patients (Figure 2) (hazard ratio [HR] for old age = 0.65; 95% CI, 0.45–0.93; $P = .019$). The other independent risk factors for repetition in this multivariate model were belonging to a nonwhite ethnic group (HR = 3.03; 95% CI, 1.50–6.14; $P = .002$), current psychiatric treatment (HR = 1.40; 95% CI, 1.10–1.77; $P = .006$), current alcohol misuse (HR = 1.33; 95% CI, 1.05–1.69; $P = .017$), feelings of hopelessness (HR = 1.29; 95% CI, 1.02–1.62; $P = .035$), and, finally, physical health problems as a precipitant of self-harm (HR = 1.52; 95% CI, 1.11–2.07; $P = .009$).

Sex was not a significant risk factor for repetition (HR = 1.0; 95% CI, 0.8–1.2; $P = .69$), nor did sex interact with any of the other risk factors identified (all P values > .12).

As shown in Figure 2, the difference between middle-aged and older patients was marginal during the first 18 months of follow-up, after which time the 2 groups clearly diverged. Of those who repeated, 62.5% of the middle-aged patients (187 of 299) and 79.5% of the older patients (35 of 44) did so within the first 18 months of follow-up ($\chi^2_1 = 4.9$, $P = .028$).

Building the regression model for middle-aged and older-aged patients separately yielded almost similar results in middle-aged patients (compared to the results for the whole sample), with the exception that physical health problems as a precipitant did not contribute significantly to the model anymore (HR = 1.33; 95% CI, 0.92–1.92; $P = .14$), whereas results were completely different in older patients, as physical health problems as a precipitant were the *only* significant predictor of repetition (HR = 2.73; 95% CI, 1.36–5.49; $P = .005$).

DISCUSSION

Main Findings

This first study of late-onset self-harm in older age showed that the late-onset group differed from middle-aged patients in terms of higher suicidal intent and hopelessness and a different profile of precipitants. We found a slightly lower risk of repetition in patients aged 55 years and above compared to patients aged 35–55 years. Interestingly, predictors of repetition differed between the 2 age groups. We found that 53% of all older patients presenting with self-harm did not have a history of self-harm (see footnote to Figure 1), and specific risk factors for repetition in this group may be missed if all older people presenting with self-harm are treated as a homogenous group while planning prevention strategies.

Comparison With Previous Findings

Middle-aged and older people presenting with a first-ever episode of self-harm use similar methods, but, in line with

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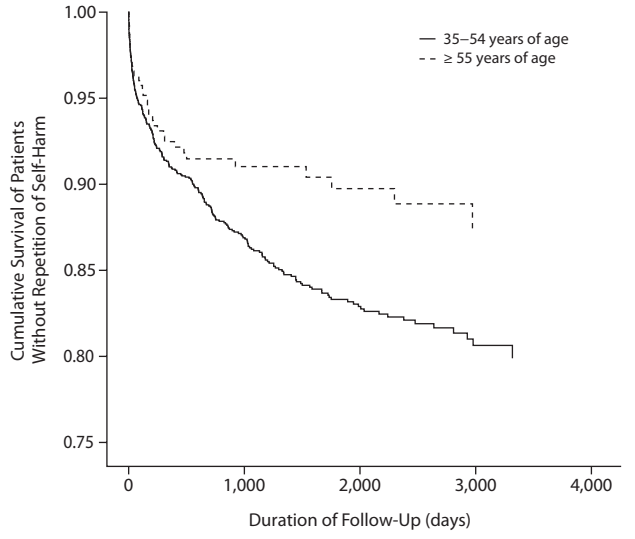
Table 2. Care Management Plans by Age Group Following Emergency Department Visits

Variable	Middle-Aged Patients (35–54 years of age), n/N (%)	Older-Aged Patients (≥ 55 years of age), n/N (%)	*P* Value
Management plan by emergency department physician (N = 1,523)[a]			
Discharged to primary care	341/1,216 (28)	43/230 (19)	.003
Self-discharged	29/1,216 (2)	5/230 (2)	.85
Referred to psychiatric services[b]	476/1,215 (39)	97/230 (42)	.39
Referred to medical or surgery services	432/1,216 (36)	96/230 (42)	.073
Admission achieved	290/549 (53)	61/98 (62)	.085
Referred to other services	20/1,216 (2)	2/230 (1)	.38
Management plan for cases seen for psychiatric assessment at the accident and emergency department (N = 1,424)[b]			
Admitted to psychiatric hospital	36/1,180 (3)	19/220 (9)	< .001
Referred to outpatient psychiatric services	231/1,182 (20)	50/221 (23)	.29
Referred to other, nonpsychiatric services	326/1,182 (28)	52/221 (24)	.21
Discharged to primary care	440/1,182 (37)	96/221 (43)	.081
Self-discharged	10/1,182 (1)	1/221 (1)	.54

[a]Numbers do not add to precisely 100%, as the categories were not mutually exclusive.
[b]Numbers of patients referred to psychiatric services do not match with those seen for psychiatric assessment as a substantial number of patients were directly seen by mental health staff members without prior assessment by the emergency department physician.

Figure 2. Survival Time Until First Repetition of Self-Harm by Age Group



previous studies[3] not limited to first-ever episodes, the circumstances suggest a higher suicidal intent at the time of self-harm among older people. The most important precipitants of self-harm in older age were relationship problems (37%), physical health problems (29%), and bereavement (15%). Compared to middle-aged patients, older patients considered relationship problems significantly less often and physical health problems significantly more often as a main precipitant for their act, which is in line with previous studies.[5] The impact of physical health problems on self-harm is still a matter of debate, with previous cross-sectional and relatively small studies showing mixed results.[20] Recently, a large, cross-sectional World Health Organization survey[28] confirmed the relationship between physical disease and self-harm but found significant differences between separate chronic physical conditions. As the impact of physical health problems in our sample was driven by the older patients, this finding may easily be missed in studies with few older people or in studies also including older people with a long-term history of self-harm, in whom physical health problems do have less effect.

Our overall rate of repetition was lower than the 23% found in a meta-analysis[29] of studies lasting longer than 4 years and including patients across all ages. The lower rate of repetition in our study can be explained by the fact that we restricted our sample to patients with a first-ever episode. Furthermore, the rate of repetition in older patients (11.8%) was significantly lower compared to middle-aged patients. Although older patients were less often discharged to primary care and more often admitted to a psychiatric hospital, in comparison to middle-aged patients, it is unlikely that these differences explain the lower rate of repetition. First, follow-up studies[30] of patients hospitalized for attempted suicide show that these patients' rate of subsequent suicide is much higher than expected and does not decline over the years. Second, meta-analysis[29] did not detect differences in repetition between hospitalized and nonhospitalized patients after attempted suicide. Lower rates of repetition in older-aged patients compared to younger patients have previously been found in a subgroup of patients who were hospitalized after attempted suicide.[31] Two explanations can be put forward to explain the lower rate of repetition in old age. First, suicide attempts are more often fatal in older-aged patients compared to younger patients.[3] Therefore, in old age, patients with the highest risk for repetition (highest suicidal intent) are less often included in samples selected by the presence of nonfatal self-harm. Second, help-seeking behavior might differ between middle-aged and older people. A recent Australian survey[32] showed that less than half of all people who injured themselves in the 4 weeks before the survey sought help. One may hypothesize that older people are less inclined to seek help than younger and middle-aged people, as has been shown for common mental disorders other than self-injury.[33] Finally, predictors of repetition in old age might be easier to manage than predictors of repetition in middle-aged patients.[5]

Detailed examination of the risk of repetition in first-ever self-harm in older age reveals some interesting findings. First, the rate of self-harm within the first 18 months of follow-up did not differ between middle-aged and older-aged patients. Second, in cases of repetition, we more often found a fatal outcome in old age compared to middle-age. This finding has also been true in studies not restricted to the first-ever episode.[2] Interpretation, however, has to be made cautiously

because of low numbers of fatal repetition and the fact that this issue was not a primary study objective. Nevertheless, since suicide rates increase with age in older white men,[27] we explored sex effects with respect to repetition, including both fatal and nonfatal self-harm. In our study, male sex neither was a risk factor for repetition nor interacted with any of the other predictors of repetition. Third, different predictors affected repetition. In older patients, only the presence of physical health problems predicted recurrent episodes. Other clinical predictors such as current psychiatric treatment, current alcohol misuse, and the presence of hopelessness hardly contributed to the risk of repetition.

Methodological Considerations

For proper interpretation, some methodological issues must be acknowledged. First, within the MaSH project, no information is available on the date of patients' first episode of self-harm if they reported previous self-harm. Therefore, comparison among older patients with a first episode of self-harm after the age of 55 years to those with a history of self-harm before the age of 55 years was not possible. This comparison would have been valuable to exclude cohort effects. Second, we included all episodes of self-harm irrespective of the degree of suicidal intent or medical seriousness. Suicidal intent is continuously distributed in self-harming populations—the distribution is not bimodal, and there is no definitive cutoff to identify those who truly intended to take their own lives.[34] Restricting the sample to those with high suicidal intent would have been problematic since some individuals with apparently low intent make medically very serious attempts.[35,36] Third, the Office for National Statistics successfully traced 80% of the MaSH self-harm cohort for which they were able to return mortality data or NHS exit data when applicable. The remaining 20% were not traced for reasons such as lack of identifying data or because national records were not being held on these individuals (homeless people, temporary UK residents, etc). It is therefore possible that there was an underascertainment of suicides. However, the size of this effect is likely to be minimal. Finally, the MaSH project focuses on self-harm episodes in individuals who present to hospitals because this group is the one for whom self-harm behavior has been shown to increase resource use and the risk of suicide.[37–39] The project does not seek to examine community episodes of self-harm.

Clinical Implications

The stronger impact of physical health problems and lower association with psychiatric disturbances in the older age group may suggest psychosocial rehabilitation programs for older adults who present with self-harm precipitated by a physical disease as a novel strategy to prevent self-harm or suicide in older age. These findings would have been missed if we had not focused on first-ever episodes only. As clinical decision-making for self-harm patients is primarily based on empirical evidence from younger age groups, currently advocated preventive strategies may incorrectly emphasize the need for psychiatric interventions only. The high suicidal intent and different predictors of repetition of self-harm in older age highlight the need for age-specific interventions beyond the scope of psychiatric care alone.

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