

A Safety Plan for preventing suicide in a closed acute ward.

Description, first experiences and clinical characteristics.

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Introduction

-The KCAP (Clinical Centre for Acute Psychiatry) is the largest acute closed ward in the Netherlands.
-Patients, in whom suicidal behaviour is recognised by a mental health worker, and at a supposedly high risk for suicide, are commonly admitted to an acute closed ward.
-The estimated risk for suicide is strongly increased during admission.^{1,2} There is a need to identify factors that are associated with suicide among in-patients and it is imperative to guarantee safety for patients as well as for the staff.³
-In July 2007 a method was developed to estimate risk and setting for suicidal inpatients.
-Every patient receives a 'danger code'. This is precisely described in a safety code manual by de Winter.⁴ This is summarised below in **Table 1**.
-This code is registered and evaluated during the daily report of the nursing to the medical staff.

Aim:
-Description of the safety plan and a preliminary evaluation of the experiences with this method over a period of 6 months.
-Presentation of preliminary clinical and demographic characteristics of these suicidal patients regarding to this safety plan.
-Description of experiences among the staff of the KCAP.

Table 1 Safety plan, danger codes (phases) for the risk of suicide at the KCAP

Phase 5 (Red)	Seclusion	Severely suicidal
Phase 4 (Orange)	Supervision	↓
Phase 3 (Yellow)	Closed, without supervision or freedom	
Phase 2 (Green)	On request outside the unit	
Phase 1 (Blue)	Preparation for clinical discharge	

Material and methods

-From the beginning of January until the 30th of June 2009, 687 patients were admitted. For 681 (99%) patients the safety codes and complete data were available.
-Patients (n = 63, 9.3%) with code 4 and 5 (higher risk) were compared with patients (n = 618, 90.7%) with code 1,2 and 3 (lower risk).
-At admission patients were assessed for the presence of 5 target symptoms (e.g. depressive mood or suicidal behaviour, see **Table 4**).⁵
-During admission a DSM-V diagnosis was assigned. Diagnoses were clustered in:
1) Depressive disorders (also Bipolar depression), 2) Bipolar disorder manic episode, 3) Psychotic disorders, 4) Disorders related to substance abuse/dependence, 5) Personality disorders, 6) otherwise.
-An anonymous questionnaire was sent to ward staff by www.thesistools.com, 36 responded.
-Data analysis: Mann-Whitney U, t tests and χ^2 tests were used. The Statistical Package for Social Sciences version 17.0 (SPSS 17.0 INC, Chicago) was used for statistical analyses.

Results

Since the introduction of the safety plan in July 2007, 4 patients (2 female) committed suicide during admission (3 in the clinic and 1 outside). These suicides took place during the collection of these data. One of these patients had at some time during admission been placed in the higher risk (code 4 and code 5) phases, the other 3 had at some time been placed in phase 3. Ultimately 3 patients committed suicide during phase 3 (n = 3) and 1 during phase 2. See further **Tables 2-4**.

Table 2 Distribution of the codes (phases) of the safety plan in the higher and lower risk groups

Phase	n	%
Phase 5 (higher risk)	n = 24	(3,5%)
Phase 4 (higher risk)	n = 39	(5,7%)
Phase 3 (lower risk)	n = 428	(62,7%)
Phase 2 (lower risk)	n = 165	(24,2%)
Phase 1 (lower risk)	n = 16	(2,3%)

Table 3. Levels of highest suicidal behaviour for all patients during admission and for the higher risk patients (n = 63) ^a significant p < .001.

	Highest suicidal behaviour all patients (n = 681)	Highest suicidal behaviour higher risk patients (n = 63)
Suicide	n = 4 (0,6%)	n = 1 (1,6%)
Suicide attempt (lethal intent)	n = 28 (4,1%)	n = 14 (22,2%) ^a
Suicide attempt (non-lethal intent)	n = 44 (6,4%)	n = 17 (27,0%) ^a
Suicidal tendencies	n = 44 (6,4%)	n = 8 (12,7%)
Suicidal thoughts	n = 116 (17,0%)	n = 14 (22,3%)

Table 4. Differences in demographic and clinical characteristics between higher and lower risk patients.

	Low risk code	High risk code	Significance
CGI	5.2	5.7	p < .001
GAF (categorised)	2.3	1.6	p < .001
Female gender	41.5%	60%	p = .004
Age (yrs)	39.5	35.2	p = .012
Married/living together	30%	39%	ns
Children	33%	46%	ns
Compulsory admission	38%	44%	ns
First admission at KCAP (<5 yrs)	42%	68%	p < .001
Secluded	18%	38%	p < .001
Jobless	66%	49%	p < .001
ECT treatment	0.6%	6.3%	p < .001
Target symptoms			
Suicidal during admission	25%	81%	p < .001
Automutilation	7.3%	19%	p = .001
Depressive mood	28.3%	51%	p < .001
Psychotic features	55%	52%	ns
Alcohol dep/abuse	14%	4.8%	p = .035
DSM clusters			
Depressive disorder	8%	27%	p < .001
Bipolar disorder manic	11%	2%	p = .019
Psychotic disorder	30%	19%	ns
Substance abuse	15%	12.5%	ns
Personality disorder	19.4%	8.5%	ns

Table 5 Questionnaire about the safety plan from anonymous staff workers (n = 36)

Do you know exactly what the safety plan contains?	Yes	100%
	No	0%
Does the safety plan make you more aware of the risks of suicide?	Always	28%
	Mostly	41%
	Sometimes	19%
	Not	11%
Do you experience a team collaboration (with the doctor) when appraising and coding a suicidal patient?	Always	14%
	Mostly	41.5%
	Sometimes	41.5%
	Not	3%
Do you think that the safety plan makes you more capable of preventing suicide?	Always	0%
	Mostly	17%
	Sometimes	58%
	Not	25%
Should we continue the safety plan on the KCAP?	Yes	81%
	Not	19%

Discussion

-The safety plan is consequently used, is clear for patients and staff, but it does not prevent suicide.
-Unknown patients are probably getting a higher code, because the suicidal behaviour is more often seen as acute than as chronically suicidal.
-There is a need for the development of a structured taxation for the risk of suicide in the acute setting.
-Probably because of defensive treatment mechanisms, most patients are allocated to phase 3.
-14.3% had no suicidal behaviour in the higher risk group, thus taxation is perhaps in part based on inexplicable psychiatric behaviour (e.g. mutism or hallucinatory behaviour)
-Need for differentiation between chronically and acutely suicidal patients in the safety plan.
-Need for development of instruments to assess the suicide risk among closed inpatients in conjunction with the safety plan.

Limitations

- There is insufficient registration of decrease or change of codes over time.
- There are as yet different and insufficiently validated definitions for suicidal behaviour.
- The safety plan is a theoretically, not empirically, based construct.
- There is a positive selection of results
- There is a lack of instruments for measuring psychopathology and for taxation of the risk of suicide

References

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