Attitudes towards attempted suicide: the development of a measurement tool

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Abstract

Background: Nowadays reported global suicide attempt rates have increased dramatically and there is some evidence that failure by health care professionals to recognize and respond to the needs of a suicidal person may be a factor in the repeated suicide attempts of some people. Moreover, research evidence has indicated that unfavorable attitudes among doctors and nurses exist towards attempted suicide patients, which have a negative impact upon the quality of care they receive. The aim of the study was to develop, pilot and validate a measure of attitudes towards patients who have attempted suicide.
Method and Material: A questionnaire comprising 102 items was constructed from a existing validated instrument in combination with findings from a literature review. A pilot study was carried out with a sample of 40 (n=40) doctors and nurses, to assess the feasibility and acceptability of the instrument developed. Questionnaires were then distributed to a sample of 186 (n=186) doctors and nurses, working in two general hospitals in Athens area. In order to establish the scale's construct validity a factor analysis was performed. In addition, a face validity of the measurement tool was assessed by a group of experts. Reliability of the questionnaire was assesses by test - retest.
Results: Preliminary analysis reduced the 102 items of the questionnaire to 80. The following eight factors were retained: "positiveness", "acceptability", "religiosity", "professional role and care", "manipulation", "personality traits", "mental illness", "discrimination". The 8 factors yielded accounted for the 55.45% level of the total variance. The resultant "Attitudes Towards Attempted Suicide-Questionnaire (ATAS-Q) achieved high internal consistency, with Cronbach's alpha of 0.96 (a=0.96) in test and a=0.97 in retest assessment.
Conclusions: The construction, development and validation of the ATAS-Q will provide a useful measurement tool, enabling health care professionals to enhance their understanding of their attitudes towards patients who attempt suicide in order to enhance the provision of effective care to them.

Keywords: attitudes, attempted suicide, parasuicide, doctors, nursing staff

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Introduction

Suicide is one of the commonest causes of non-disease related death and it is a major public health problem worldwide [1,2]. Both fatal and non-fatal suicide behaviors constitute a considerable problem in terms of individual suffering as well as the burden on health care and costs to society[1]. Attempted suicide tends to evoke strong reactions from people including doctors and nurses relatives and friends, and also the general public.[3] If the behavior appears to be associated with high suicidal intent it generally evokes sympathy; when it seems to be associated with other motives, especially those of a manipulative nature, it is often viewed unsympathetically.[3]

Furthermore, patients who have tried with varying degrees of determination to take their lives present medical and administrative problems at the same time posing considerable strains on busy medical and nursing staff in a general hospital [3,4]. Their admission may be regarded with disfavor, treatment may be narrowly confined to their physical condition, provision for aftercare or psychiatric investigation haphazard or ignored. Attempted suicide is a challenge to health care professionals as attempts of self-annihilation violate the basic beliefs on life and death of our society[5]. In addition, health care professionals may feel ambivalent towards patients who self harm and sometimes perceive them as troublesome[2] or attention seeking[6]. Some research findings have indicated that unfavorable attitudes exist towards attempted suicide among doctors and nurses.

Attitudes are often conceptualized as having three components: the affective component, the cognitive component, and the behavioral component. The affective component consists of a person's liking of, or emotional response to the issue or person about which he or she holds the attitude. The cognitive component consists of the beliefs or knowledge about that person or issue. The behavioral component is the person's overt behavior in relation to the person or issue[7,8].

Literature on the relationship between attitude and behavior presents two conflicting positions; one suggesting little relationship and one supporting a strong attitude-behavior linkage[9]. Seremet[10] points out that Staff attitudes and reactions may vary, but they directly influence the quality and nature of patients' care.

The cultural context in Greece which is influenced by religion beliefs, considers suicide and attempted suicide as a sink. Therefore, could have an effect on health care professionals' attitudes. Leu [11] points out that negative attitudes of nurses have a detrimental effect on treatment and care. Samuelson[12]compared the attitudes of psychiatric nurses (n=58) and non psychiatric nurses (n=102) and concluded that the caring profession's attitudes towards patients that have attempted suicide are important, as negative or hostile attitudes are likely to diminish the interest shown in providing help for such patients. The literature highlighted that there are some key factors that have differing effects on the nurses' attitudes towards patients who have attempted suicide [13]. A number of studies found that older and more experienced nurses held more positive attitudes to attempted suicide patients than younger and less experienced staff [14,15]. Similarly, a quantitative study carried out to examine nurses' attitudes toward suicide found that the higher percentage (55%) of nurses who participated in the study demonstrated mid to high levels of sympathy towards older people who tried to commit suicide [16].

Sun et al.[17] refer to Leu's[18] findings from a study carried out to explore casualty nurses' (n=194) attitudes toward caring for suicidal patients. In particular, Leu's[18] results indicated that the emergency nurses who participated regularly in religious activities held more positive attitudes towards suicidal patients than those who did not.

In a survey carried out to assess doctors and nurses attitudes to parasuicide the author found that both professionals held

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negative attitudes towards parasuicidal patients and did not enjoy caring for them. In particular, nurses and doctors held the most negative attitudes to patients who made multiple attempts to commit suicide [19].

Sun et al.[13] again referring to Leu's[18] findings, pointed out that there were three different types of attitudes towards suicidal patients. Some nurses were angry and held judgmental attitudes towards patients who attempted suicide. They did not like caring for suicidal patients and felt they could be of no benefit to this group of patients. A number of nurses demonstrated empathy and sympathetic feelings for suicidal patients. They accepted suicidal behaviors and felt that their nursing care had meaning. Leu[18] also found few nurses perceived that suicidal patients were troubled people therefore, they felt powerlessness and fearful when they were providing care. Thus, they distanced themselves from caring for people who had attempted suicide.

However, it has to be stressed that failure to recognize and respond to the patient's needs may have been a factor in the repetition of some attempts suicide. Therefore, the attitudes of the caring professions towards patients who attempt suicide are particularly important because they are likely to determine the enthusiasm that will be shown in providing help for such patients and hence influence the effectiveness of treatment [3]. Thus, health care professionals must be aware of their attitudes towards this group of patients as part of their professional and therapeutic role.

Methodology

Aim

The aim of the study was to develop, pilot and validate a measure of attitudes towards attempted suicide.

Questionnaire development

For the purpose of this study, components were drawn from a number of previously validated attitudinal measures[6,20]. Some statements were modified, and other statements were added following a critical review of relevant studies which researched attitudes towards suicide and attempted suicide[14],[17,19,21,22]. Thus, the subject coverage was extended in order to increase the validity of the measurement tool [23]. A pool of 102 items was included in the questionnaire under development using a likert type scale for responses from 1 (strongly disagree), 2 (disagree),3 (undecided), 4 (agree), 5 (strongly disagree).

Pilot study

The feasibility and acceptability of the questionnaire were tested in a pilot study of 40 doctors and nurses working in different specialties, in hospitals not involved in the main study. All doctors and nurses had direct contact and involvement in the care of attempted suicide patients. Participants were asked through an open-ended question at the end of the questionnaire, to give feedback about the clarity of the questions and state any problem in completing the questionnaire. The pilot study showed that the items were clearly understandable. Overall the pilot study showed no major changes in structure or content of the questionnaire were needed. Therefore, the questionnaire appeared to have face validity as the questions considered to be relevant to aim of the study.

Sample and research site

Nurses and doctors working in medical, surgical, ICU, accident and emergency departments of two general hospitals in Athens area as well as in a psychiatric ward were invited to participate in the study. As an inclusion criterion respondents were required to have at least 3 years working experience in a general hospital. All participants in the study were regularly in contact with attempted suicide patients and directly involved in this group of patients' treatment and care.

Access and ethical considerations

The researchers approached potential participants after the approval of the study

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from the directors of Nursing and Medical Services of two general hospitals in Athens area. All potential subjects participated in the study on a voluntary basis. A written statement regarding the purposes, procedures, risks, and benefits of this study was included with each questionnaire. In addition, participants were also informed that the questionnaire was anonymous and the results would be reported as group data. Implied consent to participate was assumed to have been given by those who completed and return the questionnaire.

Data Analysis

Analyses of the data were completed using the Statistical Package for Social Sciences (SPSS v. 15). A descriptive analysis was conducted to describe the characteristics of the sample. Factor analysis was performed to examine the factors structure of the Attitude Towards Attempted Suicide-Questionnaire (ATAS-Q [9,24]. Internal consistency of the questionnaire was tested by Cronbach's coefficient alpha and rest was calculated using Person's Correlation Coefficient.

Factor analysis

Factor analysis was performed in order to enhance construct validity[24,25]. Dimensionality of the scale was assessed using truncated principal components analysis with varimax rotation. In the present study an exploratory factor analysis was performed because the study concerned the initial testing of the questionnaire [24].
Questions with individual measures of sampling adequacy <0.4 were excluded chronologically, the lower first. Scores were recalculated after each item was removed. The remaining questions were then subjected to principal axis factoring with varimax rotation for the identification of the components. Solutions were initially generated by using eigenvalues set at one as a guide[25]. Items with factor loading of <0.3 were excluded from the final solution and those appeared in more than one component were included in the highest loading[24,26].

Test -Rest Reliability

Cronbach's coefficient alpha was estimated for each factor as well as for the total scale. After performing factor analysis the resultant questionnaire was tested and retested for reliability (stability). In particular, 43 (n=43) out of 186 doctors and nurses, completed the resultant questionnaire again, two weeks after the data collection.

Results

A total of 186 (n=186) doctors and nurses returned the questionnaires, yielding a response rate of 69,4%. The mean age of respondents was 33 years (range, 24-56 years). 64% of the respondents were female and 36% were male and 62% were nurses and 38% were doctors.

The calculated overall Kaiser-Meyer-Olkin (KMO) measurement of sample adequacy was 0.80 which suggests that the data were suitable for a factor analysis. From the factor analysis 8 factors extracted accounted for 55.451% of the total variance. Twenty two items were removed and the resultant "Attitudes Towards Attempted Suicide – Questionnaire" (ATAS-Q) comprised 80 attitudinal items, with a favourable attitude corresponding to 'strongly agree' and unfavourable to 'strongly disagree'. The higher the overall score of the questionnaire indicates more positive attitude towards attempted suicide people. All items of the questionnaire with the factor loading are presented in tables 1-8.

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The first factor entitled "positiveness" contains positive and negative attitudes of health care personnel to attempted suicide patients (table 1)

Table 1. The first factor of ATAS-Q

Factor I (27 items) "Positiveness"	Factor Loading
I would feel ashamed if a member of my family attempted suicide	.39
People who attempt suicide are irresponsible	.60
Once a person attempts suicide, he is suicidal forever	.55
A suicide attempt is essentially a cry for help	-.76
Attempted suicide, such as an overdose of sleeping pills, is more acceptable than violent suicide such as by gunshot	.48
People who attempt suicide have sensibilities that are not detectable by others around them	-.75
Those who attempt suicide are cowards who cannot face life's challenges	.58
People who attempted suicide occupy more staff time so staff are unavailable to patients who are "in greater need of help"	.41
Empathy demonstrated by the health professional may positively influence an attempted suicide patient to reconsider future suicide attempts	-.76
The majority of people who attempt suicide misuse health care services	.80
Whenever I care for attempted suicide patients I feel uncomfortable	.68
If unpleasant methods (e.g. gastric lavage) are used in the treatment of attempted suicide patients they can prevent the patient from attempting suicide again	.68
Sometime I fell nervous when I have to care for an attempted suicide patient in hospital	.69
A person who has made numerous suicide attempts is at high risk of succeeding in the future and needs help and understanding	-.43
I am happy to care for attempted suicide patients and I feel the same sympathy as I care for other patients	-.74
It is frustrating to treat patients who have attempted suicide	.74
I have difficulties in understanding a person who attempted suicide	.61
I like to help patients who have attempted suicide	-.65
I try to establish communication with an attempted suicide patient so he may express the problems he encounters	-.71
I often feel sympathy and understanding towards attempted suicide patients	-.79
Hospitalized attempted suicide patients will make future suicide attempts, regardless of how supportive health care professionals were to them	.67
I believe that hospitalized, attempted suicide patients will be unable to have a normal life following their discharge	.73
It is difficult and unpleasant to treat an attempted suicide patient	.54
Attempted suicide patients think only of themselves	.79
Attempted suicide patients must be treated using "strict" methods	.77
Attempted suicides are not responsible for their actions but are victims of their environment and they need understanding	-.64
The fact that a person attempted suicide it doesn't mean that the normal course of their life tipped over	-.76

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The second factor comprises attitudinal items which represent the level of "acceptability" of the acts of suicide and attempt suicide to health care personnel.

Table 2. The second factor of ATAS-Q

Factor II (13 items) "Acceptability"	Factor Loading
People with incurable diseases should be allowed to commit suicide in a dignified manner	.62
People who attempt suicide have a high level of responsibility	.35
Attempt suicide is acceptable for old or infirm people	.64
Suicide is an acceptable means to end an incurable illness	.69
There may be situations where the only reasonable resolution is suicide	.75
External factors, like lack of money, are a major reason for suicide	.50
Sometime suicide is the only escape from life's problems	.73
If someone wants to commit suicide, it is their business and we should not interfere	.51
People who die by suicide should not be buried in the same cemetery as those who die naturally	-.38
Potentially, every one of us can attempt to suicide	.49
People do not have the right to take their own lives	-.56
A suicide attempt is a brave act	.46
An attempt to suicide is an acceptable act in specific cases.	.74

Factor entitled "religiosity" illustrates health care personnel attitudes which consider suicide and attempted suicide in relation to religious issues.

Table 3. The third factor of ATAS-Q

Factor III (7 items) "Religiosity"	Factor loading
The higher incidence of suicide is due to the lesser influence of religion	.53
In general, suicide is a sine not to be condoned	.34
Suicide is a very serious moral transgression	.59
Suicide goes against the laws of God	.74
People who commit suicide lack religious convictions	.63
Most people who attempt suicide do not believe in God	.59
People who attempt suicide are, as a group, less religious	.54

The "professional role and care" factor comprises items which refer to the care that attempted suicide patients receive or should receive as well as aspects of the professional role and work environment of health care personnel.

Table 4. The fourth factor of ATAS-Q

Factor IV (10 items) "Professional role and Care"	Factor loading
Suicide is a natural way of obliterating people with psychiatric problems	.35
Patients in the place/unit I work receive good care	.76
I believe that the training I have completed to date, has given me adequate skills to care for patient who have attempted to commit suicide	.31
In the place I work there is considerable number of employees who have indifferent attitude towards their work	-.44
I think there is esprit de corps in the unit I work	.70
Patients who have attempted suicide are treated with sympathy in the unit where I work	.74
Attempted suicide patients receive a good therapeutic care in the unit where I work	.71
An attempted suicide patient benefits psychologically by his hospitalization in a general hospital	.47
Some attempted suicide patients are aggressive and there is a need for security staff in the unit of the hospital to which they are admitted	.56
When I care for attempted suicide patients, I feel depressed	.40

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Factor "manipulation" illustrates health care personnel beliefs that attempted suicide patients try to manipulate their environment.

Table 5. The fifth factor of ATAS-Q

Factor V (6) "Manipulation"	Factor loading
People who attempt suicide are in essence trying to hurt somebody with their actions	.62
Attempted suicide patients mainly try to manipulate their situation to their advantage	.59
Suicide attempters who use public places (such as bridge or tall buildings) are more interested in getting attention	.60
Those people who attempt suicide are usually trying to get sympathy from others	.51
People who bungle suicide attempts really did not intend to die in the first place	.48
People who attempt suicide hope to achieve something other than death	.64

Factor "personality traits" illustrate items that outline the character and traits of people who attempt suicide.

Table 6. The sixth factor of ATAS-Q

Factor VI (4 items) "Personality traits"	Factor loading
Most people who attempt suicide are lonely and depressed	.42
Most people who attempt suicide don't really want to die	.46
Those who threaten to commit suicide rarely do so	.39
People with no roots or family ties are more likely to attempt suicide	.30

The mental illness factor comprises items which relate suicide and attempted suicide to mental illness.

Table 7. The seventh factor of ATAS-Q

Factor VII (8 items) "Mental illness"	Factor loading
Many attempts to suicide are the result of the desire of the victims to "get even" with someone	.59
It is rare for someone who is thinking about suicide to be dissuaded by a "friendly ear"	.38
People who attempt suicide are usually mentally ill	.39
People who attempt suicide and live should be required to undertake therapy to understand their inner motivation	.43
Attempted suicide patients must be treated on a psychiatric ward of a general hospital on the day their admission	.44
People who attempt suicide are so mentally ill that they should be treated in psychiatric hospitals from the outset	.57
People who attempted suicide must be treated by community services	.56
I think I need additional psychiatric training in order to care for the hospitalised attempted suicide patients	-.39

The last factor refers to discriminations attitudes of health care personnel towards suicide and attempted suicide.

Table 8. The eighth factor of ATAS-Q

Factor VIII (items 5) "Discrimination"	Factor loading
Almost everyone has at one time or another thought about suicide	-.32
We care for all attempted suicide patients in the same room/ ward on the unit in which I work	.44
I feel more sympathy towards a person who attempted suicide for the first time than for those who make repeated suicidal attempts	.39
Only health care professionals with psychiatric training should take care of attempted suicide patients	.32
We should have separate rooms in hospitals for the care of attempted suicide patients	.39

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The interpretable factors were extracted and the accounting variance of each factor explained as illustrated in Table 9.

Table 9. Factor variance with varimax rotation

Factors	Percentage of variance
“Positiveness”	25.075%
“Acceptability”	7.652%
“Religiosity”	6.516%
“Professional role and Care”	4.017%
“Manipulation”	3.679%
“Personality traits”	3.011%
“Mental illness”	2.923%
“Discrimination”	2.578%
Total Variance	**55.451%**

Cronbach's alpha test of reliability was performed for each factor and the overall ATAS questionnaire, results are presented in Table 10. In retest assessment of ATAS- questionnaire revealed Pearson r= 0.997.

Table 10. Cronbach's alpha test of reliability

Factors	Cronbach's Alpha
“Positiveness”	0.952
“Acceptability”	0.880
“Religiosity”	0.918
“Professional role and Care”	0.786
“Manipulation”	0.749
“Personality traits”	0.589
“Mental illness”	0.833
“Discrimination”	0.655
Total Cronbach's Alpha	**0.962**

Discussion

The construction of the Attitude Towards Attempted Suicide Questionnaire is the first attempt in Greece to measure attitude towards attempted suicide people. Factor analysis of the questionnaire suggests that the attitude to suicide and attempted suicide is a complex phenomenon which must be explored in a number of dimensions rather than just the two opposing poles of positive or negative attitude of respondents[6]. Each factor represents a different dimension to explain the form of health care personnel attitude towards attempted suicide people. Therefore, the adoption of ATAS-Q makes it possible to measure the attitudes of health care personnel towards people who attempt suicide.

The factors which emerged from factor analysis seem to cover the extension of what is understood as attitude in its cognitive, affective and behavioral component. In particular, the factors which emerged under the title of “positiveness”, “personality”, “mental illness” and “religiosity” illustrate the cognitive aspect of attitude. The factor entitled “acceptability”

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represents the affective aspect of attitude. Furthermore, "professional role and care", "manipulation" and "discrimination" were components of the behavioral aspect of attitude.

Though the factors which emerged reflect the Greek doctors' and nurses' attitudes towards attempted suicide it seems that most of them are conceptually similar to those identified by previously validated instruments [6,20].

Conclusions

Testing of the ATAS-questionnaire which was constructed by the utilization of validated instruments as well as from attitudinal dimensions of the literature review revealed that is a useful tool in measuring attitudes towards people who have attempted suicide. Testing confirmed high internal consistency and stability as a measurement tool with good face and construct validity.

However, it has to be acknowledged that further refinement is needed, with testing in a larger sample and with variables that may influence health care personnel attitudes towards attempted suicide people.

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