Role of Hope and Resilience in the Outcome of Depression and Related Suicidality

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Abstract

Depression is a common disease that reduces the quality of life and limits seriously patient's psychosocial functioning. The aim of this study is to investigate the role of hope and resilience in depressive disease outcomes and suicidality. Seven rating scales (Brief Psychiatric Rating Scale, Hamilton Rating Scale for Depression, Montgomery-Asberg Depression Rating Scale, Hospital Anxiety and Depression Scale, the Enhanced Snyder Hope Scale, Scale of Connor and Davidson-10, Scale for Suicide Ideation) have been administered to 75 subjects with the following features: diagnosis of unipolar depressive disorder, bipolar disorder and schizoaffective disorder reporting a major current depressive episode according to DSM-V criteria, age between 18 and 75 years, no history of drug addiction, major medical condition or mental retardation. An inverse correlation has been found between higher levels of hope and resilience and lower severity of depression ($p < 0.0001$) among the sample and higher levels of resilience were associated with lower levels of suicidality ($p = 0.037$). Furthermore, an inverse correlation between age and levels of resilience ($p = 0.020$), an association between age and years of disease ($p < 0.0001$) as well as between resilience and levels of hope ($p < 0.0001$) were found. Hope and resilience both seem to have a positive role in the outcome of depressive illness reducing the severity of psychopathology and related suicidality.

Keywords

Hope, Resilience, Depression, Suicide

1. Introduction

Depression is a common disease that reduces the quality of life and limits seriously patients' psychosocial functioning. The outcome of depressive illness is charac-

terized by an acute phase (6 - 12 weeks) mostly associated to an intense and active treatment. Remission of symptomatology occurs after psychopharmacological and/or psychotherapeutic trials and a maintenance phase is sustained in order to prevent any relapse. Recovery is considered as the absence of sub-syndromic symptoms for more than 6 months (Frank et al., 1991).

Suicide is an important social and medical problem and during the second and third decades of life suicide represents the second leading cause of death after car accidents. Suicides related to depression mostly occur in elder age and many subjects may also report psychotic symptoms (Ganguli & Mulsant, 2002; Vythilingam et al., 2003). Suicide attempts and suicides in bipolar disorder are often related to the first depressive episode around 25 years (Simpson & Jamison, 1999). Several studies conducted in the last 10 - 15 years described a relationship between levels of resilience and suicidal risk. In fact, resilience seems to be a protective factor against suicidal risk. According to the Interpersonal Theory of Suicide (ITPS; 32) factors promoting suicide are: Thwarted belongingness (feeling of social isolation), Perceived burdensomeness (feeling to be a burden for others) and Acquired capability for suicide (habit not to fear the death and pain originating from a preventive exposure to painful events). Also, IPTS hypothesizes that the absence of hope may lead to the desire for death. According to Snyder's theory (Snyder et al., 2000), hope is defined as the degree in which people have a sense of determination to achieve success (agency though) and perceive the capability to form alternative paths towards the realization of objectives (pathways though). In addition, Davidson et al. hypothesized that higher levels of hope determined lower levels of all three IPTS components (Davidson et al., 2009). They also suggested that suicidality in subjects with elevated levels of hope may also occur since they may have many aims to reach and report an experience of failure that contributes to capability for suicide.

Hope can be considered a starting point for the recovery process and it is the basis of determination which is very important to achieve any goal (Adams & Hope, 1998). Patients' motivation can be increased by a higher sense of hope to engage in the recovery process (Park, 2016). The key elements of hope are represented by courage, faith, projects, expectation and the future.

Resilience is a term that refers to the ability, the process or the result of a satisfactory adaptation, despite the threatening or difficult circumstances that an individual faces in his/her life (Malaguti, 2005; Trabucchi, 2007). Then resilience is the capacity to transform a potentially destabilizing and critical event into a personal search which allows an individual to reorganize positively his life (La Marca et al., 2014). Resilience is not considered an "innate force" but is a dynamic process which develops throughout the entire life as a personality aspect, reinforces psychological well-being despite the existence of a mental illness (Putton & Fortugno, 2006). Hope and resilience may play an important role in the outcome of depressive disease and in suicidality. As mentioned above, Snyder has proposed a theory of hope (Snyder et al., 2000) that can be defined as a state of positive motivation based on three components: Aims to reach: Goal blockage,

Strategies to reach objectives/Pathways Thinking, Motivation to reach objectives/Agency Thinking.

DSM-V (Diagnostic and Statistical Manual of Mental Disorders) in 2013 listed nine symptoms as diagnostic criteria for depression. Snyder (Snyder et al., 1994) has previously discussed that nine diagnostic symptoms of depression are related to the three components of hope. Goal blockage relates especially with worthlessness feelings and suicidal thoughts/attempts; Agency with diminished interest and loss of energy/fatigue; Pathways in particular relates to inability to concentrate.

In this study we described the relationship between levels of hope and resilience with the gravity of depressive psychopathology, suicidality and other clinical or demographic variables among a sample of patients affected by mood disorders reporting a current depressive episode.

2. Materials and Methods of the Study

The sample used in the study is composed by patients enrolled at Mental Health Community Centre of Foggia and University of Foggia Psychiatric Unit between December 2018 and August 2019.

Patients included in the study met the following criteria:

a) Diagnosis of unipolar depressive disorder, bipolar disorder and schizoaffective disorder reporting a current depressive episode according to criteria of (American Psychiatric Association, 2013);

b) Age between 18 and 75 years;

c) Absence of history of substance addiction lifetime;

d) Absence of a psychiatric disease due to another medical condition;

e) Absence of mental retardation.

Finally, we enrolled 55 patients with depressive unipolar disease, 18 patients with bipolar disorder with current depressive episode, 2 patients with schizoaffective disorder with current depressive episode.

Seven rating scales have been administered: BPRS (Brief Psychiatric Rating Scale) for measuring general psychopathology, HAMD (Hamilton Rating Scale for Depression) and MADRS (Montgomery-Asberg Depression Rating Scale) to evaluate depressive symptoms, HADS (Hospital Anxiety and Depression Scale) commonly used to measure levels of depression and anxiety, SNYDER (The Enhanced Snyder Hope Scale) to evaluate levels of hope, CD-RISC 10 (Scale of Connor and Davidson) to analyse levels of resilience, SSI (Scale for Suicide Ideation) to evaluate suicidal ideation.

Descriptive analyses (percentages of frequency, mean and standard deviations) were performed, ANOVA and linear regressions have been carried out for bivariate analyses. Significative results have been considered with $p \leq 0.05$.

3. Results

The sample is composed of 28 males and 47 females. The average age is 48 years. The majority of patients is single, followed by married and divorced, most of pa-

tients are employed (Table 1).

Considering scores obtained from psychometric scales, mean values for the gravity of the psychopathology through BPRS are 42.52 ± 12.95, considered as a moderate gravity of psychopathology. Gravity of depression has been described with two psychometric scales obtaining mean values for HAMD of 20 ± 7.45 and for MADRS of 23.45 ± 11.22, considered as moderate gravity of depression.

The evaluation of anxiety in comorbidity with depression through HADS has determined scores with mean values of 18.84 ± 9.06, considered as clinically relevant anxiety.

Positive psychosocial characteristics of hope and resilience have been measured respectively with Snyder and CD-RISC 10 with mean values for the first of 41.17 ± 11.20 and for the second of 17.78 ± 7.66. The mean score for the Snyder is considered as "hopeful" for the sample and CD-RISC 10 score is considered as "less resilient" sample in comparison with the mean value (22.3 ± 7.6) reported in literature for depressive disorders.

Table 1. Clinical and sociodemographic descriptive characteristics of the sample.

Characteristics	mean ± s.d.	N (%)
Male sex	-	28 (37.34)
Female sex	-	47 (62.66)
Age	47.77 ± 14.68	-
Marital status		
Single	-	41 (54.66)
Married	-	29 (38.66)
Separate	-	5 (6.66)
Employment		
Employed	-	33 (44)
Unemployed	-	25 (33.33)
Retired	-	7 (9.33)
Student	-	10 (13.33)
Hospitalizations		
0	-	38 (50.66)
1	-	3 (4)
>1	-	34 (45.33)
Years of disease	13.66 ± 13.27	-
Diagnosis		
Major Depression	-	55(73.33%)
Bipolar Disorder, depressive episode	-	18 (24%)
Schizoaffective Disorder, depressive episode	-	2 (2.66%)

Suicidality has been measured through SSI obtaining mean scores of 6.65 ± 6.33 (Table 2).

Through a bivariate analysis for sex, we observed differences between females and males within the sample at psychometric scales, years of disease, number of hospitalizations and age.

In fact, significative differences have been observed in the scores of BPRS with mean values for females of 36.57 ± 13.30 and 47.20 ± 12.77 for males (p-value 0.195).

The gravity of depression (HAMD) is higher in females with mean values of 21.57 ± 7.56 than in males with 13 ± 3.24 (p-value = 0.040).

Also, women have a statistically longer outcome of disease (years) with 18.57 ± 15.14 than males with 1.6 ± 1.14 s.d. (p-value = 0.033). Furthermore, women report higher levels of depression (p-value = 0.040) (Table 3).

Table 2. Psychometric descriptive features of the sample.

Psychometric ratings	mean ± s.d.
BPRS	42.52 ± 12.95
HAMD	20 ± 7.45
MADRS	23.45 ± 11.22
HADS	18.84 ± 9.06
Snyder	41.17 ± 11.20
CD-RISC 10	17.78 ± 7.66
SSI	6.65 ± 6.33

Table 3. Gender differences of the sample in the scores of psychometric scales, for years of disease and for number of hospitalizations.

Characteristics	Females mean ± s.d.	Males mean ± s.d.	p-value
BPRS	36.57 ± 13.30	47.20 ± 12.77	0.195
HAMD	21.57 ± 7.56	13 ± 3.24	**0.040**
MADRS	25.57 ± 11.68	13.60 ± 6.18	0.065
HADS	15.85 ± 3.76	18 ± 6.44	0.481
Snyder	37.42 ± 8.88	40.88 ± 9.31	0.539
CD-RISC 10	18.57 ± 6.21	20.20 ± 5.49	0.649
SSI	13.14 ± 4.25	14 ± 2.82	0.704
Years of disease	18.57 ± 15.14	1.6 ± 1.14	**0.033**
Number of hospitalizations	47	28	0.067
Age	48.14 ± 16.49	34.40± 21.66	0.238

Depressive patients report much higher gravity of depression at HAMD (p-value = 0.002) and MADRS (p-value = 0.005) than bipolar/schizoaffective disorders patients. Also, patients affected by schizoaffective disorders report more years of illness (p-value = 0.052; Table 4). A significant association is described between higher levels of hope at Snyder as well as resilience at CD-RISC 10 and lower severity of depression at HAMD and MADRS ($p < 0.0001$) as well as between higher levels of resilience and lower levels of suicidality at SSI ($p = 0.037$). Furthermore, an inverse association between age and resilience ($p = 0.020$) as well as an association between age and years of disease ($p < 0.0001$) are reported (Table 5).

Table 4. Psychopathology ratings among diagnosis groups.

Psychometric ratings	Major Depression	Bipolar Disorder	Schizoaffective disorder	p-value
	Mean ± s.d.			
BPRS	42.30 ± 11.57	44.78 ± 16.54	28 ± 4.24	0.217
HAMD	21.69 ± 7.16	15.72 ± 5.92	12 ± 11.31	**0.002**
MADRS	25.90 ± 10.63	17.11 ± 10.11	13 ± 14.14	**0.005**
HADS	20.09 ± 7.46	15.66 ± 12.02	13 ± 16.97	0.129
Snyder	39.61 ± 11.14	45.83 ± 8.02	42 ± 31.11	0.123
CD-RISC 10	17.25 ± 7.27	18.94 ± 8.89	22 ± 8.48	0.533
SSI	7.16 ± 6.20	4.44 ± 5.39	12.5 ± 14.84	0.118
Age	46.63 ± 15.42	50.83 ± 11.08	51.50 ± 27.57	0.544
Years of disease	11.69 ± 12.31	18 ± 14.54	29 ± 15.55	**0.052**

Table 5. Tested associations between psychopathology and hope-resilience ratings.

Characteristics	BPRS	HAMD	MADRS	HADS	Snyder	CD-RISC 10	SSI	Age
Snyder	0.022	<0.0001	<0.0001	<0.0001	-	<0.0001	0.237	0.136
CD-RISC 10	0.676	<0.0001	<0.0001	<0.0001	<0.0001	-	0.037	0.020
Years of disease	0,078	0.776	0.692	0.665	0.381	0.729	0.678	<0.0001

4. Discussion

In this study we describe the role of hope and resilience in the outcome of depression and in suicidality.

Arnau et al. conducted a longitudinal study examining the influence of hope on depression in 522 students of a college (Arnau et al., 2007) in three different moments (with intervals of one month) and showed that agency thinking exercised a negative predictive effect on depression, while levels of pathways thinking didn't influence levels of depression (Arnau et al., 2007). In another study resilience has been investigated as a protective factor for anxiety and depressive mood among Korean employees (Young-Chul & Sang, 2019).

We observe lower values of hope and resilience in patients with diagnosis of major depression than in patients with diagnosis of bipolar disorder in depressive phase, even if not fully statistically significant. This difference may be explained according to a Spanish study by Fierro and Molina, 2015 (Fierro, 2016): emotional dimming is the main element in bipolar depression while sadness in unipolar depression. A more passive and painful experience justifies lower levels of hope in unipolar depression. There are significatively higher values of depressive symptoms (HAMD and MADRS) in unipolar depressed patients than in bipolar ones. We show that the length of disease is higher in patients affected by schizoaffective disorder with depression followed by bipolar and finally unipolar depression. The major length of schizoaffective disorder is linked to the features of this syndrome that stands across bipolar disease and schizophrenia. It has a typical outcome of bipolar disease, but it also presents psychotic symptoms without depression or mania. This study concludes that the outcome of disease in patients affected by depressive episode depends on objective factors such as socio-demographic characteristics (age, gender, occupation) and on subjective factors such as psychosocial characteristics of resilience and hope.

5. Conclusion

Results from our study suggest to include rehabilitation interventions and psychotherapy in the treatment of different phases of the depressive illness in order to improve healing factors such as hope and resilience and guarantee greater therapeutic effectiveness through synergic action with conventional treatments for a more favourable outcome of depression.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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