



Risk factors and protective factors of suicidal behaviour in people diagnosed with depression¹

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Abstract: According to the WHO, over 700,000 people commit suicide annually. Their main cause is clinical depression. It is predicted that by 2030 it will become the most diagnosed ailment among people. In the face of the pandemic of depression and suicidal behaviour, it is important to establish the so-called protective factors. Aim of the study: The main aim of the study was to analyse the relationship between protective factors (spirituality, religiosity) and suicidal risk factors (mental pain, depression, anxiety, fascination with death, coexistence of Borderline Personality Disorder BPD, self-harm) in people with a clinical depression. Methodology: The study was conducted from November 2022 to March 2023 using standardized tools and clinical scales to assess the above-mentioned variables. A total of 167 people were examined, while 96 people were qualified for the study, including 46 patients with depression and 50 people from the control group. Results: A significant number of subjects from the control group declaring mental health showed features of depressive disorders (27%), anxiety disorders (45%) and BPD (31.5%). Depressed participants compared to the control group, showed a lower level of spirituality and religiosity and a higher level of suicidal risk factors. Among people with depression, a positive effect of spirituality on lowering the fascination with death was shown, while religiosity correlated negatively with self-harm. In addition, psychological pain and fascination with death increased with the severity of anxiety, depression, self-harm, and BPD. In the examined group, the level of suicidal risk factors increased along with the religious crisis. Conclusions: The study partially confirmed the protective effect of spirituality and religiosity on people with depression in the context of suicidal risk. Religious crisis turned out to be a significant predictor of suicide risk.

Keywords: suicide risk factors, factors protecting from suicide, suicide and depression

1. Introduction

Suicide and depression have become a significant problem in modern civilisation. In 2021, the World Health Organization (WHO) reported that depression is the fourth most serious illness worldwide and one of the main causes of suicide. Globally, it affects 5% of adults. Unfortunately, about 75% of people with depression in low- and middle-income countries do not receive any treatment. It is predicted that by 2030 it will also become the most frequently diagnosed disease in the world. It affects as many as 350 million people, including 4 million in Poland (WHO, 2021b; Provincial Sanitary-Epidemiological Station in Krakow, 2022). A study from the SARS-CoV-2

pandemic period of 2020-2021 showed that 38.8% of “healthy Poles” show symptoms of depression and require consultation with a specialist. This study also showed that among “healthy Poles”, depression positively correlates with religious crisis, fascination with death, life stressors, and psychological pain (Surmacz et al., 2021). It was also shown that with greater severity of depressive symptoms, there is a higher level of professional burnout (Kornakiewicz et al., 2019).

According to the American classification DSM-5 (American Psychiatric Association, 2018), so-called “major depressive disorder” can be diagnosed in a person who meets 5 or more of the following criteria for at least 2 weeks: depressed mood, significant decrease in interests

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and ability to experience pleasure, weight loss or gain without intention, insomnia or excessive sleepiness, agitation or psychomotor retardation, fatigue or lack of energy, feelings of worthlessness or inappropriate guilt, decreased ability to think/concentrate/make decisions, recurrent suicidal thoughts. It is important that at least one of the symptoms is: depressed mood or so-called anhedonia (American Psychiatric Association, 2018). DSM-5 distinguishes the following types of depression: mood dysregulation disorder, major depressive disorder, chronic depressive disorder (dysthymia), premenstrual dysphoric disorder, substance/medication-induced depressive disorder, depressive disorder due to another medical condition, unspecified depressive disorder. According to DSM-5, depressive disorder can have a course: severe, moderate, mild, with psychotic symptoms, in partial or full remission. It can be a single or recurring episode. Depressive disorders often co-occur with anxiety disorders, personality disorders, neurodevelopmental disorders (ADHD, ASD), addictions. In our study, most people from the clinical group had recurrent depressive disorders co-occurring with other mental disorders.

Suicide is defined as a person's conscious, deliberate and intentional act aimed at taking their own life (Grzywa et al., 2009). According to the WHO, more than 700,000 people commit suicide each year. There are even more suicide attempts. A person who has attempted to take his or her own life is at high risk of doing so again. Suicide is the fourth (in terms of frequency) leading cause of death among adolescents. The leading cause of suicide is depression. About 77% of global suicides occur in low- and middle-income countries (WHO, 2021). In 2016, among people who died before the age of 45, 52.1% committed suicide (Surmacz et al., 2021). In the same year: the global suicide rate was 10.5; the European rate was 12.9; the Polish rate was 13.4. In Poland, this rate for women was 3.4; for men 23.9 (Surmacz et al., 2021). Studies show that men commit suicide about 1.8-3 times more often than women. Women are more likely to attempt suicide (Grzywa et al., 2009). Suicide is the fourth most common cause of death among 15-19 year olds. The most common methods of suicide worldwide include consumption of chemical agents, hanging, and use of firearms.

With the increase in suicidal acts in recent years, it is particularly important to examine suicide risk factors and protective factors that reduce self-destructive and suicidal behaviour.

Among the motives for suicide are: wanting to stop the pain, hopelessness, emptiness as well as seeking revenge. Revenge is the most common motive for suicide attempts among 14-18 year olds (Makara-Studzińska, 2013). The rate of suicidal behaviour in major depression is: for 'S' thoughts, 53.1%; 'S' tendencies, 17.5%; and for 'S' attempts, 23.7% (Dong et al., 2018, 2019). Individuals with major depression account for 15% of successful 'S' attempts (Grzywa et al., 2009).

The most important risk factor for suicide in the general population is a history of suicide attempts (WHO, 2021). Others include male gender, old age, social isolation, lack of support, stressful life situations, substance abuse, chronic somatic and psychiatric illnesses, too few protective factors, psychological pain and fascination with death (Grzywa et al., 2009; Makara-Studzińska & Koślak, 2009; Młodożeniec, 2008). The likelihood of suicidal behaviour is increased by concurrent use of psychoactive substances, DSM-5 cluster B personality disorder (antisocial, borderline, histrionic or narcissistic), feelings of hopelessness, a tendency to behave in aggressive ways, difficult childhood experiences and stressful life events (Surmacz et al., 2021). Disease factors have also been shown to predispose to but not trigger suicidal acts (Isometsä, 2014). A Polish study conducted during the Covid-19 pandemic on a population of healthy individuals found that psychological pain was the strongest predictor of suicide attempts (Surmacz et al., 2021). Similar results have been obtained in other populations (Campos et al., 2019; Tanriverdi et al., 2022a).

Shneidman (1998), after analysing suicide notes from people committing suicide, noted that most of them described 'intolerable' emotional distress and a belief that death was the only way to end it (Shneidman, 1998). The researcher defined psychological pain as 'the experience of anguish, suffering and negative emotions such as fear, despair, anxiety, regret, shame, guilt, lack of love, loneliness and loss'. He identified frustrated needs for love, belonging,

achievement, dominance, aggression as the causes of this condition. In his view, psychological pain is the primary source of suicidal behaviour (Shneidman, 1993). This happens when it reaches an 'unbearable intensity for the individual combined with cognitive narrowing'. Death then begins to appear as the only way to end suffering. This condition is referred to as presuicidal syndrome (Chodkiewicz et al., 2017). Mee et al. (2006, 2011) described the impact of psychological pain on the development of suicidal thoughts and plans in patients with depression (Mee et al., 2006, 2011). Obracht and colleagues (2003) defined psychological pain as 'a subjective experience accompanied by an awareness of negative changes in oneself and one's functioning along with co-occurring unpleasant emotions' (Orbach et al., 2003). A longitudinal study of 4 years on a group of 82 Canadian students found that psychological pain was a stronger predictor of suicidal thoughts than depression or hopelessness (Montemmarano et al., 2018). When faced with the above-mentioned suicide risk factors, it is important to identify 'protective factors' that reduce the risk of destructive behaviour. Researchers in this area distinguish the following: spirituality (Dziwota et al., 2016), religiousness (Kyle, 2013), social support (Warzocha et al., 2008), sense of coherence (Ruszkiewicz and Eldridge, 2015) and sense of connection (Makara-Studzińska et al., 2017). Studies of the effect of protective factors on suicide risk do not provide conclusive results. They identify a difference in the protective effect depending on the coherence of religion with society and the severity of disorders (Lawrence et al., 2016).

There is a wealth of research on the relationship between religiousness and spirituality and suicide risk. Kyle's (2013) study of US students found significant statistical differences between believers and non-believers in the context of suicide. Believers showed lower suicide risk. Reasons for this included: social support, moral objections to suicide, survival, stress management and religious well-being. It has also been recognised that spiritual beliefs may function as a mediating variable to help negotiate social support and make sense of adverse situations (Kyle, 2013). A 2022 study of 150 patients with a diagnosis of depression receiving psychiatric treatment found that

higher levels of spiritual well-being led to a reduced risk of suicide and lower levels of psychological distress. Suicide risk increased in parallel with increased levels of psychological pain (Tanrıverdi et al., 2022a). In the Koenig et al. study, religiousness was also found to be: 1) the most effective protective factor for suicidal behaviour, 2) a factor that moderately reduces depression, and 3) a factor that positively affects mental health and well-being (Koenig et al., 2020). A review of studies on the impact of religiosity and spirituality on depression symptom reduction found that: 1) religiousness was a predictor of reduced depressive symptoms in 49% (out of 138 studies); 2) religious crisis is a predictor of increased depressive symptoms in 59% (out of 22 studies); 3) among those with mental illness, religiousness had a protective effect (Braam & Koenig, 2019a). An older analysis of 147 studies with a total of 98,000 participants also found a negative correlation between religiousness and depression (Smith et al., 2003). A longitudinal study conducted in the USA, over a 2-year period, on older people (mean age 68 years) showed that religiousness was found to be protective and therapeutic in the diagnosis of depression. People who were not depressed at the start of the study remained depression-free for 2 years if they attended religious services frequently. Those starting the study in the active phase of depression were less susceptible to it if they engaged in private prayer more frequently (Ronneberg et al., 2016). Similarly, Gmitrowicz and Krawczyk (2014) categorise religiousness as both a risk factor and a protective factor. The principle reasons why religiousness protects against suicide are penalisation of this act and sanctions against suicide in monotheistic religions, moral prohibition of using psychoactive drugs (which increase the risk of 'S'), reducing levels of aggression and hostility, receiving emotional warmth and supportive bonds through participation in religious communities. The religions with the lowest suicide rates include those most restrictive towards the act: Islam and Judaism. Hinduism adopts the most tolerant approach to the issue of suicide. This religion, which believes in reincarnation, allows a person to end his or her life arbitrarily in the case of a serious disability or incurable illness. In between these two poles is Chris-

tianity. In its area, Catholicism is more protective than Protestantism (Krawczyk & Gmitrowicz, 2014). In 2016, Lawrence and colleagues provided a review of 89 articles from 2003-2013 analysing religion and its relationship to suicide. This analysis shows that some authors identify religion as a protective factor against suicide in their studies, while another part identifies it as a risk factor. This is determined by several important factors. The authors of the study review found that religion does not protect against suicidal thoughts, although a study by Dervic et al. revealed such a relationship (Dervic et al., 2011). In contrast, religious affiliation is a protective factor against suicide attempts. This is mainly because of the moral objections that the main religions (Islam, Christianity, Judaism) have against suicide. Such results were obtained in the USA and Europe. Results to the contrary were obtained in South Africa in 2010, where people belonging to 'other [non-mainstream] religions' reported more suicide attempts than 'non-believers'. A longitudinal study from Scotland in 2011 showed an important correlation: belonging to a religious minority group, 12 non-congruent with the general public (in this case Catholics) is a stronger factor for suicide attempts. Most likely due to a sense of social ostracism (Lawrence et al., 2016). Cohesion of the religious community has an impact on lowering suicide risk. A 2011 study conducted in Switzerland confirmed the advantage of Catholics over Protestants in reducing suicide risk (Lawrence et al., 2016). According to the authors of the above-mentioned meta-analysis, religion is a protective factor against suicidal behaviour, but not against 'S' thoughts. Religion may prevent a person from following suicidal thoughts by: providing access to a supportive community, shaping beliefs about suicide, providing a source of hope, providing ways to interpret suffering. The impact of religion on suicide depends on: type of religion, congruence with society, message content (supportive vs condemnatory), degree of engagement in religious practices. An example of a study whose outcome did not confirm the positive effect of religiousness and spirituality on suicide risk reduction was that of Surmacz and colleagues. They analysed the results obtained on a 'healthy' part of the Polish population during the

coronavirus pandemic. She showed that religious crisis positively correlates with depression, psychological pain and fascination with death. However, this is a correlation, not a cause and effect relationship. No correlation was found between religious commitment, spiritual transcendence, fulfilment in prayer, a sense of universality, a sense of social connection and suicide risk factors (depressiveness, fascination with death, psychological pain), (Surmacz et al., 2021). Another study found that religiousness did not reduce symptoms of depression and anxiety in young and middle-aged Hispanic individuals (Lerman et al., 2018).

The main aim of this study is to analyse the protective effects of spirituality and religiousness on suicide risk reduction in people with depression. The severity of suicide risk factors, i.e. depression, anxiety, psychological pain and fascination with death, was assessed in a group of people diagnosed with depression. In addition, the severity of self-injurious behaviour without suicidal intent was assessed in the clinical and control groups in relation to protective factors. Relationships between spiritual transcendence and religiousness and individual risk factors for suicide in the study sample were analysed.

2. Study group and method

2.1. Group description

The research project received approval from the Ethics Team of the UKSW Institute of Psychology (consent no.: 11/2022). Participants were asked to give informed consent to participate in the study. Inclusion criteria: age of subjects: 18-55 years; gender: female, male, other; education: at least primary. Recruitment was conducted online and through the reception desks of psychotherapy clinics. Exclusion criteria: symptoms confirming CNS damage, coexistence of serious somatic diseases, presence of alcohol addiction syndrome, presence of psychotic disorders (e.g. schizophrenia, bipolar disorder). A total of 167 individuals participated in the study. After a preliminary analysis of the results obtained on the clinical scales, 71 subjects

were excluded from the study. From the control group, which initially consisted of 111 subjects, 54 with BPD, high anxiety and depression scores were excluded. From the study group, 10 people were excluded due to high scores indicating alcohol addiction or psychoactive substance use. A total of 96 subjects were enrolled in the study. The control group consisted of a population of 50 healthy subjects without mental or physical disorders. The clinical group included 46 people in the active phase of depression (ICD-10, DSM-5) diagnosed by a psychiatrist. Of these, the vast majority were females (79.1% in the study group, 62% in the control group). The mean age was 30 years with a standard deviation of 9 in the study group and almost 37 with a standard deviation of 10 in the control group. In the healthy group, heterosexual orientation was by far the most dominant (90%). Bisexuals (10.9%) and homosexuals (8.7%) were more numerous among the depressed compared to the healthy group. There were also asexuals (2.2%) and pansexuals (4.3%). Most respondents in the clinical group came from large (43.5%) and small towns (19.6). In the control group, the distribution looked similar. More than half of the respondents in the clinical group declared their religious affiliation as 'Catholic' (58.75%), with the remainder being 'agnostic/atheist' (30.4%). The control group was far more religiously homogeneous: 90% were Catholics. In the clinical group, 58.7% of the respondents had higher education, 30.4% had secondary education. In the control group, there were more people with higher education (76%), fewer with secondary education (22%). In the control group, 82% of respondents declared continuous occupational activity; in the clinical group, 58%, while 26% declared intermittent activity. The clinical group compared with the healthy group was statistically worse in terms of relationship status: in the control, 74% of people declared that they were in a stable relationship; in the clinical group, 50%. Both groups were dominated by those undertaking white-collar jobs. Among depressed patients, there were more individuals with somatic diseases than in the healthy group. Patients most frequently mentioned hyperthyroidism (33.3%), hypertension (25%), and

insulin resistance (16.7%). In the clinical group, the mean duration of treatment for depression was 5 years. The predominant form of treatment was mixed psychotherapy combined with pharmacotherapy 52.2%. The most commonly taken drugs were from the antidepressant and anti-anxiety groups.

2.2. Method

The following research hypotheses were formulated:

1. The clinical group of people with a diagnosis of depression showed a statistically significant decrease in spirituality and religiousness compared to the control group of healthy people.
2. The clinical group of people with a diagnosis of depression shows statistically significant increase in suicide risk factors (depression, anxiety, fascination with death, psychological pain, self-harm, BPD) than the control group of healthy people.
3. In the clinical group, psychological pain and fascination with death correlate positively with clinical variables such as depression, anxiety, BPD.
4. In the clinical group, protective factors (religiousness, spirituality) correlate negatively with suicide risk factors.
5. In the clinical group, protective factors are predictors of suicide risk factors.

The following tools were used in the study:

1. The Scale of Psychache (PAS, Holden et al., 2001; Polish adaptation: Chodkiewicz, Miniszewska, Strzelczyk, Gąsior, 2017) has 13 items, 1 factor listed in the title of the scale. The reliability of the Polish adaptation was high: Cronbach's α was 0.93. The external validity of the tool is satisfactory. It showed statistically significant correlations with tools measuring depression (BDI, HADS), hopelessness (BHS), anxiety (HADS) and anhedonia (SHAPS) (Chodkiewicz et al., 2017). Validation studies of the Portuguese version of the Scale have confirmed its ability to distinguish between those at risk of suicide and those not at risk; its ability to predict suicidal thoughts (Campos et al., 2019).

2. The Hospital Anxiety and Depression Scale (HADS, Zigmond AS Snaith RP., 1983). It has 14 items. It distinguishes between two factors: anxiety and depression. The tool has satisfactory reliability. A Polish validation study on a group of adolescents aged 14-18 years, showed a Cronbach's α internal consistency of 0.70-0.77 (depending on the HADS-A/D version). It also showed high test-retest reliability after 10-14 days (Spearman's ρ was 0.67 for HADS-A and 0.75 for HADS-D). The tool has high validity relative to other tools measuring depressive and anxiety symptoms (Mihalca and Pilecka, 2015). Similar results were obtained when examining students (Czerwiński et al, 2020).
3. The SLiFŚ Fear of Death and Fascination with Death Scale (Piotrowski, Żemojtel-Piotrowska, 2009). The tool was constructed to measure conscious, general fear of one's own death. In a pilot study, it was found to also measure fascination with death. It has 23 items, 2 factors: fear of death and fascination with death. The reliability of the tool was determined for the fear scale at 0.80 (Cronbach's α), for the death fascination scale at 0.90. The validity of the tool was demonstrated with other similar tools. Remarkably, it was demonstrated that the SLiFŚ shows the level of specific fear: of death, not general fear as a state or trait (Żemojtel-Piotrowska & Piotrowski, 2009).
4. The Borderline Personality Checklist (BPD Checklist) is a tool based on the DSM-IV system. It is a self-report questionnaire developed to measure the intensity of complaints associated with Borderline Personality Disorder experienced in the past month. It lists 47 items, with respondents marking answers on a five-point scale. Tests of psychometric properties confirmed the 1-factor and 9-factor model based on DSM-IV criteria. The scales of the tool are consistent with the DSM-IV criteria: abandonment avoidance, unstable relationships, identity disturbance, self-destructive impulsivity, recurrent suicidal behaviour, affective instability, lack of anger control, dissociation and paranoid ideation. The tool has very good internal consistency, theoretical, diagnostic and differential validity. The tool was considered suitable for screening and measuring the effect of therapy (Bloo et al., 2017).
5. The Inventory of Statements About Self-Injury (ISAS) was developed by David E. Klonsky (2007). He created a questionnaire tool to measure self-injury (Klonsky and Glenn, 2008). It allows for the measurement of 13 types of self-injury functions: affect regulation, interpersonal boundaries, self-punishment, self-care, anti-dissociation/feeling-generation, anti-suicide, sensation-seeking, peer-bonding, interpersonal influence, toughness, marking distress, revenge, autonomy. Respondents mark the level of importance of a given function on a 3-point scale (Kubiak, 2013). Studies on the psychometric properties of the tool have shown that it has good test-retest reliability after one year (ranging from 0.52 to 0.89 depending on the function tested, Glenn and Klonsky, 2011). Other psychometric parameters of the Polish version of the ISAS were rated as good (Szewczuk-Boguslawska et al., 2021).
6. AUDIT Scale (Alcohol Use Disorders Identification Test). It has 10 items. It is used to assess the existence of an alcohol use disorder. Depending on the score obtained, the respondent may be assigned to the following groups: low-risk consumption, risky consumption, harmful alcohol consumption, possible alcohol dependence. Polish studies on psychometric properties have concluded that the AUDIT has high reliability and accuracy (strong correlation with the MAST and CAGE scales, $\rho = 0.76$). Therefore, it can be used as a reliable screening tool in Poland (Klimkiewicz et al., 2021).
7. ASPIRES questionnaire (The Assessment of Spirituality and Religious Sentiments [ASPIRES], Piedmont, 2010; Polish adaptation: Piotrowski, Żemojtel-Piotrowska, Piedmont, Baran, 2021). A scale for examining spirituality and religiousness in terms of Piedmont's theory of spiritual transcendence. It has 35 items. It consists of two scales:

- a. Spiritual transcendence scale (ST), which includes prayer fulfilment (PF), universality (UN), connectedness (CN). The scale consists of 23 statements rated on a five-point Likert scale. The reliability expressed by Cronbach's α for the Polish version is: 0.91 for Prayer Fulfilment, 0.75 for Universality, 0.63 for Connectedness, 0.89 for the whole Spiritual Transcendence scale.
- b. The Religious Sentiments Scale (RS), consisting of two subscales: religious involvement (RI) and religious crisis (RC). The first subscale includes questions about the frequency of religious practice, religious beliefs or experiences related to God. The second assesses the experienced conflict with God, the religious group and the dogmas of the faith. This part of the questionnaire uses a variety of response options, ranging from a five-point to a seven-point scale for the 12 questions. The reliability expressed by Cronbach's α is 0.87 for RI and 0.70 for RC. Polish validation studies have shown medium to high accuracy of the tool when comparing it to those measuring similar constructs (Piotrowski et al., 2019).

3. Results of the study

H1: It was verified whether there were statistically significant differences between the study group and the control group regarding the protective factors of suicidal behaviour (spirituality and religiousness). A parametric Student's t -test for two independent samples was used, where the independent variable was diagnosis of depression (no vs. yes) and the dependent variables were seven protective factors (spiritual transcendence, universality, connectedness, prayer fulfilment, religious sentiments, religiousness, religious crisis). The results obtained are presented in Table 1.

It was observed that the study group obtained statistically significantly lower levels of spiritual transcendence, universality, prayer fulfilment, religiousness and significantly higher levels of religious

crisis than the control group. No inter-group differences were found for connectedness and religious sentiments.

H2: It was verified whether there were statistically significant differences between the study group and the control group on suicide risk factors. A parametric Student's t -test for two independent samples was used, where the independent variable was a diagnosis of depression (no vs. yes) and the dependent variables were six risk factors (fear of and fascination with death, Borderline personality disorder, anxiety and depression, psychological pain). The results obtained are presented in Table 2.

It was observed that the study group obtained statistically significantly higher levels of fear of and fascination with death (SLiFŚ), Borderline personality disorder (BPD), anxiety and depression (HADS) and psychological pain (PAS) than the control group.

A non-parametric Mann-Whitney U-test for two independent samples was also used, where the independent variable was diagnosis of depression (no vs. yes) and the dependent variables were the six self-harm subscales (affect regulation, self-punishment, self-care, anti-suicide, toughness, marking distress). The results obtained are presented in Table 3.

It was observed that the study group achieved statistically significantly higher levels of self-punishment and anti-suicide than the control group. It is noteworthy that at the level of statistical trend ($p = 0.075$), the study group also obtained higher levels of toughness than the control group. No statistically significant inter-group differences were found for affect regulation, self-care and marking distress.

H3: Statistically significant correlations between individual suicide risk factors (fear of and fascination with death, Borderline personality disorder, anxiety and depression, psychological pain, self-harm) were tested. Parametric Pearson's correlations r were used for variables with a normal distribution and non-parametric Spearman's r_{ho} correlations for variables with a distribution deviating from the normal distribution (ISAS in the control group). The results obtained in the study group are presented in table 4.

In the study group, it was observed that fascination with death (SLiFŚ) correlates statistically significantly, positively and moderately with Borderline

Table 1. Comparison between the control and study groups regarding the protective factors

	Control group N = 50		Study group N = 46		t(94)	p	Cohen's d
	M	SD	M	SD			
ASPIRE: Spiritual Transcendence	3.55	0.69	3.06	0.70	3.44	0.001***	0.71
ASPIRE: Universality	3.75	0.77	3.21	0.83	3.25	0.001***	0.67
ASPIRE: Connectedness	3.38	0.93	3.22	0.68	0.96	0.341	0.20
ASPIRE: Prayer fulfilment	3.52	1.01	2.74	1.20	3.47	0.001***	0.72
ASPIRE: Religious sentiments	2.67	0.61	2.49	0.82	1.24	0.221	0.26
ASPIRE: Religious involvement	3.73	1.35	2.82	1.45	3.17	0.001***	0.65
ASPIRE: Religious crisis	1.62	0.67	2.16	0.96	-3.22	0.001***	0.66

Annotation. N – number; M – mean; SD – standard deviation; t(df) – Student's t-test statistic; p – t-significance; Cohen's d – strength of correlation.
***p < 0.001.

Table 2. Comparison between the control and study groups on suicide risk factors

	Control group N = 50		Study group N = 46		t(94)	p	Cohen's d
	M	SD	M	SD			
SLiFŚ: Fascination with death	1.45	0.36	2.11	0.71	-5.76	0.001***	1.19
SLiFŚ: Fear of death	2.28	0.68	2.57	0.75	-1.96	0.051*	0.40
BPD: Borderline personality disorder	67.34	12.52	113.72	31.36	-9.66	0.001***	1.99
HADS: Anxiety	4.04	1.83	12.57	4.80	-11.68	0.001***	2.41
HADS: Depression	2.90	2.04	10.87	4.78	-10.78	0.001***	2.22
PAS: Psychological pain	17.46	5.01	42.30	11.49	-13.18	0.001***	2.72

Annotation. N – number; M – mean; SD – standard deviation; t(df) – Student's t-test statistic; p – t-significance; Cohen's d – strength of correlation.
*** p < 0.001; ** p < 0.01; * p < 0.05.

Table 3. Comparison between the control and study groups on self-harm

	Control group N = 7		Study group N = 29		U	p
	M	SD	M	SD		
ISAS: Affect regulation	2.86	2.41	4.41	1.72	64.00	0.123
ISAS: Self-punishment	1.00	1.41	3.52	2.23	41.00	0.014**
ISAS: Self-care	0.43	0.79	1.55	1.88	64.00	0.109
ISAS: Anti-suicide	0.00	0.00	1.48	1.94	52.50	0.026*
ISAS: Toughness	0.29	0.76	1.62	2.08	61.00	0.075#
ISAS: Marking distress	2.00	2.00	2.48	2.18	87.00	0.552

Annotation. N – number; M – mean; SD – standard deviation; U – Mann-Whitney U test statistic; p – U-significance.
** p < 0.01; * p < 0.05; # p < 0.10.

Table 4. Correlation matrix between individual suicide risk factors in the study group

	1	2	3	4	5	6	7	8	9	10	11	12
SLiFŚ: Fascination with death ¹	-											
SLiFŚ: Fear of death ¹	-0.30*	-										
BPD: Borderline personality disorder ¹	0.43***	0.12	-									
HADS: Anxiety	0.36**	0.10	0.71***	-								
HADS: Depression	0.34*	0.05	0.56***	0.58***	-							
PAS: Psychological pain ¹	0.60***	0.05	0.74***	0.63***	0.57***	-						
ISAS: Affect regulation ¹	0.39*	0.04	0.17	0.18	0.07	0.30	-					
ISAS: Self-punishment ¹	0.47**	0.20	0.31	0.36	0.30	0.45**	0.59***	-				
ISAS: Self-care ¹	0.24	0.37*	0.37*	0.25	0.29	0.42***	0.13	0.42*	-			
ISAS: Anti-suicide ¹	0.52***	-0.12	0.16	0.29	0.20	0.36*	0.39*	0.47**	0.26	-		
ISAS: Toughness ¹	0.20	0.23	0.29	0.13	0.21	0.29	0.09	0.51***	0.54***	0.08	-	
ISAS: Distress ¹	0.22	0.48**	0.18	0.08	-0.03	0.32	0.45**	0.66***	0.61***	0.38*	0.55***	-

Annotation. ¹ Parametric Pearson's correlations *r* were used
 *** *p* < 0.001; ** *p* < 0.01; * *p* < 0.05.

Table 5. Correlation matrix between protective factors of suicidal behaviour and suicide risk factors in the study group

	ASPIRE: ST	ASPIRE: UN	ASPIRE: CN	ASPIRE: PF	ASPIRE: RS	ASPIRE: RI	ASPIRE: RC
SLiFŚ: Fascination with death ¹	-0.24	-0.03	-0.11	-0.34*	0.06	-0.18	0.37*
SLiFŚ: Fear of death ¹	0.13	0.02	0.22	0.09	-0.11	-0.02	-0.16
BPD: Borderline personality disorder ¹	-0.09	-0.09	-0.10	-0.04	0.17	-0.05	0.36**
HADS: Anxiety ¹	-0.11	-0.15	0.01	-0.11	0.18	-0.05	0.38**
HADS: Depression ¹	-0.15	-0.14	-0.05	-0.13	0.13	0.10	0.07
PAS: Psychological pain ¹	-0.01	0.08	0.07	-0.11	0.23	0.02	0.36**
ISAS: Affect regulation ¹	0.12	0.44*	0.02	-0.04	-0.22	-0.14	-0.24
ISAS: Self-punishment ¹	-0.10	0.14	0.03	-0.27	-0.33#	-0.36#	0.09
ISAS: Self-care ¹	0.28	0.33	0.32#	0.10	0.03	0.04	0.17
ISAS: Anti-suicide ¹	-0.18	0.06	-0.10	-0.29	0.10	-0.16	0.38*
ISAS: Toughness ¹	-0.02	0.08	0.18	-0.20	-0.30	-0.29	0.15
ISAS: Distress ¹	0.09	0.33	0.30	-0.14	-0.26	-0.25	-0.05

Annotation. ST – spiritual transcendence; UN – universality; CN – connectedness; PF – prayer fulfilment; RS – religious sentiments; RI – religious involvement; RC – religious crisis.

1. Parametric Pearson's correlations *r* were used
 *** *p* < 0.001; ** *p* < 0.01; * *p* < 0.05; # *p* < 0.10.

Table 6. Predictors of suicide risk in the study group

Explained variables	Explanatory variables	B	SE	Beta	T	R ²	F
SLiFŚ: Fascination	(Permanent)	2,49	0,41		6,01*	0,20	6,24***
	Age	-0,03	0,01	-0,39	-2,77**		
	ASPIRE: Religious crisis	0,19	0,11	0,25	1,80*		
SLiFŚ: Anxiety	(Permanent)	2,04	0,22		9,36	0,15	8,36**
	Age	0,71	0,24	0,40	2,89**		
ZOB: Personality Disorders	(Permanent)	131,76	16,96		7,77*	0,25	8,04***
	ASPIRE: Religious crisis	8,84	4,36	0,27	2,03*		
	Age	-1,31	0,41	-0,42	-3,15***		
HADS: Anxiety	(Permanent)	17,69	2,31		7,65*	0,11	6,29*
	Age	-0,18	0,07	-0,36	-2,51*		
PAS: Psychological pain	(Permanent)	57,19	5,38		10,64***	0,17	9,55***
	Age	-0,52	0,17	-0,43	-3,09***		
ISAS: Affect regulation	(Permanent)	0,65	1,31		0,50	0,23	8,36**
	ASPIER: universality	1,11	0,38	0,51	2,89**		
ISA: Distress	(Permanent)	5,07	1,31		3,88***	0,12	4,53*
	Age	-0,09	0,04	-0,40	-2,13*		

Annotation. Gender: 0 - male, 1 - female; Relationship status; 0 - single people, 1 - people in relationship. B - unstandardized regression coefficient; SE - standard error B; beta - standardized regression coefficient; t - test statistics t; F - statistic ANOVA; R² - adjusted coefficient of determination
 *** p < 0,001; ** p < 0,01; * p < 0,05.

Personality Disorder (BPD), anxiety and depression (HADS), affect regulation and self-punishment (ISAS), or positively and strongly with psychological pain (PAS) and anti-suicide (ISAS). Fear of death (SLiFŚ) correlates statistically significantly, positively and moderately with self-care and marking distress (ISAS). Borderline personality disorder (BPD) correlates statistically significantly, positively and moderately with self-care (ISAS) or positively and strongly with anxiety and depression (HADS) and psychological pain (PAS). Psychological pain (PAS) correlates statistically significantly, positively and strongly with anxiety and depression (HADS) or positively and moderately with self-punishment, self-care and anti-suicide (ISAS). No statistically significant correlations were observed between anxiety and depression (HADS) and self-harm (ISAS).

H4: A statistically significant correlation was examined between protective factors and suicide risk factors (anxiety and fascination with death, Borderline personality disorder, anxiety and depression, psychological pain, self-harm). Again, parametric

Pearson's correlations *r* were used for variables with a normal distribution and non-parametric Spearman's *rho* correlations were used for variables with a distribution deviating from a normal distribution (ISAS in the control group). The results for the study group are shown in Table 5.

Statistically significant positive and moderate correlations were observed between universality (ASPIRE) and affect regulation (ISAS) in the study group, negative and moderate correlations between prayer fulfilment (ASPIRE) and fascination with death (SLiFŚ), and positive and moderate correlations between religious crisis (ASPIRE) and fascination with death (SLiFŚ), Borderline personality disorder (BPD), anxiety (HADS), psychological pain (PAS) and anti-suicide (ISAS). Additionally, statistically significant at the level of statistical trend, positive and moderate correlations were observed between connectedness (ASPIRE) and self-care (ISAS), and negative and moderate correlations were observed between religious sentiments and religious involvement (ASPIRE) and self-punishment (ISAS). No statisti-

cally significant correlations were observed between protective factors and fear of death (SLiFŚ) and depression (HADS)

H5: Stepwise multiple regression analysis was used to determine which protective factors are predictors of suicide risk. The explanatory variables were protective factors (spirituality and religiosity) and, as a control, sociodemographic factors (gender, age, years of education, relationship status). The explained variables were suicide risk factors (fear and fascination with death, Borderline personality disorder, anxiety and depression, psychological pain, self-harm). Due to the low sample size, self-harm in the control group was not included in the regression analysis. The results obtained in the study group are presented in Table 6.

In the study group, three statistically significant predictors of suicide risk were observed: universality and religious crisis (ASPIRE) and age. A higher level of religious crisis (ASPIRE) increased the level of fascination with death (ŚLiFŚ) and Borderline personality disorders (ZOB). Higher levels of universality (ASPIRE) increased levels of affect regulation (ISAS). Older age increased the level of fear of death (ŚLiFŚ) and decreased the level of fascination with death (SLiFŚ), the level of Borderline personality disorders (ZOB), the level of anxiety (HADS), the level of mental pain (PAS) and the level of distress (ISAS). The strongest predictor was universality (beta = 0.51). Gender and other protective factors (spiritual transcendence, sense of connection, fulfillment in prayer, religious feelings, religious involvement) were not statistically significant predictors of suicide risk factors. There were also no predictors of depression level (HADS).

4. Discussion

H1: The results indicated that people with depression are characterised by lower scores on the spirituality and religiousness scales compared to healthy people. Additionally, they are characterised by higher levels of religious crisis. As the literature shows, people suffering from depression are characterised by a decrease in mood, drive, anhedonia and reduced activity.

Their cognitive functions deteriorate. The brain is influenced by increased cortisol secretion, levels of neurotransmitters, i.e. serotonin, noradrenaline, decrease. Brain structures are altered: the hippocampus responsible for memory decreases in size, the amygdala responsible for fear perception processes enlarges (Galecki & Szulc, 2018). The above-mentioned variables may influence the reduction of religiousness and spirituality in people in the active phase of depression. The results of the study supported this hypothesis. Unfortunately, the literature review was unable to find studies analysing strictly the spiritual or religious state of people with depression in order to refer the results of this project to them. In contrast, there are many studies supporting the protective and health-promoting effects of religiousness and spirituality on people with depression (Braam & Koenig, 2019b; Cole-Lewis et al., 2016; Pečečnik & Gostečnik, 2022; Ronneberg et al., 2016; Sikora et al., 2021; Smith et al., 2003; Vitorino et al., 2018). This may indicate that people in the active phase of depression are religiously committed. A Polish study on the health practices of people with depression showed that people with depression represent a high level of religiousness and sought opportunities to participate in religious practices (Sikora et al., 2021). The results may indicate that individuals in the active phase of depression differ spiritually and religiously from healthy individuals.

H2: The results obtained confirmed the pattern that depressed individuals, compared to healthy individuals, were characterised by higher levels of suicide risk factors: fascination with death, severity of BPD, anxiety, depression and psychological pain. They were also characterised by higher levels of self-harm particularly occurring as self-punishment and anti-suicide among those with depression. In addition, it was found that the majority of people in the study group had scores indicative of BPD (69.60%) and anxiety disorders (67.40%). Psychological pain was found to be the strongest predictor of suicidal thoughts-it accompanies depression and exacerbates its symptoms (Montemarano et al., 2018). Psychological pain is the most debilitating complaint of people with depression, prompting suicidal thoughts and behaviours (Chodkiewicz, 2013).

The findings of the research project are consistent with other reports linking depression and psychological pain (Chodkiewicz et al., 2017; Frumkin et al., 2021; Mee et al., 2019; Mento et al., 2020; Surmacz et al., 2021), depression and fascination with death (Lee et al., 2013; Surmacz et al., 2021; Žemojtel-Piotrowska and Piotrowski, 2009), depression and BPD (Zuchowicz et al., 2018) as well as depression and self-harm (Dugiel, 2018; Radziwillowicz, 2020). Research has confirmed the thesis that depression is comorbid and complex. People suffering from this illness experience not a wide range of negative psychological phenomena: fear of death and a concomitant fixation on it (most likely as a way out of suffering), psychological pain pushing them into suicidal thoughts and behaviour, emotionally unstable personality traits. This may support other researchers' hypotheses that depression and cluster B personality disorders (according to the DSM 5) fall on a single continuum (Zuchowicz et al., 2018).

H3: In the clinical group of depressed individuals, psychological pain and fascination with death correlate positively with anxiety, depression, self-harm and BPD. Overall, strong correlations were found between the individual suicide risk factors: psychological pain, anxiety, depression, fascination with death and self-harm.

The results obtained in the depressed group indicating that psychological pain is a significant suicide risk factor correlated with depression, anxiety, self-harm, and fascination with death remain consistent with studies by other authors in this research issue (Chodkiewicz et al., 2017; Frumkin et al., 2021; Mento et al., 2020; Surmacz et al., 2021).

H4: Prayer fulfilment reduces fascination with death. With religious crisis, fascination with death, Borderline personality disorder traits, anxiety, psychological pain and self-harm (as an anti-suicide function) increase. Religious sentiments and religious involvement decrease self-harm (as a function of self-punishment). Aspects of spirituality such as universality and connectedness were observed to co-occur with self-harm as a function of affect regulation and self-punishment. No statistically significant correlations were observed between protective factors and fear of death and depression.

Similar results on religious crisis have been shown in other studies (Rodziński et al., 2017; Trevino et al., 2014). Surmacz and colleagues (2021) indicated that religious crisis positively correlates with depression, psychological pain and fascination with death. Her study involved a population of healthy individuals. The current study obtained analogous results, except that on a population of people with depression. This may indicate that religious crisis has similar effects among both healthy and depressed people. This obviously requires further analysis, but it indicates that religious crisis can translate into serious problems in the lives of individuals. Hence, taking care of religious well-being appears as one of the preventive behaviours in the context of suicide risk. In fact, higher levels of spiritual well-being have been shown to lead to a lower risk of suicide and lower levels of psychological pain (Ibrahim et al., 2019; Tanriverdi et al., 2022b).

In the context under discussion, it is worth citing Koenig's results. He showed that religion is the most effective measure in reducing suicidal behaviour and moderately reducing depression (Koenig et al., 2020). In people with psychiatric disorders, religiousness tends to be more protective than in healthy individuals (Braam & Koenig, 2019c). A study of adolescents aged 12-15 years experiencing social problems found that private religious practices, institutional religiousness and religious support correlated negatively with depressive symptoms and suicidal thoughts. The authors suggested that religiousness should be included in prevention programmes for depressive disorders and suicidal behaviour (Cole-Lewis et al., 2016). A cross-sectional study among Brazilians found that individuals with higher levels of religiousness and spirituality showed higher scores on the following scales: quality of life, quality of social relationships, optimism, happiness (Vitorino et al., 2018).

The absence of statistically significant correlations between the protective factors studied and depression in a healthy Polish population was shown by Surmacz and colleagues (2021). Similar conclusions were reached by Lerman and colleagues (2018) in relation to young Hispanics. The reasons for the discrepancies in the findings can be attributed to the small clinical samples and the study methodology: self-descriptive online surveys.

H5: Only religious crisis was found to be a statistically significant predictor of suicide risk. Its increase predicted increased levels of fascination with death and Borderline disorder. Contrary to expectations, we found that higher levels of universality (a dimension of spiritual transcendence) predicted increased risk of self-harm (as a function of affect regulation). Interestingly, we found that older age significantly reduced the severity of risk factors (fascination with death, borderline personality disorder traits, general anxiety, psychological pain, self-harm (as a function of distress)).

A review of 22 studies on the protective effects of religiousness and spirituality on people with depression found that 59% of the results confirm that depressive disorders increase with religious crisis (Braam & Koenig, 2019a). In a similar study to the current one, but conducted on a group of healthy individuals, depression, psychological pain, and fascination with death increased with increasing religious crisis (Surmacz et al., 2021).

The study presented here showed that among people with depression, age decreases the severity of risk factors (level of fascination with death (SLiFŚ), level of Borderline personality disorder (BPD), level of anxiety (HADS), level of psychological pain (PAS) and level of distress (ISAS). Other studies consider old age as a risk factor for suicide (Grzywa et al., 2009; Makara-Studzińska & Koślak, 2009; Młodożeniec, 2008).

In the current study, religious crisis was found to be a predictor of suicide risk. Meanwhile, in other studies on samples of healthy individuals, the strongest predictor of suicide risk was psychological pain (Campos et al., 2019; Surmacz et al., 2021; Tanrıverdi et al., 2022a). Contrary to the results of this study, spirituality was found to be a protective factor against suicide risk in other studies (Tae & Chae, 2021; Wu et al., 2015). Reasons for the discrepancy include the project's small clinical sample.

5. Summary of study results

One of the strengths of the study is its innovation and novelty. There are not many studies analysing the protective effect of religiousness and spirituality on suicide risk in people with depression. Another

strength of the project is the use of reliable, well validated tools. In this study, a large number of tools were used, which made it possible to analyse the cross-correlations of numerous factors—both those included in religiousness and spirituality as risk factors. A strength of this study is the homogeneous group structure due to the careful selection of participants for the study.

Limitations of this study include its cross-sectional nature. A longitudinal study would certainly have been more informative on the issue under discussion. It was also a questionnaire-based, self-reporting study conducted online. These aspects of the study may reduce its reliability. Furthermore, those declaring themselves healthy showed some features of mental health problems in the clinical scales: those with the highest scores were excluded, those with medium and low scores remained in the study. Similarly, those in the control group did not present only symptoms of one problem (in this case depression) but also of personality and anxiety disorders.

A limitation of the study is the religious heterogeneity of the groups. Religious and non-religious people were mixed in the study group. This could have negatively influenced the results: in non-religious people, religiousness cannot be a protective factor because it is not practised. Secondly: there were people in the study group who declared depression in an active phase, but not all of them showed its symptoms in clinical scales.

Practical implications

The project's findings are part of a long list of studies confirming the impact of spirituality and religiousness in the process of maintaining and returning to full mental health. A meta-analysis conducted to determine effective factors in psychotherapy found that psychotherapy tailored to patients' spirituality and religiousness yielded statistically significantly better outcomes than no treatment or psychotherapies without reference to spirituality and religiousness. In other studies with control groups following the same modality and for the same duration, psychotherapies tailored to spirituality and religiousness

were as effective as standard approaches in reducing psychological distress, but resulted in greater spiritual well-being (Hook et al., 2019). Myers (2018) conducted a cross-cultural study on a sample of almost 3,000 people and distinguished five factors of happiness: sense of influence, optimism, meaning, close relationships and faith. The latter is understood as a personal relationship with God. It can therefore be said that a personal relationship with God is a happiness factor. Myers, in his previous research from 1995, came to a similar conclusion: religious involvement is positively correlated with happiness (Myers & Diener, 2018). Other studies have shown that religiousness protects against depression and helps to recover faster (Ronneberg et al., 2016). It has also been proven that religiousness helps to effectively reduce the effects of stress. A study by researchers at the University of Texas found that a 'prayer of devotion' helps effectively reduce cardiovascular reactivity in response to an interpersonal challenge of a religious nature. Furthermore, it was found that the religious practice of 'prayer of devotion' resulted in the most significant suppression of vascular reactivity compared to groups using secular meditation and relaxation techniques (Masters et al., 2022).

Furthermore, religiousness is recommended as a patient resource in recovery by: *American Psychiatric Association, Royal College of Psychiatrists and World Psychiatric Association*. However, when engaging religiousness in treatment, it must be taken into account whether the patient's religiousness is healthy or pathological in nature (Koenig et al., 2020). Spirituality has also been used effectively in the healing process of patients. A review of the literature from 2000-2018 showed that spirituality incorporated into psychotherapeutic treatment programmes by teaching gratitude, forgiveness, self-acceptance and compassion has good and measurable results in improving patients' mental health (Pečecnik & Gostečnik, 2022).

From the research findings and recommendations of psychiatric societies cited above, it can be concluded that access to healthy forms of religiousness and spirituality will have a health-promoting impact on communities. In clinical practice, this could involve allowing psychiatric patients to access religious

practices: inviting chaplains to treatment facilities, facilitating travel to places of worship (Ronneberg et al., 2016). Religiousness and spirituality could also be included in prevention programmes, social campaigns or educational programmes. The statistics on the mental health of Polish youth are alarming (Ombudsman for Children, 2023). As Professor Myers notes, some countries such as Bhutan and the United Arab Emirates have already undertaken such practices. In an effort to increase the happiness of their citizens, they promote spiritual and religious values among their citizens (Myers & Diener, 2018). Although religiousness has been proven to correlate positively with happiness and psychological well-being, researchers in this area observe a 'religious paradox': people are moving away from participating in religious practices and institutional religious communities. They suggest that this may be due to increasing individualisation, cultural pluralism and reduced social pressure to be religiously involved (Myers & Diener, 2018). In Poland, as shown by the statistics of religious practices from 2000-2020, the number of firm believers and regular practitioners is declining. At the same time, the number of non-believers and non-practitioners (CBOS, 2020) as well as people making suicide attempts (Police Headquarters, 2023) is increasing. The results of the present study showing religious crisis as an important predictor of suicide risk are consistent with the Polish reality. Attention to the religiousness and spirituality of Poles may translate into a decrease in suicidal behaviour and an improvement in the quality of life.

Although religiousness and spirituality are recognised as an important resource, it should be taken into account that people in the active phase of depression function in an altered way. The results of this study showed that people with depression experience a reduction in their spirituality and religiousness. They find it harder to pray, they do not experience as much connection with others and the world as before, they experience a religious crisis, although they retain religious sentiments and a sense of connection with other believers. This is a result of being closed to life, anhedonia and egotism characteristic of depression. It is necessary to take these phenomena into account when approaching depressed people: to express sym-

pathy for their 'state of soul', to adapt the demands to their current capacities, not to demand or expect great religious commitment, not to retraumatise them with accusations of 'losing their faith'. Their apathy in this area seems to be a characteristic element of the illness that has affected them, not a 'spiritual laziness' or an 'offence against God or the Church' as close believers sometimes suppose.

The results of this study showed that a group of people with depression are at higher risk of suicide than healthy people. They share significantly higher levels of: anxiety, psychological pain, fascination with death (often perceived as a 'way to end suffering', Chodkiewicz et al., 2017; Shneidman, 1998). They experience a greater severity of BPD symptoms than healthy individuals, i.e.: abandonment avoidance, unstable relationships, identity disturbance, self-destructive impulsivity, recurrent suicidal behaviour, affective instability, lack of anger control, dissociation and paranoid ideation. They use self-harm to avoid suicide. These characteristic experiences and behaviours of depressed people need to be taken into account when approaching them: both by the professionals treating them and by their family members. It is above all the latter who should receive psycho-educational support, as they are often the ones who deny, diminish and fail to understand the suffering of their loved ones. It is worth including psychological support of the patient's loved ones in the healing process.

People with a diagnosis of depression have been shown to be at higher risk of suicide. Their condition should be monitored on an ongoing basis by, for example, asking questions about suicidal thoughts, plans, intentions, using 'risk assessment cards'. This practice appears to be advisable in both home and hospital care.

The correlations obtained in the study indicate the danger of the mental states in which people suffering from depression find themselves. Strong positive correlations were found between fascination with death and psychological pain and self-harm as a function of suicide prevention. Hence, in clinical practice, it is to be expected that if a patient has reasons to experience psychological pain (e.g. a sense of great loss combined with few resources, a declared 'hopelessness' of the

situation), he or she may be approaching suicidal intentions, with a high probability of self-harm. In clinical practice, patients who declare high levels of psychological pain and concomitantly elevated drive should be considered as 'high-risk patients' and receive attentive care. This study showed positive correlations of psychological pain with self-harm. Correlations of psychological pain with substance use disorder (SUD) have been shown in another study (Mee et al., 2019). Consequently, patients experiencing intense psychological pain are more prone to maladaptive forms of emotion regulation such as self-harm and psychoactive substance use. Psychotherapeutic management should include training in emotion regulation skills such as those proposed by Dialectical Behaviour Therapy (Linehan, 2016).

Another practical implication of this study is the clinical value of information about a depressed patient's religious crisis. It has been shown to go hand in hand with increased suicide risk factors. Noticing a religious crisis in a loved one with depression can be an important piece of information for the surrounding people.

Although religiousness and spirituality support the healing process, it should be emphasised not to rely solely on them to combat depression or suicide risk. It is necessary to take into account other healing factors: professional psychotherapy, pharmacotherapy, psycho-educational activities, social support.

As shown earlier, the impact of religiousness and spirituality on mental health is widely mentioned. It should therefore be studied in order to make even more effective use of these resources in treatment.

Another study on the impact of religiousness and spirituality on suicide risk reduction in people with depression could be conducted on a larger clinical group in the form of a longitudinal study. In this form, it could examine the impact of specific religious practices on patients during treatment, e.g. the previously mentioned 'prayer of devotion' (Masters et al., 2022). Suicide risk factors could be assessed before, during and after interactions. The length of the sustained effect could be examined. Such a study could also use EMA (*Ecological Momentary Assessment*) sampling method. Self-reported information could be added to the information collected from patients' relatives.

In this study, the results of the effect of religiousness on suicide risk reduction were examined in a group which included believers and non-believers, as the selection criterion for the group was 'depression' rather than religious practices. This may have had the effect of lowering the effect of religiousness on suicide risk in the study group such that the poor religiousness of non-practitioners lowered the final statistical effect of religiousness on lowering risk factor levels.

In the next study, one could examine: a group of people in active depression (criterion of declaration and presence of symptoms) declaring themselves as

believers and practitioners and compare them with a group of people in the active phase of depression (the same criteria) declaring themselves as non-believers and non-practitioners. This would allow us to assess the differences and similarities between believers and non-believers. It would be possible to empirically verify whether the religiosity of believers is a stronger protective factor among believers compared to non-believers? Is the spirituality of non-believers a stronger protective factor than the religiosity of believers? What protects believers more: religiosity or spirituality?

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