

Psychometric Testing and Validation of Urdu Translated Version of Understanding Suicidal Patients Scale among Health Professionals Dealing with Suicide Cases

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Abstract

Health professionals' attitudes regarding suicide or patients exhibiting suicidal behavior are critical for effective patient intervention and support. These attitudes have a substantial impact on the quality of care offered and the outcomes for patients who exhibit suicidal behavior. Patients with suicidal conduct are increasingly being treated by health professionals in the psychiatry, medical, accident/emergency, and surgery departments, but little is known about these professionals' attitudes toward and understanding of suicidal people. Thus, the study aimed to translate and establish psychometric features of an attitudinal measure, the Understanding Suicidal Patients (USP) scale, as well as to evaluate differences in health professionals' willingness to treat and understanding of suicidal patients. Following author approval, the USP scale was translated into Urdu utilizing both forward and backward method. Purposive sampling was used to collect data, and 220 health professionals anonymously completed the Understanding Suicidal Patients scale in accordance with the inclusion criteria. Psychometric characteristics, factor analysis, and one-way ANOVA were calculated. According to the reliability analysis, the Understanding Suicidal Patients scale has acceptable Cronbach's alpha values. Inter-item correlations and item total

correlation are likewise within acceptable limits. One factor structure similar to the original scale showed evidence for the Understanding Suicidal Patients scale's construct validity using factor analysis, albeit with marginal degree of fit indices. Furthermore, a post-hoc analysis using the Tukey test revealed that health professionals working in the psychiatry department have a higher mean score for understanding suicidal patients than those working in the accident and emergency department, medical department, and surgical department. The results imply that the USP scale can be a useful measure for assessing health professionals' readiness to treat and understanding of suicidal individuals. Furthermore, addressing suicide training programs and mental health among health providers other than psychiatry may enhance knowledge, minimize stigma, and so plays a role in preventing suicide.

Key Words: Suicide, Understanding Suicidal Patients, Suicidal Behavior, Health Professionals

Introduction

Suicide is a multifaceted concern that is one of the main causes of death globally (Arafat, Maruf, & Hossain, 2022). Around 79% of suicides take place in low- and middle-income countries, which make up 84% of the global population, highlighting the significant impact of suicide in these resource-constrained areas. The South-East Asia region has the highest suicide rate among all regions designated by the World Health Organization (WHO), with a rate of 13.4 per 100,000 people (Naveed et al., 2023; World Health Organization, 2019). Furthermore, suicide attempts much outnumber actual suicides (Jahan, Sharif, and Hasan, 2023; WHO, 2021). Mental illnesses are thought to be one of the leading reasons of suicide in developed countries. However, in the LMIC crisis, interpersonal connection issues are viewed as key causes of suicide (Amitai & Apter, 2012; Jahan, Sharif, & Hasan, 2023; WHO, 2021). Most LMICs did not develop national suicide prevention plans or initiatives (WHO, 2021).

With a population estimated at 240 million, Pakistan ranks as the fifth most populous country globally and the second in South-East Asia, despite the underreporting of suicide cases, although suicide remains under-reported (Worldometer, 2024). The country lacks a suicide surveillance system and has a scarcity of high-quality suicide data. There have been substantial unfavorable societal attitudes and stigma regarding suicide, which has hampered suicidal behavior and delayed or prevented help-seeking from health specialists. The country also has very infrequent and limited preventative activities (Imran et al., 2023).

Healthcare practitioners are crucial in identifying patients who are at risk, necessitating their vigilance. While they are responsible for suicide prevention, a lack of understanding and experience with suicidal behavior has led to perceptions of these patients as challenging (Saunders et al., 2012). Research indicates that healthcare professionals often feel inadequate and tend to avoid interactions with suicidal patients. This avoidance can lead to feelings of vulnerability in patients, particularly in the context of somatic treatments (Norheim et al., 2016; Taylor et al., 2009). Additionally, negative attitudes toward suicide attempts can hinder effective problem-solving for these patients (Grimholt et al., 2014), potentially increasing the risk of suicide (Norheim et al., 2016).

Healthcare professionals hold diverse views on different ailments, with mental health issues often receiving less attention. Over 30 years ago, in 1975, Patel noted a lack of sympathy and even anger towards suicide attempts (Grimholt et al., 2014). A review by Saunders and colleagues in 2012 found that general hospital staff generally harbored negative attitudes, perceiving patients who self-harm more negatively than other patients, with the exception of those intoxicated with alcohol or drugs. Attitudes towards suicide can be influenced by various factors, including cultural, religious, and professional backgrounds, as well as knowledge and experience with suicidal behavior (Norheim et al., 2016; Wasserman, 2009). Suicide prevention efforts are particularly likely to be overlooked in low- and middle-income countries (Arafat et al., 2023).

The priorities and attitudes of healthcare professionals toward suicidal patients are crucial in encouraging individuals to seek treatment and manage their suicidal symptoms. Many suicidal patients are vulnerable and often face rejection. Suicidal behavior is a significant health concern, necessitating that clinicians convey appropriate attitudes to their patients to deliver effective therapy (Norheim, Grimholt, & Ekeberg, 2013).

There are differences in the attitudes of suicide among health care workers. When compared to other medical specialists, psychiatrists demonstrated a more positive attitude and desire to assist (Grimholt et al., 2014; Hawton, Marsack, & Fagg, 1981). Research across various healthcare sectors indicates that clinicians often experience heightened feelings of annoyance, anger, frustration, and helplessness when attending to patients who engage in self-harm, in contrast to their interactions with other patients (Faria et al., 2022; Saunders et al., 2012). Patients who self-harm frequently express feelings of humiliation stemming from the perceived lack of empathy in their physical treatment, setting them apart from patients with different medical conditions. There

is often a noticeable deficit in healthcare staff's comprehension of suicidal behavior and ideation, resulting in insufficient communication between patients and providers. Patient feedback underscores the pressing need for enhancements in psychological assessments and post-treatment care (Taylor et al., 2009; Vatne & Naden, 2014).

Prior attempts are present in one-third of completed suicides and are thought to be a clinically significant predictor of suicidal behavior (Goni Sarries et al., 2018). Perhaps the way healthcare staff comprehend and interact with an individual following a suicide attempt might make a difference, either strengthening hope for life or increasing the desire to die. This hypothesis includes not only ethical responsibilities in dealing with suicidal patients, but also chances for suicide prevention (Vatne & Naden, 2014; WHO, 2019). Most professionals, however, demonstrate unwillingness and lack of understanding when dealing with people with suicidal behavior (Faria et al., 2022), which is commonly due to factors such as unpreparedness or difficulties in dealing with this demand, providing limited initial care, and frequently referring patients to other services (Osafo et al., 2018), reducing the quality of care provided (Boukouvalas et al., 2019).

A meta-analysis published up to 2018 found that healthcare workers exhibited inadequate empathy, unfavorable attitudes, and some levels of antagonism while dealing with persons who were suicidal. The data also showed that there is a lack of training and professional qualifications for dealing with these cases (Faria et al., 2022; Rayner et al., 2019). Corroborating these findings, subsequent studies discovered a resistance to serving this clientele; care based on beliefs and stigmas; technical and daily activities prioritized over psychological help; a lack of knowledge and skills; and a need for training to facilitate therapeutic relationships (Wee et al., 2020). Healthcare providers must thoroughly analyze the suicide risk and take realistic efforts to ensure the safety of a suicidal patient. Previous research has demonstrated that understanding suicidal patients and attitudes about suicide are linked to suicide prevention (Hjelmeland et al., 2006). New suicide screening questionnaires were introduced in response to a growing interest in studying suicidal behavior and suicide prevention (Stecz, 2021). This increase is thought to improve attitudes toward suicidal patients and suicide prevention by raising the likelihood of asking about suicide and therefore breaking the taboo created by frightened attitudes (Tait & Michail, 2014). Fear generates a variety of potentially harmful helping behaviors, including as avoidance, denial, or less collaboration with patients who are more likely to die (Nia et al., 2016; Stecz, 2021).

There have been substantial unfavorable societal attitudes and stigma regarding suicide, which has hampered suicidal behavior and delayed or prevented help-seeking from mental health professionals. However, there is no Urdu-language questionnaire to assess health professionals' willingness to treat and comprehension of suicidal patients in the country. This lack of equipment is a drawback for conducting an objective study of suicide. The Understanding of Suicidal Patients (USP) Scale is an 11-point questionnaire (Samuelsson, Asberg, & Gustavsson, 1997) that assesses healthcare workers' attitudes toward suicidal patients. Against this backdrop, we sought to translate and validate the Understanding Suicidal Patients Scale (Samuelsson, Asberg, & Gustavsson, 1997) into Urdu. The first USP scale created by Samuelsson and colleagues in 1997 had an internal reliability of 0.74. The Malay translation of the USP scale had a Cronbach's alpha of 0.62. After deleting item 6, "I frequently find it difficult to understand a person who has attempted suicide," the Cronbach's alpha increased to .71 (Siau et al., 2023).

Furthermore, the present study sought to explore variances in the readiness to treat and understanding of suicidal patients among healthcare professionals serving as psychiatrists, surgeons, medical practitioners, and emergency specialists, as they constitute frontline caregivers. Suicidal patients receive care from physicians across diverse settings, including emergency departments, psychiatric wards, and internal medicine facilities. Moreover, healthcare providers encounter patients at all phases of the suicidal continuum, from ideation to attempts and completed suicides. Internists often encounter patients in acute crisis post-suicide attempt, albeit for brief periods preceding somatic treatment. Many individuals struggling with somatic ailments experience depression, with some contemplating suicide. Psychiatrists and outpatient clinic physicians typically manage the most acute suicidal cases, often referred by general practitioners and internists, with longer treatment durations. Surgeons may perform procedures on individuals who have attempted suicide, and some have chosen to specialize in psychiatry, receiving specialized training in assessment and therapy. Disparities in attitudes toward providing help to suicidal patients have also been observed across various medical specialties; while some practitioners are hesitant to support those contemplating suicide, others exhibit greater empathy and understanding (Gielen, Van den Branden, & Broeckaert, 2008; Grimholt et al., 2014).

Methods

Study Site

This study used a cross-sectional research design with a purposive sample technique (Williams, Onsmann, & Brown, 2010) to obtain data from health professionals. According to Guilford (1954), factor analysis requires at least 200 samples (Jackson, Voth, & Frey, 2013). As a result, 220 health professionals (N=55 each) from surgery, medicine, psychiatry, and emergency departments at Benazir Bhutto Hospital, Pakistan Institute of Medical Sciences, Pakistan Ordinance Factories Hospital, Holy Family Hospital, and Fauji Foundation Hospital were contacted. Participants were 25 years of age or older ($M=1.86$, $SD=.89$). Only health professionals having PMDCP registration numbers and a minimum of two years of experience in their respective departments were considered. Those who refused to give informed consent or had a history of mental illness were excluded.

Instruments

Demographic Questionnaire

It consisted of age, sex, marital status, institution, faculty, family type (nuclear/joint), and years of experience in clinical settings.

Understanding of suicidal patient's scale

The Understanding of Suicidal Patients Scale (USP) comprises 11 items rated on a five-point scale, ranging from 1 (strongly agree) to 5 (strongly disagree) (Samuelsson, Asberg, & Gustavsson, 1997). This scale evaluates clinicians' readiness to provide care for individuals who have attempted suicide, as well as their understanding and empathy towards them. The total score ranges from 11 (indicating a highly positive attitude) to 55 (indicating a strongly negative attitude). Some items (2, 5, and 11) are reverse-scored. In a previous study conducted in Finland, a USP score below 23 was considered indicative of a favorable attitude towards individuals who have attempted suicide, while a score exceeding 33 was interpreted as a negative attitude (Suominen, Suokas, & Lonnqvist, 2007). A positive attitude was defined as demonstrating commitment, empathy, and a willingness to provide care for such individuals (Stecz, 2021). The reliability of the USP scale in the original study was assessed with a Cronbach's alpha coefficient of 0.74 (Samuelsson, Asberg, & Gustavsson, 1997)

Ethical issues

Before completing the questionnaires, the subjects were provided with informed consent. The ethical review board of the International Islamic University in Islamabad, Pakistan, accepted the current research. Phase I involved translating the USP scale into Urdu, while Phase II involved computing the USP scale's psychometric qualities. The factorial structure was evaluated using confirmatory factor analysis (CFA). Strict anonymity was maintained, with only the authors acting as data gatekeepers.

Phase I: Translation of Understanding Suicidal Patients Scale into the Urdu Language

The USP scale was translated in four phases using the Brislin back translation approach (Brislin, 1970). First, the USP scale was translated from English to the target language of "Urdu" with the assistance of five specialists in related fields: two associate professors of psychology, two Urdu language experts, and one senior lecturer in English. All differences were explored and resolved in a consensus among translators. Each item was thoroughly examined, with suitable wording and grammar chosen to be as near to the original text as possible, all while being supervised by five specialists. The final phase involved reverse translation using the Brislin method (Brislin, 1970). As a result, five experts—two associate professors of English language, two senior academics, and one assistant professor of Urdu—reviewed the USP scale Urdu version to ensure an acceptable translation into English. The results found no ambiguity in the questionnaire, with a Cronbach alpha reliability of .83 for the entire scale.

Phase II: Psychometric Properties of USPS

The psychometric properties of the USP scale were assessed after the calculation of Cronbach's alphas. Additionally, item total and inter-item correlations were computed. The USP scale's construct validity was achieved through the use of CFA.

Data Analysis

The data was analyzed using IBM SPSS version 25.0. A confirmatory factor analysis was carried out with structural equation modeling (SEM) and IBM SPSS AMOS (Analysis of Moment Structure) version 23.0. The demographic factors were presented as percentages and frequency. The Cronbach's alpha coefficient was used to evaluate the USP scale's psychometric characteristics and dependability. A satisfactory cut-off of ≥ 0.70 was found, indicating internal consistency. At the translation and back-translation processes, we used a committee approach and expert assessments to assess face and content validity. Factor analysis was performed to assess construct validity.

Results

The data were analyzed with IBM SPSS version 25 and AMOS version 23 (IBM Corporation, 2013). The sample included 220 health professionals, with an average age of $1.86 \pm .89$. The majority of them were females (54.51%, $n = 120$) as opposed to males ($n = 100$, 45.49%). 45.9% of them are married ($n=101$), while 38.2% are single ($n=84$), divorced ($n=32$, 14.5%), and widowed ($n=3$, 1.4%). 134 (60.9%) were from middle socioeconomic category, 73 (33.2%) from lower, and 13 (5.9%) from high class. Most of them are from nuclear families ($n=140$, 63.6%), live in metropolitan areas ($n=200$, 90.0%), work as Senior Medical Officers ($n=77$, 35.0%), and 98 participants, comprising 44.5% of the sample, reported possessing over six years of field experience.

The results in table 1 show that the USP scale has adequate reliability coefficients, as the Cronbach alpha is .94. The scale standard deviation was determined to be fairly spread around the mean, neither too high or too low, indicating that the data were normally distributed. Skewness results suggested that the data were distributed normally, and the kurtosis for scale was regarded statistically acceptable.

Table 1- Psychometric Properties and Cronbach alpha reliability of Urdu Translated Understanding Suicidal Patients Scale (N=220)

Scales	<i>M</i>	<i>SD</i>	α	Range		Skewness	Kurtosis
				Potential	Actual		
USPS	19.67	9.02	.94	11-55	11-41	1.55	2.08

Table 2 demonstrates that all USP Scale items have a substantial correlation with the total USPS score. The results showed a significant positive correlation between items, with correlation coefficients ranging from .65 to .84 (** $p < .01$).

Table 2- Item-total Correlation for USP Scale- Urdu Translated Version (N=220)

Item No	<i>r</i>
USP 1	.84**

USP 2	.76**
USP 3	.77**
USP 4	.78**
USP 5	.76**
USP 6	.78**
USP 7	.65**
USP 8	.77**
USP 9	.79**
USP 10	.79**
USP 11	.78**

Note= **p<.01

The results of Table 3 illustrate the inter-item correlation of the USP scale. All items are associated at **p<.01, with values ranging from .47 to .76.

Table 3- Inter-Item Correlation of USP scale- Urdu Version (N=220)

	1	2	3	4	5	6	7	8	9	10	11
1.	-	.67**	.69**	.75**	.65**	.72**	.58**	.66**	.71**	.71**	.70**
2.		-	.62**	.63**	.74**	.55**	.49**	.55**	.57**	.57**	.76**
3.			-	.63**	.55**	.71**	.58**	.72**	.65**	.65**	.58**
4.				-	.60**	.65**	.58**	.64**	.67**	.64**	.63**
5.					-	.57**	.47**	.57**	.63**	.62**	.75**
6.						-	.53**	.72**	.66**	.69**	.63**
7.							-	.55**	.60**	.61**	.48**

8.								-	.67**	.69**	.59**
9.									-	.74**	.62**
10.										-	.61**
11.											-

The construct validity of the USP Scale was assessed using exploratory factor analysis before doing Confirmatory Factor Analysis on Amos, as shown in Table 4. The KMO score was 0.94, and the Bartlett's test of sphericity was significant ($\chi^2 = 1976.34$, $p < 0.001$), indicating adequate and suitable data for factor analysis (see table 4). The extraction method yielded one component structure, with a cumulative percentage of variance of 67.14%.

Table 4- The KMO and the Bartlett's test of sphericity for Urdu Translated Understanding Suicidal Patients Scale (N=220)

KMO & Bartlett's Test	
KMO	.94
Bartlett's Test of Sphericity	$X^2=1976.34$ df=55 P<.001

Using a variety of fit indices, CFA evaluated the model fit thus construct validity of the USP scale. Table 5 displays the study's CFA results and fit index thresholds. All of the fit indices were within acceptable boundaries, with the exception of the RMSEA value of 0.10, which indicates marginal fit. This supports the one factor structure and the model's marginal fit (Kim et al., 2016). Our model's fit was not supported by the Chi square (CMIN) p-value ($p < 0.001$), an additional fit metric. Nonetheless, many scientists and researchers do not see the CMIN p-value as a reliable test for model fit because of its extreme sensitivity to size of the sample. When paired with other fit indices, the "CMIN/degrees of freedom" number appears to be a more accurate estimate of model fit (Kim et al., 2016). The results show a significant value of Chi square (191.80, df=55). Because of the significance of the Chi square, alternative metrics of fit were considered, as recommended by Schumacker and Lomax (2010). Some researchers recommend using the chi-square divided by degrees of freedom (χ^2/df) to assess model fit, with values of 5 or fewer acting as a benchmark (Schumacker & Lomax, 2010). After splitting the χ^2/df , the resultant values (3.48) are satisfactory

for the model fit indices. The factor loadings for each item were more than 0.5 and statistically significant ($p < 0.05$).

Table 5- Model Fit Indices for Understanding Suicidal Patients Scale- Urdu Translated Version through Confirmatory Factor Analysis (N=220)

Measure	Value	Threshold
χ^2	191.80	-
df	55	-
χ^2/df	3.48	<5.00
GFI	.91	>0.90
CFI	.92	>0.80
RMSEA	.10	<0.10

Figure 1- The Measurement Model for USP Scale- Urdu Translated Version

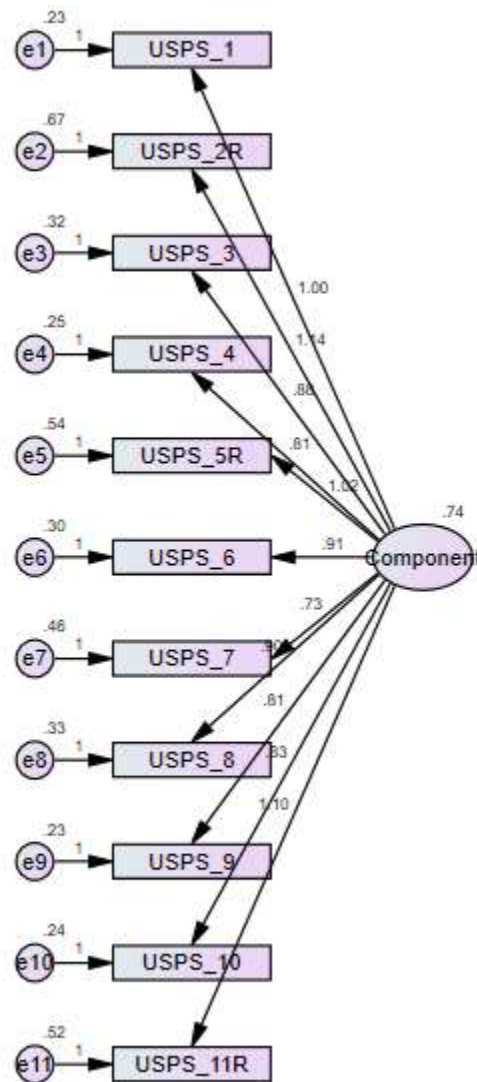


Table 6 shows substantial differences between four groups of health professionals in understanding suicidal patients ($F(4,256) = 48.70, p < .001$). To evaluate variations across groups, post-hoc analysis was performed. The post-hoc analysis using the Tukey test revealed that health professionals working in the psychiatric department have a better understanding of suicidal patients than those working in the accident and emergency department. Furthermore, health workers who work in the medical department report a better comprehension of suicidal patients than those working in the surgical sector.

Table 6- One Way Analysis of Variance on Understanding Suicidal Patients among Health Professionals (N=220)

	<i>A&E</i>	<i>Surgical</i>	<i>Medical</i>	<i>Psychiatry</i>	<i>F (3, 216)</i>	<i>p</i>
USP	<i>M(SD)</i> 24.65(10.65)	<i>M(SD)</i> 20.80(8.58)	<i>M(SD)</i> 20.67(7.70)	<i>M(SD)</i> 12.58(2.17)	22.57	.001

Discussion

This study was conducted to translate the Understanding Suicidal Patients scale and to assess the psychometric properties of the Urdu version of the USP scale. The Understanding Suicidal Patients scale demonstrated good levels of internal consistency (Cronbach's alpha >0.70). The skewness and kurtosis results indicated that the data was normally distributed, and their values were statistically acceptable. Inter-item correlation demonstrated that each item on the USP Scale is substantially associated with the scale's total score. The results showed a significant positive correlation between items, with correlation coefficients ranging from .47 to .76 (**p<.01). The values of item total correlation at the level of **p<.01, range from .65 to .84.

The acceptability and applicability of data for Confirmatory factor analysis was determined using exploratory factor analysis. The KMO score and Bartlett's test of sphericity were significant, and the extraction method revealed a single factor structure. So, the exploratory component analysis results showed that one factor structure was consistent with the original scale, validating the construct validity of the USP Scale in this study. The findings are consistent with previous studies indicating that the USP scale is a reliable and valid measure (Suominen, Suokas, & Lonqvist, 2007). Confirmatory factor analysis was also utilized to investigate the factorial validity of the USP scale, which revealed that all measures are within an acceptable range with the exception of the RMSEA value, which indicates marginal levels of fit indices according to Barrett (Barrett, 2007). An additional fit statistic, the Chi square (CMIN) p-value (p<0.001), did not support the fit of our model. However, due to its great sensitivity to sample size, the CMIN p-value is not regarded by many scientists and academics as a trustworthy test for model fit. The "CMIN/degrees of freedom" number seems to be a more accurate measure of model fit when combined with other fit indices (Kim et al., 2016). The findings indicate that the Chi square has a significant value of 191.80, df=55. As suggested by Schumacker and Lomax (2010), various metrics of fit were taken

into consideration due to the relevance of the Chi square. A standard of five or less is established by some researchers when evaluating model fit using the chi-square divided by degrees of freedom (χ^2/df) (Barrett, 2007; Schumacker & Lomax, 2010). The resulting values (3.48) for the model fit indices are acceptable after splitting the χ^2/df . Every item had factor loadings more than 0.5 and significant statistical differences ($p < 0.05$) (Barrett, 2007). Even though a few of the fit indices fall within a reasonable range, more testing of the model is advised.

Moreover, the present study revealed that health professionals who work in the psychiatric department have a better understanding of suicidal patients than those who work in the accident/emergency, surgical and the medical department. These findings are consistent with an earlier study, which found that healthcare personnel in psychiatric wards had more positive views and are more willing and committed to helping and treating suicidal patients than those in other disciplines (Samuelsson, Asberg, & Gustavsson, 1997). This is because health workers in psychiatry departments often receive specific training and education in mental health assessment, diagnosis, and treatment, as well as suicide risk assessment and intervention (Jabr et al., 2023). This specific training provides them with a better grasp of the complex psychological reasons that underpin suicide behavior, allowing them to give more complete care to patients with mental health issues (Maruf et al., 2022).

There is also evidence that health workers are more accepting and have sense of understanding towards persons who attempt suicide (Norheim, Grimholt, & Ekeberg, 2013; Samuelsson et al., 1997). Furthermore, in the study by Grimholt and collaborators (2014), findings indicated that psychiatrists exhibited positive attitudes towards patients with suicidal tendencies than other healthcare workers. They showed sympathy and willingness to offer assistance to these individuals.

Physicians' areas of specialization seemed to correspond with their level of ability and dedication to providing care to suicidal patients. This is especially remarkable given that, regardless of experience level or seniority, a patient's suicide is frequently the most concerning incident for health professionals. Working with suicidal patients is tough, but the responsibility and commitment to treat the patient is a powerful aspect and motivating force for health professionals of all specialties (Campbell & Fahy, 2002). This may be a reflection of the profoundly established beliefs of the healthcare profession, which celebrates the sanctity of life and centers on bearing responsibility for and making the utmost efforts to save and protect life, even if the efforts required

are highly tough in nature. It is extremely important to determine the training requirements for hospital healthcare staff as well as the practical constraints placed on suicide prevention by institutional and professional variables. The current study's findings show that health care professionals urgently need to receive awareness on suicide and suicide risk management training. This could enhance the quality of life for healthcare professionals at work, which would lead to more positive attitudes towards suicidal patients.

The current study has several limitations as well. As the scale supported the marginal fit, the model must be retested. Furthermore, this factor structure has only been tested among health professionals working in surgery, psychiatry, medicine, and accident/emergency departments; there is still room for endorsement and relevance among other allied health professionals, particularly among nursing populations, which may contribute to the psychometric properties and strength of this scale. Furthermore, utilizing the purposive sample strategy may increase the likelihood of selection bias. Another drawback of this study, is that the cross-sectional study design prevents us from evaluating other types of reliability, such as test-retest reliability. Further exploration is required to assess how supervision and training influence the development of positive attitudes toward patients prone to suicide, ensuring that all professionals involved in managing individuals with suicidal behavior receive appropriate educational resources. Additionally, a promising avenue for advancing research on attitudes towards suicide in Asian contexts could involve investigating the relationship between outcomes of suicidal patients, such as treatment satisfaction and post-discharge suicidality, and the attributes of healthcare professionals.

Conflict of Interest: None

Authors Contribution

Conception & Design: Syeda Ayat-e-Zainab Ali, Tamkeen Saleem

Acquisition of data: Syeda Ayat-e-Zainab Ali

Data analysis: Syeda Ayat-e-Zainab Ali,

Drafting of the manuscript: All Authors

Critical revision of the manuscript: All Authors

Final approval of the manuscript: All Authors

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