Suicidal Behaviour

Underlying dynamics

**Edited by
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Preface

Suicidal behaviour has been a matter of growing research interest among social scientists and psychiatrists in the recent past as it is one of the major causes of death across the globe. Suicide accounts for a life approximately every 40 seconds and it is considered to be one of the three leading causes of death among young people. The World Health Organization estimates that more than one million people lose their lives every year by means of suicide and this figure is likely to increase above 1.5 million per annum by 2020. Suicidal behaviour includes a process that occurs in varied forms of varying degree of severity, starting from ideation or thought level to completed suicide. On the one hand, it may be as fatal as an act of killing oneself and, on the other, it can be the non-fatal behaviour of a person just wishing him or herself dead that also constitutes suicidal behaviour. Suicide is widely regarded as a personal act deeply rooted in the subjective will of a person. Suicide is currently among the major public health problems in most countries around the world and the seriousness and scope of this maladaptive behaviour have projected a pressing need for a better understanding of the situation from a multidimensional perspective and forced planning and implementation of effective preventive strategies, as well as health care policies to curb suicidal behaviour.

Although a growing number of social scientists and health care professionals have recently been dedicating their efforts to research on various aspects of suicidal behaviour, a relatively small and constrained body of existing literature on the precipitating factors fundamental to suicidal behaviour reveals the relative paucity of a comprehensive focus on the understanding of the specific origin, roots and channels of occurrence of suicidal behaviours. The associated factors and underlying dynamics behind varying trends of suicide have always remained complex. To tackle suicide crisis from the core it is important to identify and analyse these covert aspects. Addressing these calls, this volume *Suicidal Behaviour: Underlying dynamics* tries to challenge the elements of randomness about suicidal behaviour and describes how suicidal behaviour is modelled, both socially and spatially. It is an attempt to minutely delineate the process in which all the biological, psychological, sociological and even geographical factors contribute significantly to the varying trends of suicide worldwide. The volume presents a multifaceted approach to understanding the epidemiological side of *suicidal*

behaviour, to appreciate and comprehensively portray the *underlying dynamics* in a single resource and to open further avenues for researchers and academia to expand and delve into the diversity of suicide research.

In order to systematically uncover the underlying dynamics of suicidal behaviour, the volume bases its matter of discourse on sixteen chapters contributed by internationally acclaimed scholars and experts in the field of suicidal behaviour, and attempts to eliminate the existing gaps in the subject by reflecting upon the phenomenon across different communities and countries. The text has been divided into two parts. Part I is focused on elaborating the theoretical underpinnings and comprises eight chapters on various psycho-sociocultural aspects of suicidal behaviour. It begins with a conceptual arena on the subject matter, which primarily concentrates on thorough understanding of the roots of a suicidal process, ranging from genetics through personality to environment, and it further thoroughly unfolds the relation of suicidality to aggression, emotion dysregulation and psychological stress. Simultaneously, along with the theoretical comprehension of the process, it also focuses on specific risk assessment and various theoretical approaches to prevention and intervention particular to the kind of dynamics that underlie any particular suicidal act. Part I begins with 'Conceptualizing suicidal behaviour', from a broad perspective including various definitions, theories and models to enumerate the entire domain of suicidality from different scientific perspectives. In this crucial introductory chapter Hardeep Lal Joshi, Vijay Parkash and Updesh Kumar have delved into suicide as a multidimensional phenomenon, and put forth a detailed conceptual framework of suicidal behaviour. They have attempted to delineate the wide latitude of suicidality and tried to elaborate the conceptual underpinnings from varied interdisciplinary perspectives explaining the vast domain of suicidal behaviours. Considering it essential to list effective preventive strategies and intervention techniques, they briefly cite some concrete ways that can be utilized to help suicidal people and save their lives.

Suicidal behaviour is a complex and multi-factorial phenomenon and epidemiological genetic studies suggest that the genes of the serotonergic system are linked to suicidal vulnerability. Building on the conceptual framework in Chapter 1 and bringing out the hereditary links, in Chapter 2 of the volume, Sarchiapone and Iosue try to explicate the 'Genetics of suicidal behavior'. The authors demonstrate the familial transmission of suicide and the way in which it is distinct from the familial transmission of psychiatric disorders associated with suicidal behaviour. The authors very well exemplify a specific clinical phenotype of suicidal behaviour related to attempted and completed suicides by elucidating various adoption and twin studies. Citing the role of heredity, they emphasize that vulnerability to suicidal behaviour may involve interactions between genetic factors, acting via the transmission of personality traits and environmental factors. The authors also describe various gene approach studies and suggest the role of different genes coding in suicidal aberration. They indicate that the Genome Wide Association studies and epigenetics have a significant potential to examine large sets of gene polymorphisms and heritable changes and thus improve our understanding of the association between gene expression and suicidal vulnerability.

Ranging from the exploration of genetic factors to understanding of the personality and temperamental make-up of an individual, probably social scientists have delved deep into the roots of suicidal behaviour to understand the pathways leading to its evolution and sustenance. The forthcoming chapters focus on the linkage of various psychological constructs of personality, emotion dysregulation and impulsiveness with various types of suicidal behaviour. Describing in Chapter 3, 'Suicidality and personality: linking pathways', Parkash and Kumar delve into various personality factors linked to different aspects of suicidality. Considering the widely accepted personality descriptive models including the big-three and the big-five, they have attempted to highlight all the important paths that link an individual's personality make-up with various suicidal dimensions, thereby making an individual vulnerable. The genetically determined side of personality – temperament – has also been elaborated to reveal its precipitative effects on suicidality. In the attempt to uncover all personality-related linking pathways to suicidality, they have also tried to concisely explain various related personality aberrations in the form of disorders and the way they form a bridge to suicidal behaviour. The need to focus on very specific narrower personality traits has been highlighted for a deeper understanding of the suicidal dynamics.

Covering the more specific and abstract personality aspects, in Chapter 4, 'Emotion dysregulation and suicidality', Anestis investigates the influence of negative affect on vulnerability to suicidal ideation. The author has defined emotion dysregulation as a multifaceted construct connected with problematic outcomes of anti-social behaviour, non-suicidal self-injury and substance use. Using the Interpersonal-Psychological Theory of suicidal behaviour, the author differentiates between the desire for suicide and the capability for suicide and states that most individuals with a suicidal desire will not have the capability and those with the capability will not have the desire to commit suicide. Theories of Dialectical Behaviour Therapy and Emotion Regulation Group therapy have been regarded as effective psycho-social approaches to enhance an individual's capacity to regulate their emotions and teach distress tolerance skills. Taking the discourse on personality-suicidality link further and deeper is the task of Chapter 5, 'Role of aggression and impulsivity in suicide attempts and in suicide completion'. Gvion and Apter examine the influence of each construct independently as well as in association and elaborate on how these contribute to various aspects of suicidality. The authors amply cite that aggression has been linked to the act of suicide in multiple epidemiologic, clinical, retrospective, prospective, and family studies. They highlight that direct, proximate and indirect causal factors have been studied while evaluating impulsivity within the context of suicidal behaviour. While focusing on patients with disorders, the authors emphasize how impulsive-aggressive personality disorders and alcohol abuse were two independent predictors of suicide in major depression and aggression but impulsivity does not appear to be a factor for patients with bipolar disorder.

Making the evidently perceived underlying dynamics explicit, in Chapter 6 Rozanov comprehensively describes the connections between psycho-social stress and suicidal behaviour. In addition to the individual psychological factors, the

author here suggests various macro-, meso- and micro-level factors that mediate the effect of social structure on individual and public health and has identified excessive mortality, shortening of life expectancy, rise of life-threatening risky behaviour and suicidality as major indicators of psycho-social stress. The fluctuations in suicide rates in the European Union and the former USSR countries have been aptly shown as supporting evidence to reflect the social and economic processes and transformations taking place in the country. By classifying the post-Soviet countries into two clusters – the one with high suicide rates and marked rise of suicides in response to stress and the other with with low suicide rates and blunted rise under the stress of transition – the author proves that suicide rates vary in different cultures under similar stressful conditions but this variation is not observed when mortality rates from cardiac infarction and cerebrovascular diseases are examined. In addition, he also analyses gender differences in suicide behaviour and other stress manifestations in these clusters. The interconnection between stress and alcohol consumption has also been reviewed and Rozanov proposes that national traditions and ethno-cultural peculiarities play an important role in determining variations in suicidal behaviour at the national level.

Revealing the suicide dynamics from another related point of view, in Chapter 7 Courtet and Olié trace a pathway to suicide running from social adversity to psychological pain and discuss the physiopathology of suicidal behaviour in the light of psychological pain. They describe suicide as a major social crisis in occidental countries and refer to the possible existence of an association between economic crisis and suicide. Describing the isolated elderly and prisoners as high risk populations, the authors attribute various social and economic factors to the spatial and temporal variation in suicide. Psycho-social stress, social vulnerability and social exclusion due to exposure to a harmful environment, such as sexual abuse, emotional neglect, disturbed relationship with parents or parental mental illness have been observed as carriers of negative emotions of dread, grief, shame, guilt, etc. and key precursors of social and psychological pain and thus, suicidal acts. Highlighting the need to avoid suicidal mortality and suicidal thoughts, the authors propose the use of analgesic drugs and also suggest prosocial pathways as protective factors for suicide.

The rise of modern communication systems, social networking and social media has resulted in an increase of clustering and contagion of suicidal behaviour. Research in this area is still in its nascent stage and Arensman and McAuliffe, in Chapter 8 of this volume, provide a review of the epidemiological, methodological, clinical and social issues in understanding the mechanism of suicide clustering. In addition to geographical clusters, the significance of time and space clustering among specific populations and settings, such as psychiatric inpatients, adolescents and young adults in community settings has been well explored. The authors worry about the recent rising trend of suicide clustering and contagion in older adults which was earlier found mostly in adolescents and young adults. Various approaches to assess clustering and contagion have been defined and the authors emphasize the need to establish relevant public health, health and

bereavement support services for the needs of the people. The authors conclude the chapter with a call for better crisis response training and highlight the need to have a long-term programme of suicide risk reduction and community recovery.

Understanding suicidal behaviour remains incomplete without appreciating the interplay of various causal factors that lead to suicide. The goal of reducing suicides and suicidal behaviours can be accomplished only when the causes and correlates of suicide are identified and addressed with precise adequacy. The relative scantiness of empirical attention paid to understanding suicidal risk has mostly been the reason that has prevented clinicians and health scientists from achieving this goal. Part II, 'Varied research evidences and assessment perspectives' focuses on this very important aspect and brings to light the various precipitating factors of suicide in diverse societies and cultures and the resources required to deal effectively with suicide. This Part opens with Chapter 9 'Suicidal ideation and behaviour among sexual minority youth: correlates, vulnerabilities, and protective factors', wherein Samantha Pflum and her associates have tried to explore the relation of suicidal ideation among sexual minority youth by elucidating the mental health disparities of LGBTQ (lesbian, gay, bisexual, transgender, queer) youth. Depression, peer victimization and social isolation have been comprehensively elaborated as some of the important correlates of self-harm. Being specific to the correlative risk factors, the authors also provide recommendations for health practitioners, family, and school administrators to maximize protective factors and promote positive development and support.

Providing a detailed picturesque analysis of the global trends of various suicide-related factors, the volume proceeds in the next few chapters to discuss suicidal variations in different parts of the world including Hungary. In the tenth chapter, Rihmer, Gonda and Dome attempt to provide a clearer impetus on understanding the variations in suicidal behaviour by enunciating the spatial and temporal distribution of suicidal behaviour with a special focus on Hungary. In addition to psycho-social factors, genetic and biological contributions such as regional differences and geographical factors are identified and well elaborated upon as possible causes of the high suicide rates in Hungary. The authors report a positive correlation between psychiatric disorders and suicide rate and examine the effect of antidepressant treatments in reducing suicidal rates. To extend and illustrate the variations in suicide in the next chapter, Clemans and Bryan conceptualize suicide risk particularly for military personnel by deliberating on suicide in the United States military. Risk factors between the civilian and military populations are compared and the distinct culture of the United States military has been considered as the discriminating and contributing factor. Further, Fluid Vulnerability Theory has been adopted to conceptualize the risk of suicide among service members and provide a theoretical foundation to assess the risk level of military personnel. Illustrating the phases of the cognitive behavioural therapy model, the authors have suggested specific intervention strategies to mitigate the risk of suicide among service personnel.

Alcohol dependence ranks among the strongest suicide precursors and alcohol addicts have higher rates of attempted and completed suicides. Though the

hypothetical relations are given consideration by the professionals, the origins of the close relationship between alcoholism and suicide have rarely been investigated and explored by researchers. Considering another global trend, Razvodovsky has extended the issue on similar lines in Chapter 12, 'Contribution of alcohol to suicide mortality in Eastern Europe' and he stresses that Eastern European countries constitute the highest suicide rates. Attributing alcohol as the most consistent predictor of suicide mortality and supporting his claim by highlighting several studies and experiments, the author argues that alcohol is a strong determinant of suicide both at the individual and population level. Drinking patterns and culture are examined and credited as important indicators of the alcohol–suicide association in spirits-drinking countries. Concluding his chapter, the author lists various natural experiments and empirical evidence to evaluate the efficacy of public health interventions and suggests that a restrictive alcohol policy can be considered an effective measure of suicide prevention in such countries.

The reporting and portrayal of suicide in the media have a significant influence on suicidal behaviour and the need for the proper depiction of media content and a proper understanding of its influence on suicide contagion urge further research in this area. Cheng and Yip delve in this emerging area of research in Chapter 13 and provide a critical review of media content representation of suicide in various societies, wherein they demonstrate the ways that media representation differs in various societies and the factors that influence these variations. Rather than focusing on the quantitative representation of suicide issues, the authors critically examine the content of non-fictional suicide reports in their study. They present a systematic meta-analytic literature review process and propose that traditional media representation possesses some common features but these are a result of common patterns of media's selective reporting that create myths in the readers' mind. Certain communalities observed were in terms of suicide victims' background, the method of suicide and the attributes leading to suicide. They also report how celebrity and youth suicides using violent methods were more appealing to the media. On the other hand, the authors optimistically state that online representation of suicide showed an inclination towards publishing anti-suicide information. Revealing the global trends on this issue, they very aptly report a cross-cultural study of suicide reports in Hungary, Japan, the United States, Germany, Austria and Finland to comprehensively demonstrate the cultural variations of media representation in these countries. The authors emphasize the importance of the implementation of media guidelines and the involvement of professionals to steer the development of media representation towards preventing suicidal behaviour.

After discussing various factors contributing to suicidality, the scope of the volume further extends to include the concept of suicide assessment and prevention. Elaborating upon the formal assessment of suicide risk, Bruce Bongar and colleagues in Chapter 14 examine the significance of formal risk assessment in the mental health care system and describe a comprehensive psychological and psychiatric evaluation based on the Risk Management Foundation of the Harvard Medical Institution (RMFHMI). The authors summarize the clinician's critical

areas of exploration across the five domains of clinical diagnosis, history of suicidal behaviours, client strengths and vulnerabilities, risk factors of self-harm, and protective factors. Based on these critical areas, the authors theorize that strong religious beliefs, fear of social disapproval, a positive social support group, positive coping abilities and a positive family structure would restrain individuals from suicide attempts. The authors' critical review of the formal assessment of suicide risk in three distinct mental health care settings of Veterans' Affair Hospitals, general hospitals and community mental health gives a broad perspective to identify at-risk patients and suggests specific training protocols and step-by-step evaluation measures not only to identify risk factors but also to educate health professionals in the proper diagnosis of a suicidal individual. Maintaining the line of significance assigned to suicide risk assessment but slightly shifting the focus to the cultural identity of groups and individuals, Kugel and his associates in Chapter 15 bring forward the aspects of suicide risk in culturally diverse populations in their chapter 'Culturally competent suicide assessment'. The authors describe how the various constructs of suicide such as suicidal ideation, suicide method and risk and protective factors vary between ethnicities, gender and sexual orientation and express a concern about the need to develop and validate measures to recognize the unique factors to assess accurate risk levels across culturally diverse populations. Furthermore, the authors explain the CARS (Cultural Assessment of Risk for Suicide) measure based on the four categories of the Cultural Model of Suicide – cultural sanctions, idioms of distress, minority stress and social discord – to address the risk and cultural disparities in suicide among four diverse cultural minority populations of Asian Americans, Latino/a Americans, African Americans, and sexual minorities.

As the volume moves towards the end, it is important to discuss the best practices that must be undertaken in dealing with suicidal behaviour. In the last chapter of the volume, 'Ethical and legal issues in dealing with suicidal behaviour', Mukherjee and Kumar provide an overview of the prevalent dilemmas and the ethical and legal considerations in the process of suicide assessment and suicide prevention. Describing ethics as aspirational standards a counsellor should strive to attain, the authors highlight the moral dilemma involved in accepting the act of suicide as rational or irrational. The authors elaborate upon the general principles for constituting ethical standards in counselling. Beneficence and non-maleficience, fidelity and responsibility, integrity, justice and respect for people's rights and dignity have been listed as the important principles that are crucial for building a healthy client–counsellor relationship. The authors provide a legal perspective to the issue by delving into the case of India in particular. The chapter concludes by underlining the need for a legal and ethical framework and proposes professional guidelines for understanding the client and creating an environment for the healthy existence of humanity.

The theoretical underpinnings revealed in the first part along with a thorough understanding of the causal factors and assessment procedures elaborated in the second part of the volume present a comprehensive coverage of suicide-related issues and widen the horizon of the readers to think beyond the epidemiological

perspective. The varied dynamics explored from a multidimensional viewpoint give a panoptic description of the problem and variants of suicidality. The focus on evolution, assessment and prevention of suicidal behaviour in a cross-cultural milieu presented in this volume is an attempt to provide scope for researchers and professionals working in this area across the globe to fully delve into each aspect and cater to each community separately so that the stigma of suicide can be effectively controlled and arrested.

Editing a volume on such a vast area of research is undoubtedly an arduous task and I express my gratitude to one and all who contributed to the extensive work and provided constant support. I am deeply indebted to the authors for the time and effort they have given to the project. Their outstanding work significantly contributed to a quality, informative and a professional product. I also wish to acknowledge with thanks the kindness of my colleagues at the Defence Institute of Psychological Research, Defence Research and Development Organisation, New Delhi, for their patience and cooperation in successfully completing the volume on suicidal behaviour in a short span of time. I hope this volume will serve as a pivotal reference point for the health care professionals and research scientists and will generate new ideas of research for the continual advancement of studies on suicidal behaviour in the service of mankind.

1 Conceptualizing suicidal behaviour

Understanding and prevention

Hardeep Lal Joshi, Vijay Parkash and Updesh Kumar

Suicide is one of the major causes of death among people in the West and now the suicidal cases are rising in the Eastern countries as well (World Health Organization (WHO), 2012). WHO (1999) has estimated that approximately 1.53 million people will die from suicide, and ten to twenty times more people will attempt suicide across the world by the year 2020. These estimates indicate that on average one death will occur every 20 seconds and one attempt will be carried out every one to two seconds. Although of low predictive value, in these estimates the presence of psychopathology is perhaps the single most important predictor of suicide (Gvion and Apter, 2012).

According to another WHO estimate, every year about 170,000 deaths by suicide occur in India (as cited by Patel *et al.*, 2012). As per a decade-old estimate, every year, of the half million people dying by suicide across the world, 20 per cent were Indians (Singh and Singh, 2003) of the 17 per cent of the world population. In the past two decades the suicide rate has escalated from below 8 to above 10 per 100,000 (Vijayakumar, 2007). In a recent study published in the *Lancet* in June 2012, it was estimated that about 187,000 suicides occurred in 2010 (Patel *et al.*, 2012). These estimates show that suicide is fast becoming a menace to human life and therefore it calls for urgent action that can lead to finding ways to curb this growing tendency among people.

The aftermaths of suicide are often massive because not only does it annihilate a person's existence but also leaves his family and friends in the lurch, thrusting upon them emotional, mental and physical stress. A person who attempts suicide, essentially, needs medical help and treatment and therefore it is necessary to broaden the knowledge regarding suicide and carry out extensive research in this field.

Ancient understanding

Strikingly, in ancient times, the act of suicide was not considered disagreeable and was instead regarded as a good method to avoid life's frustrating circumstances. Ancient Romans before the fourth century deemed the quality of life to be of greater value than its longevity. Seneca, the first-century Roman philosopher, acknowledged suicide as a decent way to end life's

misery. Even the Christian Church began denouncing suicide as sinful only in the fourth century which then proclaimed that the act of suicide is in violation of the Sixth Commandment – Thou shalt not kill – and therefore began viewing it as a crime. Later on, the Italian philosopher St Thomas Aquinas, in the thirteenth century, declared that suicide is a mortal sin because it invades God's power over human life. Since suicide began to be considered a crime against God, in Christianity, for a long time people committing suicide were debarred from burial in a Christian graveyard. It is interesting to note that suicide continued to be a criminal offence in the United Kingdom until 1961, where Christianity is the major religion.

Like the European countries, the concept of suicide was grappled with by Asian countries as well. From 1200 to the 1600s, suicide – hara-kiri in Japanese – was viewed as a dignified means of departing from life's disgraceful state of affairs. In ancient India too, suicide was preferred as a better option to death from disease. Considering the Confucianist views, the act of suicide is not condemnable. In Confucian opinion, the act of suicide is seen in relation to the events that lead up to it, and can therefore, depending on the circumstances, be seen as something honourable or dishonourable. In China, where Confucianism is followed widely, suicide is also seen as a passionate protection of one's honour or integrity and as a spirited resistance against something bad. In Confucian cultural tradition, suicide in general is seen as something negative but it can sometimes be justified if it is for a noble purpose. 'Confucius would see suicide as an option for protecting one's virtue and integrity, but that more can be gained by doing well in life instead of killing oneself' (Van Tuan, 2010, p. 5).

From the Buddhist point of view, it is a common belief that life is a transitory abode while death would be a long-lasting subsistence. However, in Buddhism, it is believed that the next life depends on the way one lives one's present life and suicide is condemned because running away from this life by means of 'death' cannot prevent the anxieties of the next life. It shows that Buddhist beliefs are close to the existential model of thinking (Van Tuan, 2010, p. 5). Similarly in Islamic countries, suicide is regarded as an unholy act because the Quran, the religious text of Islam, considers it to be one of the most horrible sins that obstructs man's spiritual path. This is one of the reasons why in most Muslim countries suicide is still considered as a crime. Although some countries do consider suicide a crime, individual suicide has been decriminalized in the Western world. In the United States of America, it is not illegal to commit suicide but the person can be penalized for an attempt. It is interesting to note that at present, no European country considers attempted suicide a crime (McLaughlin, 2007), whereas, in India, attempted suicide is a punishable offence.

Conceptualizing suicide

Many psychologists regard suicidal ideation as a form of mental illness and suicide as an outcome of this illness and, therefore, an extensive body of work has been done to study the various aspects and dimensions of suicide and suicidal

behaviour. Sigmund Freud (1917) in his essay, 'Mourning and Melancholy', postulated that the life-instinct 'Eros' and the death-instinct 'Thanatos' are the two instincts that drive individuals. Researchers believe that Freud's conceptualization of the

> 'death instinct behaviors reflecting self-destructive tendencies, guilt feelings, suicide, melancholia, masochism and sadism are furnished with a motivational force of their own, as well as with a specific mechanism of action, that is the repetition compulsion. The death instinct drives man to the ultimate state of quiescence – death through the urge inherent in organic life to restore an earlier state of things'
>
> (Orbach, 2007, pp. 266, 267)

Freud used to believe that these self-destructive processes lead to depression and suicide. He further posited that most individuals struggle between the two instincts and suicide results when Thanatos wins over Eros. Although there have been many scholars who have contributed enormously to the field of suicidal behaviour research, major work in the conception of suicide was carried out by American psychologist Edwin S. Shneidman in the 1950s. Around six decades ago he co-founded the Los Angeles Suicide Prevention Center in 1958, for the better understanding of suicide. Shneidman neologized various terms like psychache, suicidology, psychological autopsy and postvention. As Shneidman pioneered the research in this field he is often referred to as the father of contemporary suicidology (Leenaars, 2010; Shneidman, 1993).

Derived from the Latin words 'sui' (of oneself) and 'caedere' (to kill) the word 'suicide' was first used in the seventeenth century by Sir Thomas Browne. He introduced this term in his published book *Religio Medici* in 1643. In 1903 the first 'International Classification of Diseases and Causes of Death' was adopted which included 'suicide' in the section related to morbidity and mortality due to external factors. Thinkers like Emile Durkheim and Sigmund Freud in their respective studies pointed out the effect of external factors on suicide and therefore led to the encompassing of sociological and psychological aspects in the definition of suicide. But before proceeding to the discussion of the definition of suicide, it is essential to understand that the term 'suicide' is often used only for those reported cases where the attempt to kill oneself has resulted in death which apparently makes it quite a restricted term in the sense that it does not cover all the other related aspects of the act. This often leads to flawed estimation of the cases. Therefore, the term 'suicidal behaviour' is used to refer to the multidimensional nature of suicide and the acts related to it. Though the nomenclature of suicidal behaviours too has been an issue of international debate among experts as well as there being variations involved in those cases where the attempts do not lead to lethal outcomes, the term 'suicidal behaviour' is generally used as a more inclusive term (Silverman *et al.*, 2007a, b; Van Orden *et al.*, 2010).

We all know readily what suicide means whenever it is mentioned in everyday life. But technically, the word suicide does not simply mean 'killing

oneself'. It is a much more complex concept and as mentioned above, the complexity arises from the fact that suicidal behaviour is used to describe a varied gamut of results, one of them being suicide. Basically, three categories of suicidal behaviour have been suggested: completed suicide, suicide attempt, and suicidal ideas (Beck *et al.*, 1972).

It may be noted that not every act of killing oneself can be classed as suicide. In order to be so, it is essential that the person must intentionally initiate the act, in the full knowledge or anticipation of its lethal results. On the other hand, there is much variation among the terms used for suicidal behaviours without lethal results so those acts of terminating one's own life which have non-fatal results are designated as suicidality, attempted suicide, suicide attempts, act of intentional self-harm or para-suicide (WHO, 1998). The International Classification of Diseases, (ICD-10; WHO, 1992) too has created a separate class of 'Intentional Self Harm' stating that it comprises 'purposely self inflicted poisoning or injury suicide (attempted)' (p. 1013).

Researchers have contended that there is a continuum from suicidal ideation to gesture to attempt to complete which depicts suicidal behaviour (Crosby *et al.*, 1999; Garland and Zigler, 1993; Silverman and Maris, 1995). Suicidal behaviour generally begins with ideation which includes thoughts about desire and method to commit suicide (Beck *et al.*, 1988). The person here thinks of or wishes to die, this then is reflected in his or her gestures, further transmuting into an attempt and finally might be resulting into completion. Hence it can be said that 'suicidal behavior is a set of noncontinuous and hetero-geneous spectra of behaviors, such that suicidal ideation, suicidal threats, gestures, self-cutting, low lethal suicide attempts, interrupted suicide attempts, near-fatal suicide attempts, and actual suicide' (Bursztein and Apter, 2009, as cited by Amitai and Apter, 2012, p. 986). Giving a nomenclature to major suicide-related behaviours, O'Carroll *et al.* (1996) described suicidal ideation as 'any self-reported thoughts of engaging in suicide-related behavior'; non-suicidal self-injury as 'direct, deliberate destruction of body tissue without lethal inten-tion'; and a suicide attempt as a 'potentially self-injurious behavior with a non-fatal outcome, for which there is evidence (explicit or implicit) that the person intended at some level to kill himself/herself' (cited by Amitai and Apter, 2012, p. 986). These behaviours differ on the scale of rescuability and lethality. In fact, rescuability and fatality are the factors that actually distinguish between suicidal gestures and attempts. Rescuability is high and fatality is low in suicidal gestures or parasuicide where the person concerned does not actually intend to die yet he/she commits the act of self-directed violence. In the absence of the intention to die as in the present context, the term 'self-harm' is used. But when there is a presence of intent to die, the rescuability is low and the chances of fatality become high. It may be noted that the applicability of the conceptualization of suicidal behaviour on a continuum for every individual is still to be proved (Silverman and Maris, 1995).

The attributes of lethal suicidal behaviour or suicide are quite different from non-lethal suicidal behaviour. Shneidman (1985) theorized that suicide resulted

due to an intense emotional and psychological pain called 'psychache', which ultimately becomes unbearable and cannot be abated by previously successful coping patterns. Suicidal death thus, in a sense, is an escape from this pain. This notion of escape from unbearable experiences has also been endorsed by another researcher, Baumeister (1990). He regards the act of suicide as an escape from self, or at least self-awareness. An individual attains a state of 'cognitive deconstruction' in this attempt which involves both irrationality and disinhibition, such that drastic action becomes logical. Some other researchers have asserted that in most cases suicide is associated with negative events which lead to a sense of meaninglessness of life and hopelessness about future (Beck *et al.*, 1985; Eyman and Eyman, 1992), which create, independently or in combination, a psychological state that perceives suicide as a promising way out. Still other researchers proposed that hopelessness about the future may be a better long-term predictor of suicide (say, one or two years later) than it is for the short term (weeks or months) (Clark, 1995).

Defining suicide

Over the years, several pioneers and researchers have defined suicide in their own way, however, there still remains a need to have a single globally accepted definition. Although there seems to be an inherent communality among different definitions, some of the popular but differing definitions of suicide are as follows:

- 'All cases of death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result' (Durkheim, 1897/1951, p. 44).
- 'All behaviour that seeks and finds the solution to an existential problem by making an attempt on the life of the subject' (Baechler, 1979, p. 11).
- 'Suicide is a conscious act of self-induced annihilation, best understood as a multidimensional malaise in a needful individual who defines an issue for which suicide is perceived as the best solution' (Shneidman, 1985, p. 203).
- 'Suicide is an act with a fatal outcome which the deceased, knowing or expecting a fatal outcome had initiated and carried out with the purpose of provoking the changes he desired' (WHO, 1986).
- 'A fatal willful self-inflicted life-threatening act without apparent desire; implicit are two basic components lethality and intent' (Davis, 1988, p. 38, as cited by Maris *et al.*, 2000, p. 30).
- 'Death arising from an act inflicted upon oneself with the intention to kill oneself' (Rosenberg *et al.*, 1988, as cited by Maris *et al.*, 2000, p. 30).
- 'The definition of suicide has four elements: (1) a suicide has taken place if death occurs; (2) it must be of one's own doing; (3) the agency of suicide can be active or passive; (4) it implies intentionally ending one's own life' (Mayo, 1992, pp. 92, 95).

The above-cited definitions make it obvious that there is a lack of overall agreement among researchers on which key aspects to be included in the definition of suicide. Despite much debate, the researchers have still not reached consensus about it but over time, certain common elements have emerged from these different definitions. These elements include: the result of the behaviour, the intent to die to attain a different status, the agency of the act, the consciousness of results, the effect of a theoretical orientation and the influences of culture. The WHO Working Group thus later adopted a standard definition of suicide which not only includes all the above-stated elements but is also theoretically neutral, free of value judgement and one that is culturally normative. WHO (1998) defined suicide as the 'act of killing oneself, deliberately initiated and performed by the person concerned, in the full knowledge or expectation of its fatal outcome'.

   Apparently, in any definition of suicide the intent to die is the central element. However, it may be noted that it is hard to be absolutely certain of the thought pattern of the deceased unless he has made his intention to die clear by way of a suicide-note or diary or a prior conversation. Then there are many attempts made impulsively during brief critical circumstances and are thus hardly planned. Besides, there are cases where people who think of committing suicide often have an ambivalent attitude towards killing themselves. In all such cases establishing a correlation between intent and outcome can be quite challenging (Carson *et al.*, 2004; WHO, 2002). Therefore, a slightly modified version of the above definition has recently been proposed to make it even more comprehensive and universally acceptable.

> Suicide is an act with fatal outcome, which the deceased, knowing or expecting a potentially fatal outcome, has initiated and carried out with the purpose of bringing about wanted changes.
>
> (De Leo *et al.*, 2006, p. 5)

Suicide is a multifaceted phenomenon and it often occurs as a result of mutual or reciprocal actions of various factors. Although many extensive studies have been made in this field, there are still some problems which remain unsolved such as the standard definitions of different subtypes and phenotypes of suicidal behaviour and associated factors like aggression and impulsivity (Gvion and Apter, 2012). The psychologists, therefore, still have a number of questions to answer.

Theoretical perspectives

Though suicide is considered a behaviour related to modern society, it is not necessarily so. Great philosophers also described suicide in one way or the other. At that time, no theory was proposed because of less interest in this topic, yet almost all the great philosophers gave their opinion on suicide. In the Classical Greek era, suicide was always viewed negatively. Pythagoras proposed

that suicide leads to imbalance because it is unnatural. Plato and Socrates also described suicide as wrong and against the state. Aristotle proposed punishment for committing suicide, considering it negative for mankind. It was in Classical Rome, that the opinion regarding suicide changed. In this era, suicide was not considered negative, or wrong, rather it was seen as a way to find freedom from problems. Around 1500, the writers and philosophers started changing their views regarding suicide. The main insight into the topic was provided by the French philosopher Rousseau who tried to free suicide from evil. According to Rousseau, the individual should not be blamed for suicide, it is society, which is compelling him to commit this act. David Hume described suicide apart from the concept of sin. Later on Immanuel Kant preserved the earlier Stoic stance, calling suicide unjust. Goethe presents the opposite view to Kant's, calling for right to death. In history, views regarding suicide are never unidimensional, some consider it negative whereas others stand at the opposite pole and justify its rationality.

Theoretically, suicide and suicidal behaviour are a complex and multi-dimensional phenomenon. It is difficult to study this topic because in order to compose a general theory, very large samples are required and in the general population, fewer suicide attempts and deaths are found. Second, people who actually attempt suicide are excluded from clinical trials, and those who die because of suicide are never available for assessment. Although research concerning suicidal behaviour has been conducted in an atheoretical context, different theoretical models have been proposed to describe it. Major approaches describing suicidal behaviour include biological, psychological and sociological perspectives.

Biological theories

There is a fair amount of research evidence that biological factors play an important role in suicide. It is found that the suicide rate is higher in monozygotic-twins as compared to dizygotic twins. It is also found that the suicide rate is higher among biological relatives of suicide attempters as compared to normal pro-bounds. Biological theorists also proposed that suicidal behaviour results from the presence of biologically-based diathesis. According to recent research (Mann, 2003; Van Pragg, 2001), the dysregulation of the serotonergic system in the ventromedial prefrontal cortex leads to a higher suicidal risk. Considering the role of biological factors along with other psychological and social factors, Kinderman (2005) proposed the biopsychosocial model wherein he suggested that biological factors, social factors and other environmental or life events lead to mental health problems through their conjoint effects on mental psychological processes, and these are the final common pathways to mental ill-health which may ultimately lead to suicidal behaviour in many untreated cases.

Psychological perspectives

Various psychological interpretations of suicide have been proposed by psychologists. Freud (1917) was the front runner among those experts. Freud suggested

that suicide is motivated by unconscious intentions. According to Freud, the root cause of suicide was the loss or rejection of a significant object. The suicide attempter turns a death wish towards the person himself which has been directed against someone else. Freud considered it a type of self-punishment. The suicidal persons feel a sense of guilt and criticize themselves for each and everything and start developing prohibition towards harshness. In this way, the suicidal person is unable to organize his experiences in a coherent way which ultimately results in suicide. Freud's theory of instinctual self-destructive behaviour was further elaborated upon by Menninger (1938). He explained the three primary dynamics underlying suicidal behaviour. These dynamics included the wish to kill (ego – aggression turned inward); the wish to be killed (superego – self-aggression stemming from guilt), and the wish to die. Although the wish to kill is expressed against oneself by means of suicidal acts, the inherent aggression in that wish is intended for an ambivalently valued person. Menninger further proposes that the wish to be killed stems from intense superego guilt for outlawed sexual and aggressive unconscious id desires. He asserts that the wish to die represents the strength of the unconscious death instinct rather than representing a conscious (ego) wish to kill or a superego self-punishment. The wish to die indicates an id desire to revisit the prior birth tranquillity and it is manifested in nonfatal self-destructive acts and in self-exposure to dangerous activities. Because of the innate intensity of the death instinct, the wish to die is thus a form of playing with death (Menninger, 1938, as cited by Orbach, 2007, p. 267).

The other perspective on suicidal behaviour is given by cognitive behaviour psychologists. According to this perspective, depression is the main cause of suicide in which hopelessness is the main factor. The suicidal person views himself, the future and the environment as negative and this negative evaluation along with some cognitive errors and distortion pushes him to suicidal ideation and suicidal acts. The final outcome, that is, suicide is the result of cognition the person has developed. According to some cognitive behavioural psychologists, it is the cognitive schema, and according to some it is the irrational beliefs which are crucial factors in the development of negativity which is the main cause of suicide among suicidal people (Beck *et al.*, 1985).

Learning psychologists explained suicide as a learned behaviour. According to them, it is the forces of environment that shape the suicidal behaviour which is reinforced by the environment. Some psychologists like Bandura (1977) explained suicidal behaviour in terms of social learning. Suicide is committed by the person, as he observed it in the environment. The social learning theory points out the role of imitation, gives indirect insights about suicide contagion, and posits that a number of environmental factors such as suggestion on television, stories in the newspapers and observing others, that is, modelling may be some of the factors related to suicide.

Other researchers working in this area provide different types of explanations. Baumeister (1990) propounded 'escape theory' and explained suicidal behaviour in terms of motivations to escape from aversive self-awareness. He described a causal sequence of six primary steps or escapist events leading to suicidal behaviour.

The causal chain begins with events that make a person feel they are falling severely short of standards and/or expectations. The failure so perceived is attributed internally to the self and it makes self-awareness painful. This painful self-awareness of one's own inadequacies results in the generation of negative affect; and, consequently, a desire emerges to escape from that painful self-awareness and the associated affect. In the efforts to escape an individual attempts to achieve a state of cognitive deconstruction and the deconstructed state brings irrationality and disinhibition, making drastic self-harmful steps appear acceptable. It is at that point of time when suicide may be viewed as the ultimate step in the effort to escape from self and the world (Baumeister, 1990).

Williams (1997, 2001) expanded on the escape theory of Baumeister (1990) by putting forth the 'cry of pain' model to explain suicidal behaviour. Williams and colleagues (Williams, 1997; Williams and Pollock, 2000) contended that engaging in suicidal behaviour is not a cry for help, but it is a cry of pain due to a situation that is trapping a defeated individual. They proposed that suicidal behaviour emerges as a painful reaction to a situation involving defeat and where no avenues to escape or rescue are to be found. When these three conditions are unavoidably present in a situation, it activates the helplessness and hopelessness mode of behaviour, which may lead to suicidal behaviour (Williams and Pollock, 2000). Williams and Pollock (2000) explain that rather than the defeat itself, it is the state of entrapment in that situation that poses a danger for an individual to be involved in suicidal behaviour, because the sense of entrapment blocks the motivation to escape a situation in other ways than by ending one's life.

A more recent theory propounded by Joiner and associates (Joiner, 2005; Van Orden *et al.*, 2010) is known as the 'interpersonal theory' of suicidal behaviour and is based on thwarted belongingness, perceived burdensomeness, and acquired capability to withstand fear of death and perform lethal self-injury. This model asserts that an individual may have a desire to end his own life when he feels disconnected from others and feels that he is a burden on his significant others. This theory further states the acquisition of the ability to lethally injure oneself is a preliminary requirement for an at-risk individual to attempt or commit suicide; and without this lethal ability one would not be able to attempt suicide.

Another more recent explanation of suicidal behaviour can be seen in O'Connor's (2011) 'Integrated Motivational-Volitional (IMV) Model' that conceptualizes suicidal behaviour as being determined by a complex interaction of proximal and distal factors grouped into three phases: the pre-motivational, the motivational and the volitional phase. The pre-motivational phase includes background factors and triggering events; the motivation phase includes the generation of suicide ideation and intention formation; and the final volitional phase includes behavioural enactment and suicide attempt. One's intention to engage in suicidal behaviour is the key proximal predictor of suicidal behaviour. Taking Williams' (2001) assertions as the basis, this model also posits that suicidal intention results primarily from feelings of entrapment, which are triggered by defeat/humiliation appraisals. The IMV model describes some specific moderators that

explain the transition from defeat/humiliation to entrapment, from entrapment to suicidal ideation/intent, and from suicidal ideation/intent to suicidal behaviour (Meissner, 2013).

There is another perspective to explain suicidal behaviour which looks upon suicide not as a uni-dimensional phenomenon but as a multi-dimensional one. This view gives consideration to the probability of mixed causal sequences as explained by the different perspectives above. According to this view, the suicidal person experiences unbearable psychological pain and finds no way to escape from it. The situation is traumatic. The suicidal person thinks that death is the only solution for all the problems and he is in a heightened state of disturbance explained by rejection, harassment, hopelessness and helplessness. The internal attitude of the person is ambivalent, showing acceptance and rejection at the same time. Simultaneously, many conflicts occupy the brain. The cognitive state of the person is restricted showing only one direction in thinking. Volitional motivational forces make the person take the drastic step of attempting suicide, the lethality of which is determined by the ability to self-harm and the intensity of the volitional force and accordingly it may result in completed suicide.

The sociological perspective

The major sociological interpretation of the problem of suicide was made by French sociologist, Emile Durkheim (1897/1951). He argued that suicide had less to do with the individual's own decisions and it was mainly the outcome of the societal influence on a person. In an attempt to explain suicidal behaviour by means of particular patterns of tensions between the individual and society, Durkheim categorized four types of suicide – Egoistic, Altruistic, Anomic and Fatalistic. Egoistic suicide is committed when a person has fewer ties with people. These people feel alienated from others; they enjoy less social support which is important for a person to function as a social being. Egoistic suicide is believed to occur among those people who feel socially excluded, with poor social support and lack of integration with society which results in sense of personal failure and worthlessness (O'Connor and Sheehy, 2001). Sociologists explain that fewer suicides take place among married people because of their ties with family members. Altruistic suicide is opposite to egoistic suicide as it is found among the individuals who are actually overly integrated into society. Durkheim opined that altruistic suicide is committed because of societal demands. It was described as a response to cultural expectation. Earlier in India, the Sati pratha was practised, a custom in which the widow in India threw herself on her dead husband's funeral pyre.

Anomic suicide was explained as linked with societal regulation or deregulation and it is initiated because of a sudden change in a person's relation with society. He explained anomie as a sense of disorientation which could show great vulnerability for suicide. This occurs when the societal rules guiding the lives of people do not remain appropriate and individuals become redundant. This leads to instability and alienation and, in some cases, suicide. According to Durkheim's

opinion, the fatalistic suicide is considered to be prevalent in the case of excessive societal regulation where people feel that they have lost all direction in life and have no control over their own destiny (O'Connor and Sheehy, 2001). Although this sociological framework is as applicable today as it was over a hundred years ago, experts from other areas do not agree with Durkheim because the people who undergo some problems because of the sudden change in life also commit suicide. Also, Durkheim's postulations found rare empirical support and they fail to explain why a specific individual commits suicide.

Although the models proposed by a large group of researchers in this field have been discussed, there exist many other models that attempt to explain the process of suicidal behaviour in various ways but lack evidential support. However, the fact that remains common to all models is their focus on reflecting the suicidal process from initiation to attempt. The importance of understanding suicidal behaviour from multiple viewpoints lies in the basis it formulates for taking appropriate preventive measures so that human lives can be saved from such unnatural endings.

Preventing suicides

The relatively stable rates of suicide and suicidal behaviour over time highlight the need for greater attention to prevention and intervention efforts. Effective suicide prevention requires a thorough understanding of the suicidal process, which we have tried to present in the preceding sections. The extent to which we understand the dynamics underlying suicidal behaviour will help us to better identify the people at risk. Effective strategies for the prevention of suicidal behaviour should target eliminating the dynamics that perpetuate the engagement of an individual in suicidal acts. It can be seen that restricting access to lethal means and training health care professionals to identify and manage depression and suicidal behaviour are likely to contribute somehow to reducing suicide rates. Although effective prevention programmes do exist, the need for greater dissemination of information and the further development of prevention efforts is underscored by the fact that many people engaging in suicidal behaviour do not receive treatment of any kind (Nock *et al.*, 2008).

With the overall increase in suicidal behaviour, the need for effective interventions cannot be overstated. Intervention, also known as secondary prevention, refers to the healing and care of the suicidal crisis. Suicide is an event with biological (including biochemical), sociocultural, interpersonal, psychological, neuro-psychological and personal philosophical or existential aspects. Since suicide is not exclusively a medical problem, it does not always require a medical professional to save a life; a layperson too can sometimes serve as a rescuer. Even so, other professionals such as psychologists, psychiatrists, social workers, psychiatric nurses, can play a major role in suicide intervention (Leenaars *et al.*, 1994). The fundamental principle of crisis intervention programmes for suicide across the world is the belief that suicidal action is generally the product of a temporary, reversible, ambivalent state of mind (Stillion and McDowell, 1996). Suicidal

behaviour involves numerous possible risk factors and most of the interventions originate from an understanding of such factors. There are several techniques for suicide intervention that are briefly outlined henceforth.

Crisis intervention

The main focus of suicide prevention efforts is on crisis intervention. The chief aim of crisis intervention is to help an individual deal with an immediate life crisis. In the case of a suicide attempt, the first step is to provide emergency medical help to the individual at a general hospital or in a clinical setting. When an individual who is considering suicide is ready to talk about his problem at a suicide prevention centre, it becomes easier to prevent an actual suicide attempt. At a crisis intervention centre, the main goal is to assist such an individual to regain his ability to cope with his immediate problems at the earliest. Emphasis is usually laid on: (1) maintaining contact with the individual over a brief period of time; (2) helping the individual understand that the acute distress is negatively affecting his capacity to evaluate the circumstances correctly and to choose from possible options; (3) helping the individual realize that other means of dealing with the crisis are present and are better than committing suicide; (4) taking a directive and supportive position; and (5) helping the individual see that the current distress and emotional turmoil will not continue forever (Carson *et al.*, 2004).

Treatment of mental disorders

The majority of those who attempt suicide suffer from a treatable mental disorder such as depression, schizophrenia, substance abuse, or borderline personality disorder. Studies and clinical experience have shown that the early identification and appropriate treatment of such disorders are an important technique to prevent suicide. In this respect, educating health care professionals to diagnose and treat mood disorder patients can help in lowering suicide rates among those who are at high risk.

Behavioural approaches

Another tradition in suicide prevention is that which concentrates on the particular characteristics of suicidal people, rather than focusing on mental disorder. Such an approach directly aims at the behaviour (Linehan, 1997). A variety of interventions have been developed, based on this approach, some of which are discussed below.

Behavioural interventions

Behavioural interventions involve a mental health worker conducting therapy sessions with the patient, and discussing prior and present suicidal behaviour and

suicidal ideation, and trying to ascertain associations with possibly underlying causal factors (Linehan, 1997). A study was conducted by Salkovskis, Atha and Storer (1990) on patients at high risk of multiple suicide attempts, who had been admitted to an emergency ward because of taking an antidepressants overdose. The patients were given either the standard treatment for suicide attempts or the standard treatment along with a brief 'problem-oriented' intervention – a form of short-term psychotherapy that centred on the problem which was found to be bothering the patient most. The study found a significant advantage for those receiving the intervention along with the standard treatment six months after treatment, in terms of a reduction in their rates of repeated suicide attempts. Another study conducted by Linehan, Heard and Armstrong (1993) investigated the efficacy of dialectical behaviour therapy with those patients who exhibited borderline personality disorders, multiple behavioural dysfunction, significant mental disorders and a history of multiple suicide attempts. The findings revealed a positive outcome during the first year among patients who had received the therapy as compared to those who received standard treatment. In another study, MacLeod and colleagues (MacLeod *et al.*, 1998) showed the effectiveness of manual-assisted cognitive behaviour therapy in achieving significant improvements in suicidal patients with a history of attempting suicide and displaying a deficit in positive future thinking.

Quick help interventions

Recently some new programmes have been developed to provide immediate help to the individual who is showing any hint of suicidal behaviour. In this type of intervention, the patient or client is given an opportunity to be in touch with any medical or other professionals at a difficult time. The Green card technique is one of them. In the Green card intervention, the clients are given a card, carrying a direct and immediate access to a variety of options, such as an on-call psychiatrist or hospitalization. It has been shown that the Green card is beneficial for those considering suicide for the first time (Cotgrove *et al.*, 1995; Morgan *et al.*, 1993). The Tele-Help/Tele-Check service for the elderly operating in Italy is another intervention technique which is based on the tenet of availability of help and easy access (De Leo *et al.*, 1995). Tele-Help is an alarm system that the client can activate to call for help. The Tele-Check service keeps in touch with the clients and calls them twice a week to check on their needs and provide emotional support. This intervention technique has been also found to be quite effective by means of promoting faster help availability (De Leo *et al.*, 1995).

Relationship-based approaches

It is known that social relationships play an important role in determining the vulnerability to suicide: the more social relationships a person has in his life, the less he is vulnerable to suicide (Litman and Wold, 1976). Many interventions aim

to increase social relationships so as to lessen repeated suicidal behaviour as bringing about an improvement in social ties is regarded as vital by the therapist. Such interventions improve in social relationships, which in turn serves as available help for the person under crisis. A particular outreach method, known as 'continuing relationship maintenance' (CRM) has been found to be effective by Litman and Wold (1976). This approach involves an active reaching out to the patient by the counsellor who strives to keep a regular connection with him. The improvements resulting from this method included reduced loneliness, more satisfactory intimate relationships, less depression and greater confidence in using community services. The efficacy of 'task-centred casework' – a problem-solving method that lays stress on the collaboration between a patient and a social worker over matters related to daily living was shown by Gibbons *et al.* (1978) and a greater improvement in handling social problems was shown by the group that received task-centred casework. In another study conducted by Hawton *et al.* (1987), a significant proportion of the out-patient group who received counselling focused on relationship building showed improvements in social adjustment, marital adjustment and relationships with their families.

Community-based efforts

It is observed that instead of treatment of suicide-related behaviour of the individual, the emphasis should be on the whole community so that this menace is prevented at a broader level rather than treated at a narrower level. Some of the community-based interventions that may prove vital to help curb the suicide problem may be as discussed in the following sections.

Suicide prevention centres

Apart from the intervention techniques discussed above, there is also specific community mental health services for individuals who exhibit suicidal behaviour. There are suicide prevention centres intended to serve as crisis centres that offer instant help, often over the telephone, but programmes with face-to-face counselling and outreach work are also used. In a study conducted by Lester (1997), 14 studies that examined the effectiveness of suicide prevention centres on suicide rates were reviewed. Seven out of these studies offered some confirmation for a preventive effect of these centres.

School-based interventions

In an attempt to train school staff, community members and health care providers to identify those at risk from suicide and refer them to appropriate mental health services, various programmes have been designed. The training varies from programme to programme, but in every case a strong link to local mental health services is necessary. It may be noted that the importance of mental health professionals cannot be undermined despite the training of school staff

members, parents and others involved in school programmes. Yet, health care facilities solely cannot fulfil all the demands of young people, and thus school-based interventions play an important role in suicide prevention.

Multi-systemic approach

Multi-systemic therapy was initially designed for adolescents with conduct disorder, but has been modified later for adolescents with severe mental health problems, including attempted suicide (Henggeler *et al.*, 2002). This therapy involves assessment of the risk of suicide, followed by intensive family therapy to improve family support along with individual skills training for adolescents to assist them develop mood-regulation and social problem-solving skills, along with intervention in the wider school and interagency network to lower stress and improve support for the adolescent. The technique also involves regular, frequent, home-based family and individual therapy sessions, with additional sessions in the school or community settings, for over a period of three–six months. It has been found that multisystemic therapy was considerably more successful in lowering rates of attempted suicide at one-year follow-up as compared to emergency hospitalization and treatment by a multidisciplinary psychiatric team (Huey *et al.*, 2004).

Societal approaches

Experts in social sciences are of the view that the concentration should not only be on the individual but also on the social environment in which the problem behaviour is occurring. They propose some changes in the environment so that the undesired behaviour should not occur.

Restricting access to means

Restricting access to the means of suicide can play an important role in preventing suicide. This was first shown in Australia by Oliver and Hetzel (1972), who found that suicide rates lowered when access to sedatives – mainly barbiturates, which are lethal in high doses – was restricted. Besides, there is also evidence of a decline in suicide rates when access to other toxic substances such as pesticides is restricted. Gas detoxification – the removal of carbon monoxide from domestic gas and from car exhausts – has proved effective in decreasing the rates of suicide. Soon after carbon monoxide was removed from domestic gas, suicides from poisoning with domestic gas began to decline in England (Kreitman, 1972) and subsequently in many other countries (Lester, 1998). The link between the presence of handguns at home and suicide rates has also been observed (Carrington and Moyer, 1994; Kellermann *et al.*, 1992). There are numerous approaches to lowering gun-injuries, by means of restricting access to them. These often focus on legislation on sales and ownership of guns and on gun safety. Gun safety measures include education and training, different practices of gun storage

(like separate storage of guns and ammunition, and keeping guns unloaded and in locked places) and trigger-blocking devices. Restrictions on the ownership of firearms have been linked with a decrease in their use for suicide in some countries such as Canada, the United States and Australia (Carrington and Moyer, 1994; Lester, 1998). Hence, societal measures may also help in adopting suicide preventive measures.

Conclusion

Suicide is a behavioural and social problem which is affecting each and every society. The clear understanding of the nature of the dynamics underlying suicidal behaviour is of paramount importance when designing effective preventive mechanisms. Suicide is a multidimensional phenomenon and different theoretical perspectives provide crucial insights to find the roots of the huge problem of suicide. Undoubtedly suicide is a problem not only for the person who commits it but also for the family, other relatives and the entire society. There is the utmost requirement to put adequate preventive measures in place to deal with this social menace. There is a need for continued dedicated research efforts to explore further, and social scientists along with medical professionals need to work in collaboration to prevent and treat this menace.

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