Suicide: a concept analysis

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Suicide: A concept Analysis
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Abstract:	Background: Suicide is a national and global phenomenon with its rate increasing every year inspite of clinicians, policy makers and researchers grappling with suicide prevention and investing heavily on risk assessment, prevention and reduction. There seems to be a gap in understanding suicide and its associated behaviours. Aim: The aim of this review was to undertake a concept analysis of suicide and behaviour. Method: Walker & Avant 8 step method was adopted. Search engines that included academic search elite, CINAHL, Ovid Online embracing Embase and Ovid Medline were utilised in accessing articles published in the last 10 years, written in English, with abstracts and full text. Results: The concept of suicide requires understanding of explicitly and intensity of suicidal behaviour. Areas of risk assessment such as thwarted belongingness and perceived burdensomeness should be considered. Associated with suicide are internal and external hazards which tend to create vulnerability leading to suicidal behaviour. Clinicians should differentiate between suicide in the presence of mental illness and when there is a predicament. Risk assessment tools should not be taken as absolute as they do not provide 100% detection of intent. Conclusion: Understanding the concept of suicide would help clinicians comprehend their patients, suicidal behaviour and improve intervention methods. Key words: suicide, suicide behaviour, risk assessment, intent, deliberate self-harm, concept analysis.
Response to Reviewers:	Dear Reviewer, Thank you for allowing resubmission of the articles. We hope you have enjoyed reading it. Changes made as requested. References: Reviewed to 50. Abstract: Now included with the article.

	Regards JNgwena

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Conflict of interest:

 Jerry Ngwena declares that he does not have conflict of interest

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Abstract:

Suicide is a national and global phenomenon with its rate increasing every year inspite of clinicians, policy makers and researchers grappling with suicide prevention and investing heavily on risk assessment, prevention and reduction. There seems to be a gap in understanding suicide and its associated behaviours.

Aim:

The aim of this review was to undertake a concept analysis of suicide and behaviour.

Method:

Walker & Avant 8 step method was adopted. Search engines that included academic search elite, CINAHL, Ovid Online embracing Embase and Ovid Medline were utilised in accessing articles published in the last 10 years, written in English, with abstracts and full text.

Results:

The concept of suicide requires understanding of explicitly and intensity of suicidal behaviour. Areas of risk assessment such as thwarted belongingness and perceived burdensomeness should be considered. Associated with suicide are internal and external hazards which tend to create vulnerability leading to suicidal behaviour. Clinicians should differentiate between suicide in the presence of mental illness and when there is a predicament. Risk assessment tools should not be taken as absolute as they do not provide 100% detection of intent.

Conclusion:

Understanding the concept of suicide would help clinicians comprehend their patients, suicidal behaviour and improve intervention methods.

Key words: suicide, suicide behaviour, risk assessment, intent, deliberate self-harm, concept analysis**.**

Background:

Suicide is both a global and national phenomenon. In the United Kingdom, these figures as indicated by the Office of National Statistics (ONS) are generally on the increase vis-à-vis: 5,981 (2012); 6,233 (2013) 6,581 (2014) (ONS 2015). In both males and females the difference in rates has remained constant at 3 times higher for men than women. ONS Figures (rates of male suicide per 100,000 population) remain disappointingly comparable: 2009 (17.5); 2010 (17.0); 2011(18.2), 2012 (18.2); 2013; 2014 (16.8) (19.0- the highest since 2001 at the onset of data collection with 16.6 per 100,000 in 2007 being the lowest). Such statistics are a cause for concern and as such clinicians and policy makers grapple with suicide prevention measures and invest heavily on risk assessment to achieve the goal of suicide prevention and reduction (DOH 2015). Researchers have equally invested time and money in trying to understand suicide and suicide behaviour. Dearth of research (Ngwena 2014) is evident in relation to causes of suicide, prevention, risk assessment and management, yet more people die from suicide. In England, key documents at national and local levels have been produced to help identify those at risk of either self-harm or suicide with subsequent management plans on prevention (DOH 2014). In spite of these measures, suicide occurring within a week of discharge stands at 50% (Bickley et al., 2013) with 49% doing so two weeks before their initial appointments. Given the above, it can be justifiably assumed that there is incongruence between perceived low risk of suicide at point of discharge and the actual risk or intent of suicide.

The term suicide refers not to a single action but more broadly to a great many varied behaviours. These may include talking of suicidal thoughts, intentions, ideation, gestures, attempts, completions or equivalents. Thus far, no single term, definition or taxonomy has served to sufficiently represent the complex set of behaviours that have been suggested as suicidal. Indeed as indicated by Silverman et al. (2007) in the field of suicidology, there is no single common accepted definition of suicide. A standard set of terms and definitions are greatly needed to advance the science of suicidology and aid communication and understanding of suicide. To achieve this, it is perhaps necessary to explore the concepts or what constitutes suicide. In this aspect, concept analysis helps to clarify overused vague terminologies, promote mutual understanding among contemporaries, provide a precise operational definition that by its very nature has construct validity and accurately reflects its theoretical base in order to help in the development of a diagnosis or intervention. A number of theories have been put forward in the explanation of suicide (Durkeim 1951; Shneidman 1985). Few however have discussed possible causal pathways (Cornette, Abramson and Bardone 2000).

2

This article aims to not only add to the current debate on suicide but to also contribute to a new dimension of understanding the concept of suicide, suicide behaviour and interventions.

Method:

Walker and Avant's (2005) concept analysis was employed. This involves selecting a concept (suicide), defining the aims or purpose of the analysis, finding out the usage of the concept, ascertaining the defining features/attributes, creating a model and contrary cases, establishing precursors/antecedents and consequences/concerns and describing research/practical tools that would enable detection of suicide.

Relevant databases that included academic search elite, CINAHL, Ovid On line embracing Embase and Ovid Medline were used in accessing articles on suicide and suicidality, written in English, with abstracts and full text. Key words included suicide, suicide behaviour, risk assessment, self-mutilation, intent, death, deliberate self-harm.

Identifying the uses of a concept:

Oxford dictionary define suicide as an action of killing oneself intentionally (www.oxforddictionaries.com). Merriam Webster online dictionary (2010) state it as an act or instance of taking one's own life voluntarily and intentionally especially by a person of years of discretion and of sound mind. Pridmore and Jamil (2009) provided two theoretical models of suicide vis-à-vis suicide due to a psychiatric disorder and that which may occur in the absence of a psychiatric disorder. It is the latter where rationality (sound mind) might apply when considering attempted or completed suicide. Other definitions include the act of deliberately ending one's own life (Nock et al., 2008) and an act of fatal outcome in which the victim is aware of the potential fatality or intended changes to end his/her life (De Leo et al.,2004). As indicated by these definitions, there are some inconsistencies which point towards differences in understanding suicide or suicide behaviour.

A better understanding of suicide is one that aims towards unambiguity in relation to the intended end result. To achieve this aim, Crosby et al. (2011) have strived towards a uniform understanding by indicating that a uniform definition of self-injurious behaviour can be stated to be a behaviour that is self-directed and deliberately results in injury or potential injury to the self. It is viewed to have two elements: non suicidal and suicidal acts. Non-suicidal act is that which is self- directed and deliberately results in injury or potential injury to oneself. In this category there is no implicit (*that which is without doubt or reverse, implied though not directly expressed; inherent in the nature of something*) or explicit (*that which is fully revealed or expressed without vagueness,*

3

implication or ambiguity; leaving no questions as to the meaning or intent) suicidal intent. Adding to this understanding, Oquendo et al. (2007) suggested that non-suicidal act is deemed to be a non-fatal self-directed potentially injurious behaviour without any intent to die as a result of the behaviour. It however may or may not result in injury. Suicidal act on the other hand is seen as that which is self-directed and deliberately results in injury or potential injury to oneself. Here, there is clear evidence of deliberate self-injurious act whether implicit or explicit of suicidal intent. Understanding suicide or suicidal behaviour therefore depends on implicitly or explicitly of suicide intent. In this line of argument and Sun (2011) asserted that it is the concept of implicitly or explicitly of suicide that require a deeper understanding. To help with this understanding are three key areas: suicide related communication, suicide related behaviour and suicidal ideations.

(a)Suicide related communication is where acts such as preparation may occur. For instance, the person may verbalise thoughts of suicide, plan method of suicide such as assembling the necessary materials (buying a gun, tablets/pills, rope, writing a suicide note or giving away possessions). Sun (2011) argued that it is an interpersonal act of informing, conveying, or communicating thoughts, desires, wishes or intent of suicide. The act of communication is not in itself a self-inflicted or self-injurious behaviour per se, but rather communication of plans and intent of suicide.

(b) Suicide related behaviour encompasses self-harm, attempts and completed suicide (Silverman et al., 2007). The behaviour is seen as one that involves self-inflicted injury, potential injurious behaviour for which there is evidence that the person has intention to inflict injury (explicit) or that which there is undetermined evidence that the person intends self-harm (implicit). Potential outcome of suicide related behaviour fall into two categories: Type 1. Suicide attempt (no injury) and Type 2. (Injury). We argue for a third category that incorporates fatality.

(c) Suicidal ideation is where an individual may contemplate suicide but do not necessarily engage in the above described behaviours and hence there is no implicitly or explicitly intent of suicide. Suicide ideations should be regarded as significant (Nock et al. 2008) as they are indicative of early warning signs and may at a later stage lead to self-injurious behaviour.

Defining attributes:

Walker and Avant (2005) reported that the definition of attributes of a concept is those that appear repeatedly. In this aspect, the concept of suicide has the following recurring attributes: Hazard-external or internal, internal crisis, absence of coping mechanisms, absence of external support/significant others, suicidal intent and lethal act.

4

Hazards:

A hazard (Sun 2011) is an instance in the life of an individual that encompasses actual or probable danger to the person's function. A hazard may be an external or internal stressor whose impact on the individual depends on how well or poorly equipped they are in dealing with the threat. Where the stressor is overwhelming and in the absence of positive coping strategies, contemplation, suicide attempt or completed suicide may be the result. External stressors include: the physical environment, employment (for instance lack of or inability to cope following job loss, reduced income level), trauma (psychological), injury (physical), poor work conditions (bullying, harassment, intimidation, discrimination), relationships with others, home environment (domestic violence, sexual abuse, poor relationships, unemployment, financial problems (debt), homelessness, drug and alcohol addiction) overwhelming challenges, difficulties of unmet expectations/thwarted ambitions, loss through separation or death of loved ones, divorce, role change, rape and mental illness.

Internal stressors on the other hand originate from inside individuals and define the body's capability of responding to and dealing with external stressors. They include: nutritional status, attitudes, thoughts, feelings of anger, fear and worry, anticipation, imagination, memory, locus of control, vulnerability, overall health and fitness levels, emotional well-being (See table 1 below). Managing stressors and avoiding suicide attempt or completed suicide involves making changes in the external or in internal factors which strengthens the ability to deal with adversity (Nock et al., 2008).

Hazards can lead to what Sun (2011) refers to as internal crisis; the effect of which is often seen as signs and symptoms manifesting as somatic (stomach ache/upset, headache, fatigue, apathy, loss of appetite, lethargy) or psychological distress (anxiety, fear, anger, hostility, loneliness, a sense of hopelessness, worthlessness, sadness and depression). The relationship between hopelessness and suicide has been investigated at length (Beck et al., 2006) with its recognition as a high predictor of suicide.

Insert Table 1 here

As previously indicated, Pridmore and Jamil (2009) presented a two model hypothesis of suicide vis-à-vis predicament and suicide pathway model(see figure1 for predicament model).The predicament model makes two assumptions of suicide, that which is due to the presence of a psychiatric disorder and the other in the absence of the disorder. Whereas both can occur independently, they are not mutually exclusive as they can coexist. In their

5

argument, a predicament is an unpleasant situation in which one sees no positive outcome or has limited options. The cause can either be external (environmental) or internal (mental disorder) or both (see table 1 above). Suicide pathway model assumes the presence of mental disorder as the causative factor. Being more specific, Ishii et al. (2014) asserted that those diagnosed with schizophrenia or schizo- affective disorders are prone to suicide with risk factors identified as difficulty dealing with management or coming to terms with the illness (fear of mental disintegration), poor adherence to medication, agitation or motor restlessness, presence of hallucinations and delusions and physical illness. Along the same line of reasoning, Chapman et al. (2015) suggested that there is a strong association of suicidal ideations/intent and later suicide in those diagnosed with either schizophrenia spectrum disorders (schizophrenia, schizophreniform or delusional disorders) or mood disorders (depression, dysthymia, Bipolar disorder).

In other areas such as risk of suicide behaviour including suicide and suicide attempt, and self-harm, Robinson et al. (2009) indicated gender as being significant with male rate of suicide being higher than that of females. Male-female difference may be due to males being higher achievers compared to women making them vulnerable at times of unemployment or changed socioeconomic circumstances (Ngwena 2014). This difference may also be a result of different expectations and coping strategies. For instance males tend to use alcohol and drugs as coping mechanism when faced with stressful events and generally have greater access to violent means (Pridmore and Jamil 2009). Alcohol influences mental state and behaviour leading to attempted or complete suicide. Indeed as argued by Pompili et al. (2010) alcohol abuse lead to suicidality via disinhibition, heightened impulsiveness, thereby enabling the probability of suicidal behaviour following a conflict or dissatisfaction and impaired judgement. In addition, alcohol may lead to depression or psychosis which at a later time lead to suicide behaviour or complete suicide. Drug use would equally have significant effect on mental state as it is strongly associated with the development of psychosis.

The foregoing discussion focused on suicide associated with the presence of mental illness or that which is induced by drug or alcohol misuse. In some cases, suicide can occur in the absence of a mental disorder (non-mental disorder suicide (Maseko and Patel 2009) though may be conceptualized as such. This is termed medicalization. Pridmore and Jamil (2009) indicated medicalization of social issues as the practise of viewing nonmedical problems in medical terms, generally as an illness or disorder. It results in 'normal' human behaviour and experience, being labelled as a medical condition(s). Considering WHO definition that associates health with wellbeing, it is for instance not uncommon for anguish/distress to be diagnosed as depression. For instance

6

Horwitz (2007) discussed how normal sorrow has been turned into depressive disorder. Given these assertions, it can be suggested that non-mental disorder suicide encompass instances where distress caused by hazards are labelled as psychiatric conditions. It is this understanding that needs to change among health professionals if accurate diagnosis is to be made and patients helped/assisted accordingly.

In labelled pathway suicide, distress is the central theme or driver. Suicide may occur in one of three ways (1) Mental disorder suicide: where suicide occurs as a direct link to mental disorder (2) Medicalization suicide where suicide occurs in the absence of a mental disorder but the distress has been labelled a mental disorder (3) Non-mental disorder suicide where there is no mental disorder or incorrect claim of a mental disorder-the individual suicides to escape a predicament or an unpleasant situation (see figure 2).

Insert figure 1 here.

The concept of risk suicide ladder (Pridmore and Jamil 2009) starts at Zero (no risk) to 10 (threshold at which suicide is completed). In the ladder, an assumption is made that all individuals have base line suicidality (IBS-individual base line suicidality) the intensity of which differs from person to person. It is determined among other things by past experiences, personality, genetic endowment, culture, gender, long-term social shortcomings and locus of control as indicated by Evans et al.(2005) (See also the Interpersonal theory below).The momentary position (MP) depicts the suicide risk of an individual at any given time. With a Hazard impact (HI), risk factor (RF) or stress impact (SI) on the MP the ladder shifts towards the Suicidality/threshold. Because HI, RF or SI differs from person to person; the shift towards the threshold will be dependent upon individual characteristics such as impulsivity, neuroticism, acute intoxication and aggression among other factors. A high IBS, severe stressor impacting on an individual can lead to high SI or HI resulting in a shift towards the Suicidality threshold.

Insert Figure 2

Absence of coping strategies:

Coping strategies are employed as a reaction to psychological stress that is usually triggered by changes in one's environment. They involve ways in which individuals deal with stressful situations encountered both within themselves and the outer world. The focus of coping strategies is to maintain mental health, emotional, psychological and physical well-being. Coping strategies fall into two categories adaptive (positive) and maladaptive. Weiten et al. (2009) identified adaptive coping strategies as: (i) problem solving/focused/instrumental coping. This focuses on ways of tackling issue(s) at hand thereby reducing stress

7

levels;(ii) emotion-focused coping strategy where an individual releases pent-up emotions and distracts themselves by engaging in an activity (iii) appraisal focused, where an individual challenges their own assumptions and alters their goal and values accordingly. Maladaptive coping strategies on the other hand involve engaging in behaviours that can only escalate an already stressful situation (Sun and Tsao 2007). It is often employed in the absence of adaptive coping strategy (ies). An individual may for instance engage in self-harm behaviour that includes: homicide, suicide attempts, suicide, alcohol, drug taking and overdoses.

Significant others:

A significant other is an individual(s) who play(s) a key role (s) in one's life and help maintain their psychological wellbeing. This balance (Sun 2011) is achieved by giving support and reassurance. Significant others generally add to one's quality of life and wellbeing. It has been identified that the absence of significant others can adversely affect individuals' well-being. For instance, early loss of a significant other has long been associated with attempted suicide. It is not just the absence of significant others that can have an influence on suicide; if present, quality of this relationship is significant too. Joiner (2005) argued for the way in which dysfunctional families and peer interactions could be good predictors of attempted or completed suicide. In addition to family members, significant others may be a person from church or religious group/organisation or a guardian. Though they may offer source(s) of support, socialisation and integration, what is key is the quality and value of the support.

Religion and culture are viewed in the way in which they may have a positive or negative influence on mental state, suicide behaviour and suicide (Koening et al., 2012). This could perhaps be due to religion offering psychological stability for instance used as a: coping mechanism at times of stress (Wang et al., 2013), capital building/social networking via religious communities (Langille et al., 2012), ritual bringing people together, particular lifestyle (behaviours such as altruism and charity or abstaining from excessive alcohol and drugs) and empowerment.

Though these factors may offer protection to suicide among religious groups (Koenig et al., 2012), others have indicated association of religion and suicide (Zhang et al., 2010). In their meta-analysis, Wu et al. (2015) supported the protective nature of religion but note that the protective factors are notable in older adults compared to the younger. The likely explanation they argued could be due to community loss, leaving careers, friends/family dying and children leaving home. Religion then become a larger part of their life as it brings hope

8

and provides an identity. As health deteriorates with age, reliance on religion offers a route to better coping

mechanism in the face of adversity (see predicament model above). These assertions are consistent with loss

theory (Yan et al. 2003) which specified the progression of life as naturally experiencing continuous loss of

health, social position, relatives, friends and purpose of life. The approach would be to identify an individual's

religious affiliation and seek support from their group either directly, via chaplaincy, family or significant

others.

Society and culture play a great role in influencing how service users respond to and view mental health and

suicide. Culture influences the way in which people describe and experience mental health and mental illness,

their ability to access care, the nature of the care they want, the value of the collaboration/communication between

professionals and the response to intervention and treatment. This has significant implications for treating those

belonging to different racial, ethnic and cultural groups. Cultural variables have a far-ranging impact on suicide

as they shape risk and protective factors as well as the availability and types of treatment that might intervene to

lessen suicide. In a study of Black and minority ethnic groups, Ngwena (2014) discussed the influence of cultural

background in determining suicidal behaviour and completed suicide. Black and minority ethnic groups are for

example less likely to receive specialist help and view health professionals as those who do not understand their

culture/needs and are by extension less likely to seek help with the subsequent deterioration of their conditions.

Culture as such influences all aspects of an illness, pattern of coping, seeking help and responses, adherence to

treatment, methods of emotional expression and communication. Edge and Rogers (2005) for example explained

how the cultural background of pregnant black women in their study of being strong and not admitting a weakness

influenced self-harm and attempted suicide. Similar studies have been reported by Bhui and Mackenzie (2008).

Understanding cultural differences and background, therefore forms an important aspect of understanding suicide

and its prevention.

Insert figure 3 here.

The diagram above depicts two variables that are considered risk factors to suicide; Isolation and burdensomeness.

Isolation is one of the strongest and most reliable indicators of suicidal ideations, attempts and lethal suicide

behaviour that transverses the life span (Van Orden 2010). Belongingness is an observable human factor that in

its absence depicts an indication for unmet need. The unmet need (thwarted belongingness) as is argued produces

a psychological need that if not met lead to suicidal ideations. Indeed as Joiner (2005) and Van Orden (2010)

pointed out, perceived unmet need to belong and belief that one is uncared for (thwarted belongingness) could

enhance suicidal behaviour. This could emanate from either lacking a social network or feeling that one is not connected to the existing social network. (See figure 2). Burdensomeness involves perceived dependency on significant others. By the very nature of society, one would be dependent on family members or friends for instance if they are unemployed or unwell. This dependency can create a sense of burdensomeness which if elevated can lead to suicidal ideations/self-harm/suicide. As depicted by Van Orden (2010), perceived burdensomeness is a creation of an affective-laden construct of self-hate observable in: low self-esteem, self-blame and shame-all powerful indicators of suicidal ideations/acts. Taking this into account, mental health professionals attending to those with suicidal intent must not only enquire about the absence of significant others, but also the quality of the relationship where there is/are existing significant other(s).

Suicidal intent:

Suicidal intent is defined as the seriousness or intensity of the patient/an individual's wish to terminate his or her life. It is a complex construct with two major elements: (i) Objective planning: the level of planning and forethought preceding the act of suicide; (ii) Perceived intent: the intended outcome and perceived lethality of the act. Conner et al. (2007) asserted that although objective planning and perceived intent have interconnectedness, they are not mutually exclusive. For instance, low level planned act of suicide might be combined with high perceived intent. Examples of such would be impulsive suicide. Such low level planning with high impact could happen so quickly leaving no time for adequate risk assessment, recognition and intervention. Clinicians should therefore be equipped with knowledge and skills to identify such cases of low level planning with high impact. Level of intent can be measured using suicide psychometric scales such as Pierce or Beck's suicide intent scales. It is however worth pointing out that though rating scales remain the best tools in predicting suicide, the level of accuracy/prediction varies, with scores not always predicting the accurate level of intent (Stefansson et al., 2010). This perhaps could explain the continued increase in the rate of suicide despite application of risk assessment tools at every level of care.

Model Case:

Walker and Avant (2005) define a model case as one that demonstrates all the defining attributes of a concept. It gives an example of how the defining attributes can be illustrated.

Richard was a 25 year old Caucasian man who lived with his girlfriend of 23 in a well to do area. They were both graduates, had got good jobs in the city and were seen as high fliers by their respective employers. With some savings since starting work, they had borrowed money from the bank and bought a house. Just before his 26th birthday, Richard was made redundant. This was unexpected. His girlfriend helped for a while, but could not do so in the long term. This caused a strain in their relationship. They separated four months after Richard had been made redundant. Loss of job and girlfriend (external Hazard/stressor impact) was unbearable for him. Richard became increasingly low in mood, lacked sleep, complained of stomach ache, was lethargic with low energy levels and started having a sense of hopelessness (internal crisis). Following their breakup, the girlfriend declined to meet her part of the mortgage including other bills. This put Richard in a dilemma (predicament). He started to drink regularly and excessively. He also used cannabis which he argued helped him deal with his situation (both are maladaptive coping strategies). Before long the bank started demanding their payment and threatened repossession. This put additional pressure on Richard (additional stressor). In his early years at the age of six, Richard's father left their home and never appeared again in his life. He also lost touch with his mother who had met another man, remarried and disappeared from his life. He was brought up by his unmarried uncle who passed away soon after he graduated from the University (absence of significant others). One day he went to an underground tube station and jumped in front of a train (lethal act). His death was instant (Low plan, high impact).

Having an attribute of a concept (in this case suicide) implies having all the negatives qualities that eventually lead to suicide. The above scenario illustrates lack of coping strategies and presence of maladaptive coping mechanism. As previously discussed, alcohol abuse (Pompili et al., 2010) can lead to suicidality because it causes disinhibition, heightened impulsiveness, thereby enabling the probability of suicidal behaviour following a conflict or dissatisfaction and impaired judgement. Equally cannabis use (Tucker 2009) can lead to psychosis. A combined use of alcohol and cannabis may have a double effect of causing depression and psychosis concurrently. In relation to the models discussed above two could be applicable –predicament model due to his current situation- seen in his profile as early experience of loss, environmental events-loss of job, relationship, being on the verge of house repossession and thwarted belongingness and burdensomeness due to loss of his dream job and loneliness due to break up with his girlfriend.

Contrary Case:

A contrary case is one that does not have all the defining attributes (Walker and Avant 2005)-a balanced person(s) who has no adversities or who can cope in the face of adversity. This can be illustrated by the example below.

Mrs Day, a 38 year old married woman lives with her husband and their 4 boys aged 16, 14, 12 and 10. Though they both work, there is not enough money to make ends meet due to their relatively big family. They have a good network of friends. They are equally close to their respective extended family members. Her husband enjoys his family and shares all the responsibilities at home. The children are happy and growing up well balanced. They love football and are all members of the local children's football club. The family describes itself as close knit.

This is an example of a contrary case where Mrs Day does not have all the defining attributes. She has no hazards: internal or external; she is coping well; she has a supportive family. This is an example of an individual who though struggles, has not engaged in maladaptive behaviour.

Antecedents:

Antecedents are indicated to be events that must occur prior to a concept (Walker and Avant 2005). Antecedents to suicide behaviour are regularly demonstrated by individual characteristics such as susceptibility and lack of problem solving skills leading to the inability to deal with hazards/risk factors indicated in table 1 above. Lack of adaptive coping strategies may often lead to situations where individuals feel helpless, hopeless, dejected and isolated with the end result of maladaptive behaviour such as suicidal behaviour. Often the perception of risk factors/hazards leads to unbearable level of stress such that escape by engaging in suicidal behaviour may be the only option (Tables 2, 3 and 4).

Consequences:

Sun (2011) asserted that the inability to cope with external and internal crisis situations could be contributory factors for people to commit suicide. He argued that people are unlikely to want to commit suicide if they possess coping skills necessary to manage their external and internal crisis situations. Where there are no coping skills, one may engage in self-harm behaviour such as taking an overdose. Successful acts of suicide results in death and as a consequence have adverse effects socially leaving families to grief painfully (Sun, 2011). Hawton and Simkin (2003) suggested that people who are bereaved because of suicide, goes through a distressing and difficult form of grief with one in six people experiencing intense grief. The affected families experience stigmatisation,

12

shame, guilt connected with self-blame, shock and disbelief and a sense of rejection. Adding to the debate, Lindqvist et al. (2008) discussed the influence of adverse psychosocial factors for the surviving family members in the aftermath of suicide. Equally Schneider et al. (2011) stressed that those bereaved by suicide experienced disturbance in their everyday life such as: anger, low mood, with females showing an increased risk of lack of energy, teenage suicide being more traumatic, families struggling to find explanations why the suicide occurred, searching for meaning in order to adapt to losses, withdrawing themselves from socialising, experiencing low self-esteem and feelings of inferiority.

Empirical referents:

Empirical representations (referents) are used both to aid the measurement and acknowledgment of a concept, and to help in the development of research instruments (Walker and Avant 2005). In order to recognize intent of suicide and to conceptualize this, a number of tools have been developed. These as indicated by Sun (2011) fall into five groups: (i) Clinician rated instruments (ii) Self-rated suicide instruments (iii) Self-rated buffers against suicide (iv) Instruments focused on children and adolescents (v) Special purpose scales such as attitudes towards suicide. Success in elucidating the right outcome however vary and is dependent to some extent on the training and confidence in the use of such tools or how the information is solicited from patients. In their recent study, McLaughlin et al. (2014) reasoned that attending mandatory updates on the use of tools (risk assessment) increases not only the confidence of staff but also helps in understanding the theoretical concepts of the often complex nature of suicide. In this way clinicians learn, practise and internalise the required skills necessary for risk assessment via the use of tools. Of the many assessment tools, the commonly applied include Beck's suicide rating scale (Beck et al.,1979), Nurses global risk assessment tool (Barker and Cutcliffe 2004) and Pierce suicide rating scale (Pierce 1977). These tools have varying success of predicting suicide. However, as suggested above (Stefansson and Jokinen 2012) they do not always accurately predict intent. Clinicians should perhaps be more aware of other variables that are strongly associated with completed suicide: gender, single, age, presence of mental illness, long term use of hypnotics and presence of poor physical health (terminal illness) culture and the various risk factors described above.

Discussion:

Implications for practice:

The primary goal for clinicians working with suicidal patients is to assess the degree of risk and intent faced by individual patients. Whereas this is an important goal, it is also vital that clinicians understand that individuals who die by suicide do so as a result of multiple rather than single risk factors in isolation and within the context of maladaptive coping strategies and vulnerability. Concept analysis (Walker and Avant 2005) allows for a clear definition of attributes, antecedents and consequences (table 2, 3, 4) while at the same time enabling a better understanding of suicide behaviour and management.

Insert table 2 here

Insert table 3 here

Insert table 4 here

To adequately manage suicide, it is important that clinicians fully understand the impact of various risk factors influencing suicide behaviour and complete suicide. The first step would be to identify vulnerability in patients or would be patients. Equally, understanding the above factors in concept analysis would enable clinicians to be aware of suicidal behaviours and develop individual intervention methods accordingly.

The three models discussed would perhaps help clarify the level of risk and their implications were they to escalate. The predicament model would in the phase of adversity and absence of adaptive coping strategies help clinicians direct intervention methods accordingly. For instance, both the level of a predicament and the perceived meaning placed on a predicament by an individual should be assessed. The labelled pathways to suicide which takes a medicalization approach to social issues would be helpful in understanding the connection between social issues and diagnosing mental illness. It would be advantageous if social issues are seen as such and patients helped/treated accordingly.

Interpersonal theory would also be important in understanding suicidal behaviour especially when one considers social isolation and inclusiveness as major components of suicidal ideations. Thwarted belongingness (*I am alone*) –social isolation and perceived burdensomeness (*I am a burden*) and acquired capability of self-harm/suicide must be identified with those presenting with suicidal thoughts/ideations. In her research Van Orden (2010) indicated burdensomeness as a key feature in adolescents presenting with suicidal ideations or acts of self-harm and that these were often on the backdrop of family conflicts (a key risk factor of suicide). This may also be a common

14

feature in those with physical or chronic conditions. The same understanding should apply to labelled pathway suicide, where a misdiagnosis may lead to inappropriate diagnosis and intervention(s).

The above cannot be achieved without risk assessment that can be carried out via the existing risk assessment tools such as Becks depressive and Pierce Suicidal Intent scales. Indeed as indicated by Granello (2010), accurate risk assessment is essential in the acute, modifiable and treatable risk factors. Risk assessment helps to identify specific interventions that can counter the suicidal behaviour. For those presenting for the first time with suicidal thoughts or acts, clinicians should be equipped with the knowledge and skills to identify the antecedents and attributes if consequences are to be avoided. On the other hand, for the existing clients, detailed knowledge of these factors should be top priority if clinicians are to help prevent continued suicidal behaviour. In this equation, there should be a clear understanding and differentiation of self-mutilation and deliberate self-harm. Though used interchangeably (Sun 2011), they are distinctively different with self-mutilation (table 3) referring to an act where there is absence of intent and fixation with death. It is an intentional act where tissue damage occurs with the sole purpose of shifting the overpowering emotional pain to a more tolerated physical pain. Depending on the degree of tissue damage, self-mutilation can be a precursor to an elevated risk of suicide. On deliberate self-harm, Mangnall and Yurkovich (2008) identified three key ingredients that must be present for an act to be defined as such: firstly, the act must not involve conscious suicidal intent; secondly, the outcome/consequence of the act must be minor to moderate physical injury and thirdly, the act occurs in the absence of a psychosis and or organic intellectual impairment. A clear identification of these behaviours in patients would help clinicians employ specific interventions.

As suggested in the opening paragraph, suicide prevention is a national priority. As such mental health services require awareness of antecedents of suicide among the high risk groups. Some researchers have found psychological autopsy method a useful tool to establish the antecedents of suicide/risk factors (see table 1). It refers to a careful collection of data that are likely to help reconstruct the psychological environment of those who have committed suicide in order to better understand circumstances of their death. It is often done when the course of death is unknown or ill defined. Included in this process is interview of those connected with the person as well as medical records and other official sources (Siddamsetty et al., 2014).

There is no estimation of the burden of the antecedent condition that leads to death by suicide with a highly deleterious outcome. This is because suicidal behaviour often occurs in response to aversive self-focused emotional state that lead to a breakdown in cognition and problem solving. It is imperative that clinicians engage

15

in identifying means of engaging clients in the development of and internalising positive coping strategies. In addition, risk reduction strategy must consider the particular factors which appear to underpin the persons' feeling of suicidality and perceptions of their situation.

References:

Barker P, Cutcliffe, R (2004) The nurses' global assessment of suicide risk (NGASR): developing a tool for clinical practice. Journal of Psychiatric and Mental Health Nursing 11:393-400

Barraclough BB, Nelson J, Sainsbury P (1974) One Hundred cases of suicide: Clinical aspects. British Journal of Psychiatry. http://www.ebscohost.com/academic/academic-search-elite.

 Accessed 18th July 2016

Beck TA, Brown G, Berchick JR, Stewart LB, Steir AR(2006) The relationship between hopelessness and ultimate suicide: a replication with psychiatric outpatients. Journal of Lifelong Learning in Psychiatry 42:291-296

Beck T, Kovas M, Weissman A (1979) Assessment of suicidal intent: the scale for suicide ideation. Journal of Consulting and Clinical Psychology 47 (2):343-352

Bernal M, Haro JM, Bernert S, Brugha T, de Graaf R, Bruffaerts R, Lepine JP, de Girolamo G, Vilagut G, Gasquet I, Torres JV, Kovess V, Heider D, Neeleman J, Kessler R, Alonso J (2007) Risk factors for suicidality in Europe: results from the ESEMED study. Journal of Affective Disorders 101: 27-34

Bickley H, Hunt M, Windfurh K, Shaw J, Appley, L (2013) Suicide within two weeks of discharge from psychiatric inpatient care: a case-control study.

http://ps.psychiatryonline.org/doi/full/10.1176/appi.ps.201200026. Accessed 20 April 2014

Chapman Cl, Mullin K, Ryan CJ, Kuffel A, Nielson O, Large MM (2015) Meta-analysis of the association between suicidal ideation and later suicide among patients with either a schizophrenia spectrum psychosis or a mood disorder.

http://www.ebscohost.com/academic/academic-search-elite. Accessed 18th July 2016

Crosby A, Ortega L, Melanson C (2011) Self-directed violence surveillance: uniform definitions and recommended data elements. CDC, Atlanta

Conner K, Michael R, Phillips MD, Sean C, and Meldrum MS (2007) Predictors of low-intent and high-intent suicide attempts in rural China. Research and Practice 97(10):842-1848

Cornette MM, Abramson LY, Bardon AM (2000) Towards an integrated theory of suicide behaviours: merging the hopelessness, self-discrepancy and escape theories. In: Joiner TE, Rudd MD (eds) Suicide science: expanding the boundaries, Academic/ Pleum Publishers Kluwer,New York pp 43-66

17

De Leo D, Burgis S, Bertolote J, Kepkhof A, Bille-Brahe U (2004) Definitions of suicidal behaviour. In: De Leo D, Bille-Brahe U, Kerkhof A, Schimidtke (eds) Suicidal Behaviour: theories and Research Findings pp 17-39

DOH (2015) Preventing Suicide in England: Two Years on Second annual Report on the cross-government outcome strategy to save lives. DOH, London

Durkheim E (1951) Suicide. Free Press, New York

Edge D, Rogers A (2005) Dealing with it: black Caribbean Women's response to adversity and psychological distress associated with pregnancy, child birth and early motherhood. http://www.ebscohost.com/academic/academic-search-elite. Accessed 18th July 2016.

Evans P, Owen P, Marsh, S.C (2005) Environmental factors, locus of control and adolescent suicide risk. Child and Adolescent Social Work Journal 24(3-4):301-319.

Granello HD (2010) The process of suicide risk assessment: twelve core principles. Journal of Counselling and Development 88(3):363-370

Harris E. C; Barrowclough B (1997) Suicide as an outcome for mental disorders'. British Journal of Psychiatry170:205–228

Hawton K, Simkin S (2003) Helping people bereaved by suicide. British Medical Journal 327(7408):177–178

Horwitz AV, Wakefield, JC (2007) The Loss of Sadness: How psychiatry transformed normal sorrow into depressive disorder. Oxford University Press, New York

Ishii T, Hashimoto, E, Ukai, W, Kakutani Y, Sasaki R, Sarito T (2007) Characteristics of Attempted Suicide by Patients with Schizophrenia Compared with Those with Mood Disorders: A Case-Controlled Study in Northern Japan. http://www.ebscohost.com/academic/academic-search-elite. Accessed 18th July 2016

Joiner T (2005) Why people die of suicide. Harvard University Press, Cambridge

Koenig HG (2012) Religion, spirituality and health: the research and clinical implications. http://www.hindawi.com/journals/isrn/2012/278730/abs/ Accessed 18th July 2016

Langille DB, Asbridge M, Kisely S, Rasic D (2012) Suicidal behaviours in adolescents in Nova Scotia, Canada: protective associations with measures of social capital. Social psychiatry and psychiatric epidemiology 47(10): 1549-1555

Lindqvist P, Johansson L, Karlsson U (2008) In the aftermath of teenage suicide: a qualitative study of the psychosocial consequences for the surviving family members. BMC Psychiatry 8 (26):1-7

Mangnall J, Yurkkovich E (2008) A literature review of deliberate self-harm. Perspectives in Psychiatric Care 44(4):175-184

Maseko J, Patel V (2009) why women attempt suicide: the role of mental illness and social disadvantage in a community cohort study in India. Journal of Epidemiology and Community Health 62:817-822

McLaughlin S, Baily D, Gwen B (2014) Improving confidence in suicide risk assessment. Nursing Times 110(27):16-18

Ngwena J (2014) Black and Minority ethnic groups (BME) suicide, admission with suicide or self-harm: an inner city study. Journal of Public Health 22:155-163

Nock MK, Borges G, Bromet E.J, Cha CB, Kessler RC, Lee S (2008) Suicide and suicidal behaviour. Epidemiol Rev. 30, 133-54

http://www.ncbi.nlm.nih.gov/pubmed/18653727. Accessed 28 April 2014

ONS (2015) Suicides in the United Kingdom. National Statistics Institute, London

www.ons.gov.uk. Accessed 26 August 2015

Oxford Dictionaries (2015) Oxford dictionaries definitions.

http://www.oxforddictionaries.com/definition/english/suicide. Accessed 9 March 2016

Oquendo MA, Posner K, Gould M, Stanley B, Davies M (2007) Columbia classification of algorithm of suicide assessment (C-CASA): classification of suicidal events in the FDA's paediatric suicide risk analysis of antidepressant. American Journal of Psychiatry 164:1035-1043

www.http://cssrs.columbia.edu/. Accessed 15 February 2015

Pierce DW (1977) Suicidal intent in self-injury. British Journal of Psychiatry 130:377-385

Pridmore S, Jamil MY (2009) Two models of suicide. Australian Psychiatry 17(6):466-471

Schneider B, Grebner K, Schnabel A, Georgi K (2011) Is the emotional response of survivors dependent on the consequences of the suicide and the support received? Crisis 32(4):186-193

Shneidman E (1985) Defining Suicide. Wiley, New York

Stewart D, Ross J, Watson C, James K, Bowers L (2011) Patient characteristics and behaviours associated with self-harm and attempted suicide in acute psychiatric wards. Journal of Clinical Nursing 21:1004-1013

Siddamsetty AK, Aggarwal NK; Bhatia MS (2014) Concept of Psychological Autopsy. Delhi Psychiatric Journal, 17 (2): 458-461

Silverman MM, Berman AL, Sanddal ND, O'Carroll PW, Joiner TE(2007) Rebuilding the tower of Babel: a revised nomenclature for the study of suicide and suicidal behaviors: Part 2: Suicide-related ideations, communications and behaviours. Suicide Life Threat Behav 37(3):264-77

http://www.ncbi.nlm.nih.gov/pubmed/17579539. Accessed 28 April 2014

Sun FK, Long A, Huan, XY, Huang, HM (2008) Family cares of Taiwanese patients who had attempted suicide: a grounded theory study. Journal of Advanced Nursing 62(1):53-61

Sun FK (2011) A concept analysis of suicidal behaviour. Public Health Nursing 28(5):458-468

Stefansson J, Nordstrom P, Jokinen J (2010) Suicide intent scale in the prediction of suicide. Journal of Affective Disorders 136 (2012):167-171

Tucker P (2009) Substance Misuse and early psychosis. Australian Psychiatry 17 (4): 1-5.

Van Orden KA, Witte TK, Cukrowicz KC, Braithwaite SR, Selby EA, Joiner TE Jr. (2010) The interpersonal theory of suicide. Psychological Review117:575-600

Walker LO, Avant KC (2005) Strategies for theory construction in nursing. Pearson Prentice Hall, Upper Saddle River, New Jersey

Webster M (2010) Meridian dictionary. Encyclopaedia Britannica.

http://www.merriam-webster.com/dictionary/meridian. Accessed 28 April 15

Weiten W, Lloyd MA, Dunn D, Hammer E (2009) Psychology applied to modern life. Adjustment in the 21stCentury, 9th edn. Cengage Learning, Wadsworth

Wu A, Wang JU, Jia CX (2015) Religion and completed suicide: a Meta-Analysis. Plos one.

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0131715 Accessed 18th July 2016

Yan T (2003) Elderly suicide among the social change in China. Journal of population Research 27: 38-73

Zhang C, Yuan G. Yao J, Cheng Z, Liu C(2011) Effect of tryptophan hydroxylase-2 rs7305115 SNP on suicide attempts risk in major depression. Behavioural and Brain Functions 6:49
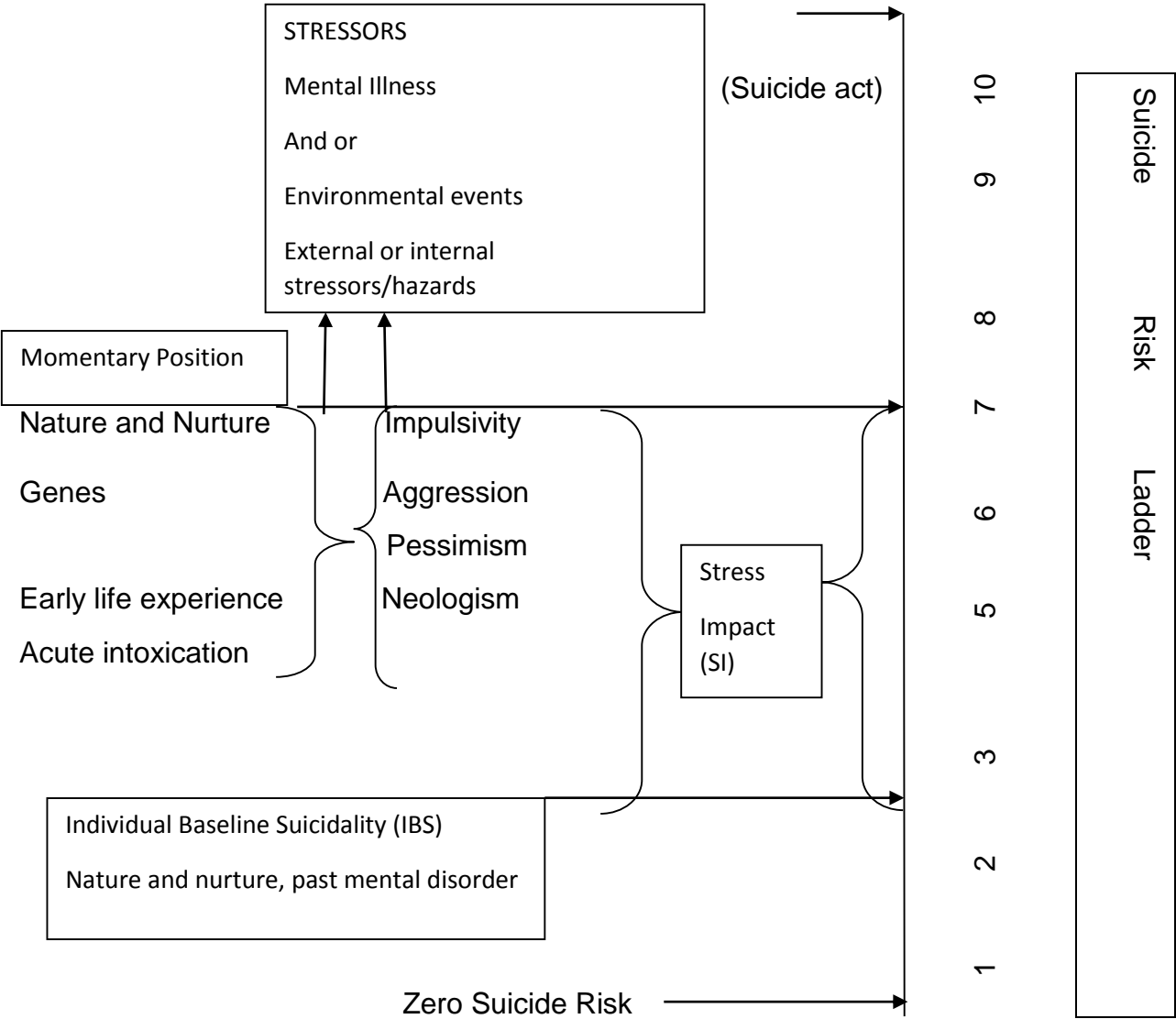
Figure 1

Figure 2 Labelled pathway of suicide. Adapted from Mohammed & Jamil (2009)
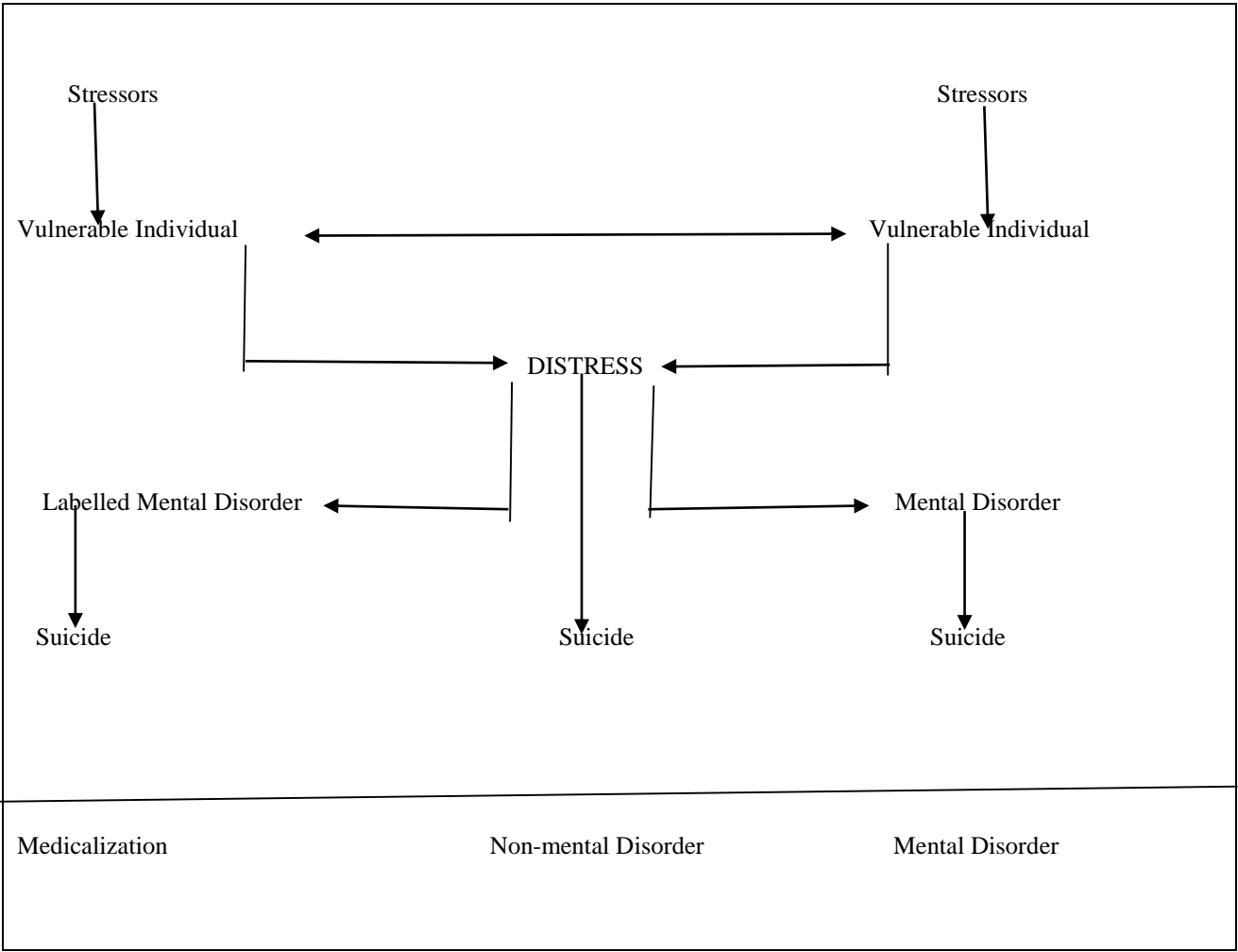
Figure 2:

Thwarted belongingness: I am alone

Perceived burdensomeness: I am a burden

Capability for Suicide

Desire for suicide
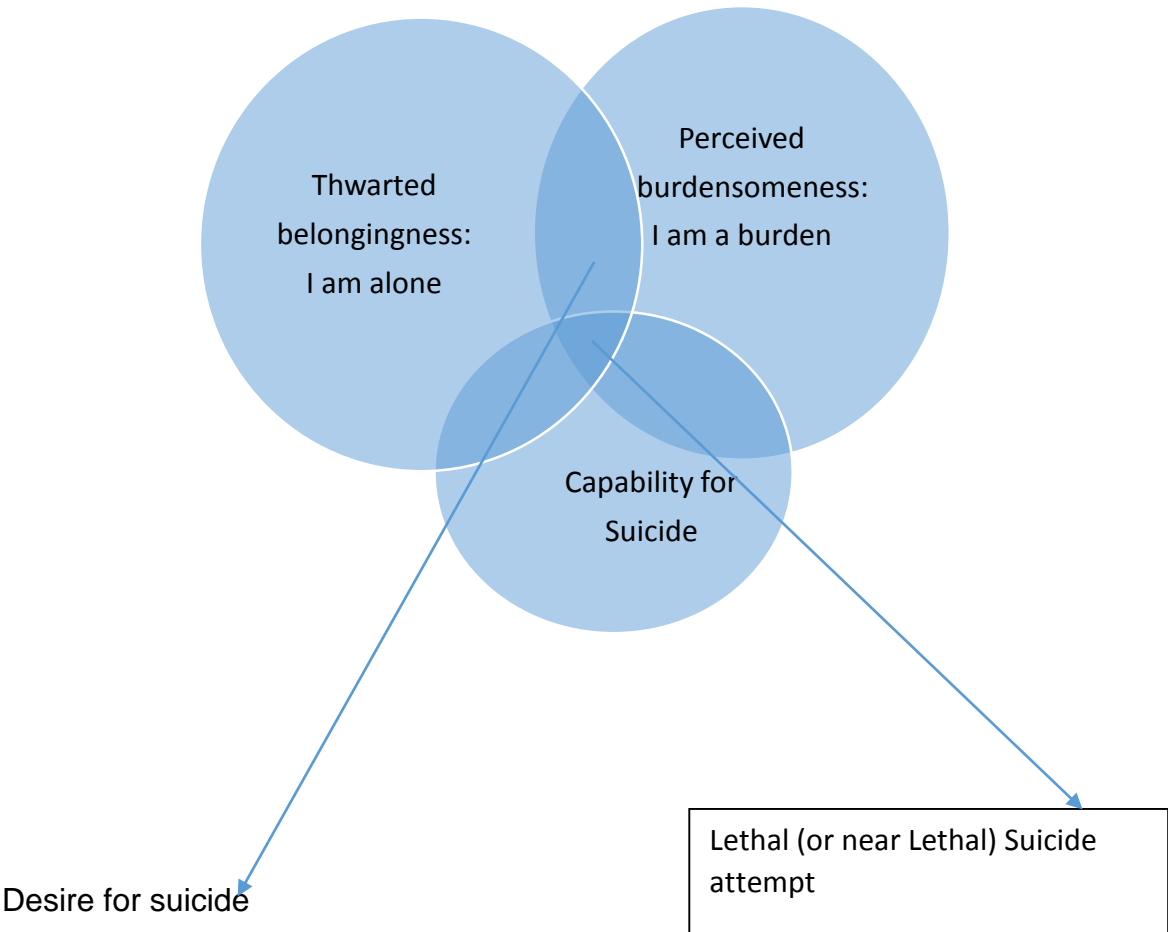
Lethal (or near Lethal) Suicide attempt

Figure 3:

Table 1 Suicidal Risk Factor (Internal & External Hazards)

Previous attempted suicide
Family history of suicide
Negative view if the future • Feelings of helplessness • Feelings of shame and guilt • Perceptions of and plans for the future
Mental Health illnesses • Depression (clinical depression is associated with suicidal ideation • Hallucinations (hearing voices commanding to self-harm or persecution, alcohol and drug use) • Psychopathology • Substance misuse
Social Issues • Social isolation (withdrawal, loss/ lack of social support) • Socio- economic climate --recession has led to a rise in suicide rates among men • Unemployment, • Family factors e.g. environment, divorce • Academic disengagement
Behaviour warning of suicidal intent e.g. procuring means of death, acts in anticipation of death, acts of anticipation of death, putting financial affairs in order, general behaviour of the plan of suicide
Current stressors e.g. recent bereavement (especially crucial significant other --partner), relationship difficulties, stressful events, financial problems, terminal illness, accommodation issues.
Abuse • Child abuse, domestic abuse, (all forms of abuse in all ages) • Substance misuse including alcohol • Internet use • Bullying
Media coverage 'with copycat effect' especially of political or entertainment celebrity, media coverage should change.
Ageism may lead to oversight
Loneliness and Influence of alcohol on people that are single, widowed, separated

Table 1

Table 2 Attributes, antecedents and consequences of suicidal
behaviour-Modified from (sun 2011).

	Suicide Behaviour	
Antecedents	Attributes	Consequences
• Vulnerability characteristics that lead to poor perception of stressful events being unbearable-inability to cope with adverse events/situational crisis	• External Hazards • Internal Crisis • Absence of coping mechanisms • Absence of significant others • Suicidal intent • Lethal act	Consequences • Death • Injury • Organ damage • Psychological trauma • Long lasting disability

Table 2

Table 3 Antecedents, attributes and Consequences of Suicidal-Mutilation. Adapted from (Sun 2011)

	Suicidal-Mutilation	
Antecedents	Attributes	consequences
• Unbearable emotional distress • Maladaptive coping strategies	• Release of emotional pain • Physical injury	• Use of physical pain to replace unbearable emotional pain.

Table 3

Table 4 The antecedents, attributes and consequences of deliberate self- harm. Adapted from (Sun 2011)

Suicidal Self-Harm		
Antecedents	**Attributes**	**Consequences**
• Tension/Anxiety • Aggression/Impulsivity • Feeling of depersonalisation or derealisation • History of abuse	**Absence of:** • A fatal outcome • Suicidal intent • Psychosis • Organic brain impairment **Presence of:** • Repetitive episode • Addictive behaviour • Contagious effects • Borderline or other personality traits • Other co-morbidities	• Relief of tension • Communication of emotional pain • Paradoxical disengagement from treatment or care plan.

Table 4