Depression and Suicide: An in-depth analysis

Vivian Rodriguez

Northern Illinois University
Important note

For those who are depressed and/or suicidal, or for those who know someone else who is depressed and/or suicidal, representatives are available 24/7 at The National Suicide Prevention Hotline, and they can be reached at 1-800-273-8255 (TALK), or The Substance Abuse and Mental Health Services Administration can be reached at 1-800-662-4357 (HELP), free of charge (National Institute of Health [NIH], 2019; United States Department of Health and Human Services [USDHHS], 2019).

Introduction

Suicide rates in the United States are staggering, and sadly, suicide has been identified by the Centers for Disease Control and Prevention and the National Institute of Health as a leading cause of death among age groups 10-54 (Centers for Disease Control and Prevention [CDC, 2019; NIH, 2019]). Suicide is the second leading cause of death in those aged 10-34, and is the fourth leading cause of death in those aged 35-54 (CDC, 2019; NIH, 2019).

Surprisingly, “There were more than twice as many suicides (47,173) in the United States as there were homicides (19,510)” (CDC, 2019; NIH, 2019). Women have a higher suicide attempt rate and men are approximately four times more likely to be successful in their attempt (CDC, 2019; NIH, 2019). For example, the suicide rate for women aged 25-34 had a success rate of 7 percent in the year 2017 alone, while men aged 25-34 had a success rate of 27 percent in the same year (CDC, 2019; NIH, 2019). The CDC’s 2017 leading cause of death report outlines rates of suicide regarding gender, age, race, location, and methods used. Suicide is a very serious public health concern, but suicide can be prevented with prompt evidence-based practice interventions (World Health Organization [WHO], 2019). Listed in appendix A are rates of
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suicide by gender and age. Listed in appendix B are rates of suicide by race, location, and methods used.

Several topics will be discussed regarding depression and suicide including prevalence, risk factors, causes, assessment, intervention, and evaluation (medical vs. nursing). Additionally, my volunteer experience at Alexian Brothers Center for Mental Health (ABCMH) will be discussed where assessment and interventions conducted there are compared against current literature.

Statistics

The National Institute of Health, in reference to the Diagnostic and Statistical Manual of Mental Disorders, defines depression as “a period of at least two weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities, and had a majority of specified symptoms, such as problems with sleep, eating, energy, concentration, or self-worth” (NIH, 2019). Depression is one of the most common mental health disorders in the United States and it is estimated that over 17 million U.S. adults had at least one major depressive episode. In 2017 alone, those aged 16-25 accounted for 13.1 percent of depression, while those aged 26-49 accounted for 7.7 percent (NIH, 2019). Of the 17 million total adults that had at least one major depressive episode, 64 percent had severe impairment, while 36 percent had a depressive episode without severe impairment (NIH, 2019).

In correlation with females having a higher rate of attempted suicide, they also have a higher rate of depression (8.7%) compared to males (5.3%) based on the 2017 National survey of Drug Use and Health (NIH, 2019). A large majority of U.S. adults, male or female, (35%) did not receive any treatment at all for their depression, while the remaining majority (45%) sought
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professional help and medications (NIH, 2019). Various therapies will be further discussed under section title Interventions, Therapies, and Medications: Medical Focus.

Depression and Correlation with Suicide

The Department of Health and Human Services (USDHHS) state that a majority of those who suffer from depression do not die by suicide, but there is a correlation of having depression and dying by suicide (USDHHS, 2014). There is a difference in suicide rates for those that are treated for depression in an outpatient versus inpatient setting. Two percent of those treated for depression in an outpatient setting have committed suicide, whereas, 4 percent of inpatients treated for depression committed suicide (USDHHS, 2014). The USDHHS states that, “7 percent of men with a lifetime history of depression will die by suicide, [while] only 1 percent of women with a lifetime history of depression will die by suicide” (USDHHS, 2014).

Zhang and Li (2013) conducted a “case-control psychological autopsy study, in which face-to-face interviews were conducted to collect information from proxy informants for suicide victims and living subjects in rural Chinese 15–34 years of age who died of suicide and who served as community living controls”. Major depression and hopelessness were measured using the Structured Clinical interview for DSM-IV and the Beck Hopelessness Scale (Zhang & Li, 2013). This study concluded that there was a strong association between depression and suicide when hopelessness was a consideration in the analysis. Zhang and Li (2013) were able to deduce that higher rates of hopelessness correlated with suicide.

Louise (2016) reports that, “the risk of suicide is increased by concurrent illness, alcohol and drug abuse, access to lethal means, hopelessness, pessimism, isolation, and impulsivity”.
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Again, it is noted that hopelessness has a correlation with concurrent illness which may include depression, a mental health illness. Wang, Shi, Luo and Qian-Ying (2017) state that “having previously suffered from depression is the primary risk factor for suicidal ideation”. The researchers noted that self-reported depression scores directly correlated with suicidal ideation (Wang, Shi, Luo & Qian-Ying, 2017). The meta-analysis concluded that there is a moderate correlation between depression and suicidal ideation and that depression is a contributing factor (Wang, Shi, Luo & Qian-Ying, 2017).

Risk Factors and Causes of Depression and Suicide

As one of the most common mental health disorders in the United States, depression can be caused by several factors including genetics, environment, biological and physiological factors (NIH, 2018). High levels of anxiety in children and adolescents may contribute to chronic mood and anxiety disorders later in life (NIH, 2018). The coexistence of other illnesses such as cancer, diabetes, and heart disease are thought to contribute to the development of depression (NIH, 2018). Additionally, certain medications taken for other conditions can contribute to depression (NIH, 2018). Drug use and brain structure (functioning level of frontal lobe) may also contribute to the development of depression. There has been ongoing research to determine how brain structure can contribute to mental health problems.

Life circumstances and trauma have also been strongly linked to the development of depression (National Alliance on Mental Illness [NAMI], 2019; Higuera & Holland, 2019). Life circumstances can include a wide array of scenarios such as work environment, where a person lives, marital status, financial situation, and interpersonal relationships (Higuera & Holland, 2019). Furthermore, “trauma can cause long-term changes in how the brain responds to fear and
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stress. These changes may lead to depression.” (Higuera & Holland, 2019). Sexual assault, physical abuse, sexual abuse, and exploitation may cause mental trauma leading to depression or other mental health problems.

The risk factors for developing depression share commonalities with potential causes. Additional factors may include female hormonal fluctuation, stress, circadian rhythm disturbances, poor nutrition, and grief or loss (Schimelpfening, 2019). Both risk factors and causes are very complex and unique to the individual.

In regards to risk factors for suicide, a previous attempt is the number one risk factor (NIH, n.d.). The presence of depression or other mental health disorders as well as substance abuse are a close second (NIH, n.d.). According to the NAMI (2019), “Twenty-one percent of adults with a substance use disorder also experienced a major depressive episode in 2018”. Additional risk factors for suicide overlap with those at risk for depression. Those aged 15-24 and over 60 are at highest risk for suicide. Certain subgroups and minorities of people are also at higher risk (NIH, n.d.). For example, “American Indian and Alaska Native youth and middle-aged persons have the highest rate of suicide among all subgroups of people” (NIH, n.d.). Regardless of a specific subgroup of people, the reasons that someone may decide to end their life are extremely complex.

Assessment Methods and Diagnosis Criteria: Medical Focus

Clinicians that see patients on a routine basis performing a routine clinical assessment are not likely to assess for depression or suicidal ideation because it may seem out of their realm to ask such questions or make such assessments. This very concept may attribute to the staggering
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depression rates, as many who are suffering may go undetected. Mazzasalma (2010) asserts that “major depression can and should be evaluated [during] routine clinical assessment”. Early assessment and intervention may have the potential to improve depression and suicide rates in the general population. It may take too long for someone to realize that they may be depressed, and the depressive symptoms that they are experiencing may be quite advanced by the time they seek out psychiatric services or any other form of assistance.

There are many assessment tools available for clinicians to use. The Beck Depression Inventory Self-Reporting Questionnaire consists of 21 questions that requires a rating of 0-3 for each question. A rating of 3 indicates high severity. The patient-reported score is compared against the questionnaire legend which explains what the range of scores indicate. For example, a score of 1-10 indicates that “ups and downs are considered normal”, while a score of 31-40 indicates “severe depression” (Kerr & Kerr Jr., 2001). Question number 9 directly assesses for level of suicide risk (Kerr & Kerr Jr., 2001). The Beck Depression Inventory Self-Reporting Questionnaire can be found in appendix C.

The Primary Care Evaluation of Mental Disorders (PRIME-MD) assessment tool was once a popular method of assessing depression. Due to its length (27 questions), it has since been phased out and formed into a very concise 2 question preliminary screening tool (Anderson, Michalak & Lam, 2002). If the patient being screened answers yes to either one of the questions, then the clinician must move onto to use the PHQ-9 tool for further assessment. The PRIME-MD 2 question assessment tool can be found in appendix D.

The Patient Health Questionnaire “was developed to detect mental disorders in primary care patients” and is a more streamline version of the original 27 question PRIME-MD tool (Kerr
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& Kerr Jr., 2001; Anderson, Michalak & Lam, 2002). The Agency for Healthcare Research and Quality identifies the PHQ-9 as still a valid evidence-based tool (AHRQ, 2016). The PHQ-9 consists of 9 questions which asks the patient how often they have been bothered by the following problems: Having little interest, poor appetite, trouble falling asleep and etc. (Kerr & Kerr Jr, 2001). Each question is rated by the patient as 0-not at all, up to 3-nearly every day. Again, there is a legend which guides the clinician in determining severity of depressive symptoms. A score of 1-4 indicates minimal depression while a score of 20-27 indicates severe depression (Kerr & Kerr Jr, 2001). Suicide risk is directly assessed with question number 9. The PHQ-9 assessment form can be found in appendix E.

No matter the tool used, it is essential that there is a suicide screening portion. “The gold standard for comparison of all these tools is always a focused, in-depth interview by an experienced mental health clinician” (Anderson, Michalak & Lam, 2002). While the above-mentioned tools may be among the most used or recommended, there are still limitations. For particular demographic groups and cultures, validity is limited due to the effects of translation from English to other languages (Kerr & Kerr Jr, 2001). Furthermore, “patients' different interpretations of its emotional terms, and various cultural factors, such as perceptions of racial prejudice and a cultural group's work ethic” may vary widely (Kerr & Kerr Jr., 2001). For this reason, screening and assessment tools should never be the sole method used.

Even among solely English-speaking Americans, there can be gender bias. Men and women perceive themselves differently and fall in line with different societal norms. Men may not perceive themselves as depressed if their sex role/or societal norm “prohibits them from using conventional terms to describe emotional problems” (Kerr & Kerr Jr., 2001). A
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standardized tool that can be used across all genders and cultures will most likely never come to fruition, and more research must be done to develop specific tools for specific subgroups of people. An additional challenge of assessing for depression and suicidal ideation among all groups of people is that it is all self-reported. There is no specific quantifiable or objective test that can be conducted to determine the severity of depression, such as a blood test. Other tools must be used in order to accurately diagnose someone.

Assessment, Diagnosis, And Planning: Nursing Focus

Nursing assessment and diagnosis methods are guided by holistic nursing. Holism can be incorporated into any nursing specialty and enhances nursing practice. Holistic nursing “takes a “mind-body-spirit-emotion-environment” approach” (American Nurses Association [ANA], 2013). “Holistic nursing is based on a philosophy of living and being that is grounded in caring, relationship, and interconnectedness” (ANA, 2013).

Nursing assessment for patients with suspected depression must always begin by evaluating their risk for suicidal ideation or behavior which includes asking if the patient has attempted suicide within the last 6 months (ANA, 2016). Assessing how the patient is feeling and documenting it in their own words will give the nurse a sense of acuity of the situation (ANA, 2016). The nurse can next assess sleep patterns, nutritional intake, weight changes, activity level, self-care habits, and self-reports of helplessness, hopelessness, loneliness, and/or isolation (ANA, 2016; Martin, 2016). Level of ambivalence, motivation, potential access to harmful methods of ending life, and protective factors (suicide against religion, children at home, family obligations?) will provide the nurse with further understanding of the situation (ANA,
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2016). Reviewing these factors encompasses more of a focused nursing assessment because the focus is on mental health. A nurse’s guide to suicide risk assessment can be found in appendix F.

A comprehensive assessment, no matter the ailment in question, includes assessing “biographical information, reasons for seeking healthcare, patient expectations, present illness or health concerns, and health, family, environmental, and psychosocial history” (Pratt, 2009). In addition, the ANA states that a comprehensive assessment also includes sociocultural, spiritual, economic, and life-style factors (ANA, n.d.). Reviewing all of these factors defines a comprehensive assessment. In examining all of the factors mentioned above, the nurse may obtain indepth information regarding physical/cognitive abilities, signs of abuse, medication regimen, housing situation, and interpersonal relationships.

The following are nursing diagnosis that can be attributed to a patient with depression or suicidal ideation. Not in any particular order of importance, a nurse may diagnose his/her patient with: 1) Risk for self-directed violence, 2) Impaired social interaction, 3) Spiritual distress, 4) Chronic low self-esteem, 5) Disturbed thought process, 6) Self-care deficit, 7) Grieving, 8) Hopelessness, 9) Deficient knowledge and/or 10) Ineffective individual coping (Martin, 2016; North American Nursing Diagnosis Association [NANDA], 2018).

When a patient is successfully assessed and diagnosed by the nurse, he/she can commence the planning phase. The planning phase of the nursing process involves collaboration with the patient to create patient-centered goals to achieve positive outcomes. Planning patient goals will be most effective when the patient’s perspective and preferences are considered (Toney-Butler & Thayer, 2019).
Patient-centered goals may include: 1) Patient will have satisfaction with social circumstances and achievements of life goals, 2) Patient will identify at least two-three people he/she can seek out for support and emotional guidance when he/she is feeling self-destructive, 3) Patient will not inflict any harm to self or others, 4) Patient will demonstrate compliance with any medication or treatment plan, and 5) Patient will demonstrate alternative ways of dealing with negative feelings and emotional stress (Martin, 2016). Patient-centered goals can be customized to any patient, in any particular setting or situation. The planning stage of the nursing process dictates that goals are completely individualized. Goals created in the planning phase should ideally be measurable. For example, if something is to be done, the patient should indicate a time-frame for which this goal in particular should be achieved. This provides structure and may help increase motivation to achieve said goals. Goals can be on a smaller scale, and all attempts at goals or achievement of goals must be promptly recognized and reinforced to support repetition of positive behaviors.

Goals can be created using the S.M.A.R.T format which stands for “specific, measurable, attainable, relevant and time-based” (Stibich, 2019). “The SMART criteria help to incorporate guidance and realistic direction in goal setting, which increases motivation and leads to better results in achieving lasting change” Goal setting will be a very important step in the nursing process, as nurse and patient-designed goals with help the patient be more successful and foster a more meaningful life.

**Interventions, Therapies, And Medications: Medical Focus**

Though pharmacological treatments are preferred, and have been proven as effective, after proper dosing and combination of medications were identified, nonpharmacologic
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The Evidence-Based, Nonpharmacological Treatment Guideline for Depression includes: “exercise therapy, bibliotherapy, cognitive behavior therapy, short-term psychodynamic supportive psychotherapy, and interpersonal psychotherapy” (Park et al., 2014). Each nonpharmacological treatment was compared against the current literature for efficacy of the treatment mode. This study concluded that exercise therapy was “more efficacious than no treatment for adult patients with mild-to-moderate depression, and its efficacy is similar to that of antidepressant treatment or cognitive behavioral therapy alone” (Park et al., 2014). Additionally, bibliotherapy “decreased the severity of depressive symptoms significantly, and the efficacy was reported to last for up to 6 months” (Park et al., 2014). Of important note, these guidelines are most suitable for adults with mild-moderate depression only. Those who suffer from severe depression are best served when pharmacological interventions are implemented in addition to other treatments (Park et al., 2014).

Cognitive-behavioral therapy, short-term psychodynamic supportive therapy, and interpersonal psychotherapy appears similar to that of other interpersonal psychotherapies when compared to antidepressant treatment alone (Park et al., 2014). The development of the guidelines was meant to “improve quality of treatment, reduce the differences in clinical practice, inappropriate treatment and treatment cost in the management” (Park et al., 2014).
Pharmacological treatments alone were once the gold-standard in the treatment of depression because the condition was viewed strictly as a chemical imbalance that could be corrected with medications (Gillihan, 2017). Today, it has been found that Cognitive-behavioral therapy (CBT) and medications work equally well in the treatment of depression (Gillihan, 2017). “The choice of antidepressants is based on the patient profile as well as liver, kidney and cardiovascular safety, as different drugs have different side effects” (Mezzasalma, 2010) For this reason, it is imperative to individualize treatment. A table, located in appendix G, lists some of the most common prescription medications used in the treatment of depression.

In a review of systematic reviews, Gartlehner et al (2017) conclude that against nonpharmacological treatments, second generation antidepressants were the most effective, but are also most associated with adverse effects. Additionally, Gartlehner et al (2017) concluded that the only nonpharmacological treatments that posed remote similar efficacy to second generation antidepressants is CBT and complementary and alternative medicine (CAM). Cognitive-behavioral strategies can restore a patient’s sense of self-control, personal efficacy, and active participation in their own care (Gil, 2017). CAM therapies such as St. John’s Wort, folate, exercise and Omega-3 fatty acids have shown to decrease depression scores among adults diagnosed with depression (Nahas & Sheikh, 2011). The efficacy of both pharmacological and nonpharmacological treatments are highly specific to the individual.

**Interventions: Nursing Focus**

Nursing interventions, for any nursing diagnosed patient, vary widely because they must be customized for the patient to reach their specific patient-centered goals. Some general nursing interventions that may be used for depressed or suicidal ideation patients may include: 1) Encourage clients to express feelings (anger, sadness, guilt) and come up with alternative ways
to handle emotions, 2) Contact the family, arrange for crisis counseling or other types of warranted counseling, 3) Initiate resources for self-help groups, 4) Check for the availability of required supply of medications needed, and 5) Implement a written contract which outlines that the patient agrees to refrain from inflicting self-harm (Martin, 2016).

Additional therapeutic nursing interventions for the depressed and suicidal patient may include thorough teaching for patient and family at an appropriate educational level regarding mental illness and what it means for the patient. The nurse should also validate the patient’s feelings regarding their current mental health status. Validation lets the patient know the nurse has heard and understands what was said, and it promotes the nurse-client relationship (Gil, 2017). Having the patient keep a diary of symptoms and feelings regarding current state of health may also be useful in raising self-awareness and identifying abnormalities or patterns (Gil, 2017). A nurse can aid the patient in making decisions about choosing a particular symptom management strategy and offer relevant resources (Gil, 2017).

Utilizing therapeutic communication is one of the most important nursing interventions that can be used. Therapeutic communication can offer several benefits. “It facilitates description of symptoms, thereby increasing diagnosis accuracy, and a better understanding of medical indications, offers the premise for including the patient in taking medical decisions, offers the chance of identifying patient’s needs, perceptions or apprehensions regarding the disease and the treatment and offers a reliable tool for detecting the emotional states of the patient and for orienting him/her towards the most adequate therapeutic measures” (Popa-Velea & Purcarea, 2014). Perhaps most importantly, therapeutic communication allows the nurse to recognize and convey acceptance of the patient’s experience (Gil, 2017).

**Evaluation of Interventions**
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Overall, “available evidence for [Major Depressive Disorder] MDD does not warrant choosing one [second generation antidepressant] SGA over another based on either greater efficacy or greater effectiveness. Only about 60 percent of patients treated with SGAs respond to treatment (meaning specifically that their depressive severity decreases by at least half); approximately 30 percent achieve remission during the first-line treatment” (Agency for Healthcare Research and Quality [AHRQ], 2014). Adverse effects are common during treatment with SGAs, and their discontinuation can be attributed this (AHRQ, 2014). For this reason, SGAs are supplemented with other classes of medications to achieve a better patient outcome.

Additionally, “the general effects of the major psychotherapies that have been studied are significant” (AHRQ, 2014). The effects of psychotherapy tend to last a longer period of time, and the patient may be less likely to relapse (AHRQ, 2014). This finding may be attributed to the importance of lifestyle change and reframing thought processes surrounding a mental illness.

When it comes to evaluation of nursing care, there is lack of evidence that can directly be attributed to their interventions. “Direct care nurses are integral to self-regulation for the discipline as they are the best source of information about nursing practice and patient outcomes. Evidence supports the assumption that nurses do contribute to prevention of adverse events but there is insufficient evidence to explain how nurses contribute to these and/or other patient outcomes” (Jones, 2016). Nurses can measure outcomes by “[documenting] how nursing contributes to these outcomes, and help organizations meet related targets” (Jones, 2016). As opposed to upholding what nurses do for patients, outcomes can be measured by what nurses achieve with their patients (Jones, 2016).
With this in mind, the interventions mentioned under section *Interventions: Nursing Focus*, page 13, are evaluated by examining follow through of the goals that the nurse has created with the patient as well as efficacy of working alongside them to achieve those goals. Not all information is quantifiable or measurable in nursing. For example, a way for a nurse to evaluate if his/her teachings were effective is to have the patient teach back everything that they have learned and worked through with the nurse. While that is not exactly measurable, it can be modified to become measurable using the S.M.A.R.T format. The patient teaching back the common side effects of their medications is *specific*. Determining whether their response is correct or incorrect is one way to “measure” understanding. Knowing the side effects of a medication is an *attainable* goal. Side effects are entirely *relevant* to the medication that the patient is taking. Ensuring the patient can teach back the side effects of their medications by next week is setting a *time* frame.

Ultimately, it can hard to quantify or measure everything in nursing and, “there are no intrinsic benefits in measuring nursing outcomes; rather, the benefits are contingent upon whether or not the act of measurement results in changes that lead to improved quality of care” (Jones, 2016). If nurses can provide documentation demonstrating that their interventions resulted in a change that lead to improved quality of care, then the evaluation of the intervention can be deemed as successful and beneficial. Though not purely scientific, nursing interventions can still be effective. The lack of quantifiable data (in certain situations) lends itself to unreliability but “nursing could not have emerged as the largest sector of the healthcare workforce unless employers and payors also assumed that nurses could make a valuable contribution to patient care” (Jones, 2016).
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Volunteer Experience Discussion

I will speak, anecdotally, in this section regarding my observations during my volunteer experience. I had the opportunity to volunteer and shadow staff members at Alexian Brothers Center for Mental Health, located at 3436 N. Kennicott Avenue in Arlington Heights, Illinois. ABCMH is a specialized center within the AMITA health systems network and specifically serves those with various mental health disorders, not including addiction. Any individuals that need addiction services are directed towards Alexian Brothers Behavioral Health Hospital located in Hoffman Estates, Illinois. This center has a team of specialized psychiatric nurses, medical assistants, psychiatrists, counselors, and other support staff such as case managers and social workers.

The purpose of this section is to compare what practices were utilized for assessment and intervention against what has been discussed in this document after researching the literature. Time poses as a limitation to speak on evaluation of treatments at ABCMH. I specifically inquired what types of assessment and intervention methods were used for patients at their facility. Assessment methods observed at ABCMH majorly included the use of the PHQ-9 form coupled with psychiatric interview, where the clinician asks a series of in-depth questions. This is the preferred method of assessment at ABCMH. This assessment method is consistent with the literature reviewed in Anderson, Michalak & Lam’s (2002) analysis of commonly used assessment tools in depressed patients. Though this study is now dated, the PHQ-9 assessment tool is still used in current practice.

Interventions used at ABCMH vary depending on individual patient needs. Very few patients at this center only engage in psychotherapy, whether it be in groups or individual.
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Nearly all patients at ABCMH are prescribed medications, and engage in psychotherapy as an addition to their mental health management, which is consistent with Gillian’s statements regarding treatment of depression (2017). Cognitive behavioral therapy is highly valued at ABCMH. CBT showed similar efficacy to the use of SGA’s alone, as stated by Gartlehner et al (2017). CAM therapies are also used but not to the degree of pharmacological and CBT treatment.

The center also refers patients to the Alexian Brother’s Behavioral Health Hospital if their depression is resistant to typical treatment methods. These methods were not discussed in this document due to the focus being more on traditional medical methods, nonpharmacological methods and nurse-specific interventions. However; for reference, treatments for medication resistant depression may include Electroconvulsive therapy (ECT), and Transcranial Magnetic Stimulation (TMS), which have shown to have great clinical significance (Dr. Lee, personal communication, November 26th, 2019).

A newer treatment method I observed at ABCMH, that I had not initially stumbled upon during my literature review process, was the use of Ketamine for the treatment of depression. Further research on this method was recommended by Dr. Lee, a Psychiatrist at ABCMH. Racemic Ketamine is administered intravenously and circulates in the blood stream (Meisner, 2019). Esketamine (Spravato) is administered via a nasal spray. The use of Ketamine in the treatment of MDD was very recently approved in March of this year by the FDA (Meisner, 2019). “The delivery of ketamine and the type given affect drug effectiveness and side effects… [It is] not yet known which type is more effective or how much side effects may differ” (Meisner, 2019). Further research is needed to determine long term effects of use, but it was very
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exciting to learn about a very newly introduced pharmacological intervention that has been adopted by the facility where I volunteered.

Resources

For those who are depressed and/or suicidal, or for those who know someone else who is depressed and/or suicidal, representatives are available 24/7 at The National Suicide Prevention Hotline, and they can be reached at 1-800-273-8255 (TALK), or The Substance Abuse and Mental Health Services Administration can be reached at 1-800-662-4357 (HELP), free of charge (NIH, 2019; USDHHS, 2019).

“The National Suicide Prevention Lifeline is a national network of local crisis centers that provides free and confidential emotional support to people in suicidal crisis or emotional distress” (National Suicide Prevention Lifeline, n.d.). The Substance Abuse and Mental Health Services Administration (SAMHSA) offers ample resources for a wide variety of mental health issues, including addiction. SAMHSA offers a behavioral health treatment services locator as well as early serious mental illness treatment locator (USDHHS, 2019). For those in need, they can search for facilities near-by. The Illinois Department of Health and Human Services offers a community mental health center locator so that community members “have the availability to access public-funded mental health services for those who are diagnosed with a mental illness or emotional disturbance and an impaired level of functioning” (USDHHS, n.d.). The National Suicide Prevention Life Line, Department of Health and Human Services, and the Substance Abuse and Mental Health Services Administration are 3 major organizations available to assist those with mental health disorders. Though depression and suicide remain a major concern for society today, the hope is to raise awareness and ensure that community members know that they
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are not alone and that assistance is always available. It is the hope that mental health clinicians and clinics can adopt and integrate evidence-based interventions, discussed in this document, to improve patient outcomes.
### CDC 2017 Leading Cause of Death Report: Rates of Suicide by Gender and Age:

**Suicide Rates by Age (per 100,000)**

Data Courtesy of CDC

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(CDC, 2019)
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Appendix B

CDC 2017 Leading Cause of Death Report: Rates of Suicide by Race, Location, and Methods used:

Suicide Rates by Race (per 100,000)
Data Courtesy of CDC

Suicide Rates in the United States
(by state; per 100,000; average 2008–2014)
Data Courtesy of CDC

*AI/AN = American Indian / Alaskan Native, **Pl = Pacific Islander
Percentage of Suicide Deaths by Method in the United States (2017)

Data Courtesy of CDC

(CDC, 2019)
Beck Depression Inventory:

Beck's Depression Inventory
This depression inventory can be self-scored. The scoring scale is at the end of the questionnaire.

1. 0 I do not feel sad.
1 I feel sad
2 I am sad all the time and I can't snap out of it.
3 I am so sad and unhappy that I can't stand it.

2. 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel the future is hopeless and that things cannot improve.

3. 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.

4. 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.

5. 0 I don't feel particularly guilty
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

6. 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7. 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

8. 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

9. 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10. 0 I don't cry any more than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.
11. 0 I am no more irritated by things than I ever was.
    1 I am slightly more irritated now than usual.
    2 I am quite annoyed or irritated a good deal of the time.
    3 I feel irritated all the time.
12. 0 I have not lost interest in other people.
    1 I am less interested in other people than I used to be.
    2 I have lost most of my interest in other people.
    3 I have lost all of my interest in other people.
13. 0 I make decisions about as well as I ever could.
    1 I put off making decisions more than I used to.
    2 I have greater difficulty in making decisions more than I used to.
    3 I can’t make decisions at all anymore.
14. 0 I don’t feel that I look any worse than I used to.
    1 I am worried that I am looking old or unattractive.
    2 I feel there are permanent changes in my appearance that make me look unattractive
    3 I believe that I look ugly.
15. 0 I can work about as well as before.
    1 It takes an extra effort to get started at doing something.
    2 I have to push myself very hard to do anything.
    3 I can’t do any work at all.
16. 0 I can sleep as well as usual.
    1 I don’t sleep as well as I used to.
    2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
    3 I wake up several hours earlier than I used to and cannot get back to sleep.
17. 0 I don’t get more tired than usual.
    1 I get tired more easily than I used to.
    2 I get tired from doing almost anything.
    3 I am too tired to do anything.
18. 0 My appetite is no worse than usual.
    1 My appetite is not as good as it used to be.
    2 My appetite is much worse now.
    3 I have no appetite at all anymore.
19. 0 I haven’t lost much weight, if any, lately.
    1 I have lost more than five pounds.
    2 I have lost more than ten pounds.
    3 I have lost more than fifteen pounds.
20. I am no more worried about my health than usual.
   0 I am worried about physical problems like aches, pains, upset stomach, or
   1 constipation.
   2 I am very worried about physical problems and it's hard to think of much else.
   3 I am so worried about my physical problems that I cannot think of anything else.

21. I have not noticed any recent change in my interest in sex.
   0 I am less interested in sex than I used to be.
   1 I have almost no interest in sex.
   2 I have lost interest in sex completely.

INTERPRETING THE BECK DEPRESSION INVENTORY

Now that you have completed the questionnaire, add up the score for each of the twenty-one
questions by counting the number to the right of each question you marked. The highest possible
total for the whole test would be sixty-three. This would mean you circled number three on all
twenty-one questions. Since the lowest possible score for each question is zero, the lowest
possible score for the test would be zero. This would mean you circles zero on each question.
You can evaluate your depression according to the Table below.

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Levels of Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>These ups and downs are considered normal</td>
</tr>
<tr>
<td>11-16</td>
<td>Mild mood disturbance</td>
</tr>
<tr>
<td>17-20</td>
<td>Borderline clinical depression</td>
</tr>
<tr>
<td>21-30</td>
<td>Moderate depression</td>
</tr>
<tr>
<td>31-40</td>
<td>Severe depression</td>
</tr>
<tr>
<td>over 40</td>
<td>Extreme depression</td>
</tr>
</tbody>
</table>

DEPRESSION AND SUICIDE

Appendix D

Primary Care Evaluation of Mental Disorders (PRIME-MD):

(PRIME-MD PHQ (2 Question Screen)

Name ___________________________ Date __________

Over the last 2 weeks, how often have you been bothered by any of the following problems?

1. During the past month, have you often been bothered by feeling down, depressed, or hopeless?
   Yes ☐ No ☐

2. During the past month, have you often been bothered by little interest or pleasure in doing things?
   Yes ☐ No ☐

(Anderson, Michalak & Lam, 2002)
DEPRESSION AND SUICIDE

Appendix E

Patient Health Questionnaire (PHQ-9):

Compliments of Alexian Brothers Center for Mental Health
Suicide risk assessment

When assessing patients for suicide risk, your first priority is to observe for active suicidal behavior, such as hiding contraband to harm themselves. Also, be aware of factors that could increase suicide risk, including recent loss, suicide in the family, chronic pain, male gender, or suicide of a prominent person. Check for:

- recent suicide attempts, particularly in the last 6 months
- whether a recent suicide attempt was well-planned to escape rescue, or a poorly planned attempt from which the patient was easily rescued or called for help
- patient’s level of ambivalence; for instance, does the patient have hope for the future? Would he or she want to live if something changed?
- motivation for suicidality; for example, does the patient want to end pain and suffering? Does he or she feel like a burden to others? Does the patient feel self-loathing, anger, or rage?
- patient’s access to a suicide method, including what’s available outside the hospital (for instance, a stockpile of pills or access to a gun or a rope)
- patient’s intent to act on suicidal thoughts
- command auditory hallucinations telling the patient to commit suicide
- protective factors that may reduce risk; for instance, is suicide against the patient’s religion? Does the patient have family obligations, such as children?

Formulate an objective rating (high, medium, or low) of the lethality of the patient’s previous suicide attempts and current suicide plans. (Don’t share this information with the patient.)

Clinical formulation
Assess the patient’s risk level based on your opinion, regardless of whether you’ve used a suicide assessment tool with a score. Include your recommended level of observation (which may range from every 30 minutes to constant observation at arm’s length or with restraints) and precautions (such as room searches, supervised utensils, and mouth checks after receiving medication).

Clinical alerts
- Assess all patients for suicidality every shift, regardless of their diagnosis.
- Know that improvement in a patient’s mood and affect may indicate he or she has a clear suicide plan or sufficient energy to commit suicide.
- Always discuss the patient’s safety plan with the patient. This plan details what the patient can do to keep safe and what you will do to keep the patient safe. (Don’t refer to this as a contract for safety.)
- Assess the patient for pervasive hopelessness (a key element in suicide risk).

(ANA, 2016)
Common Prescription Medications to Treat Depression:

<table>
<thead>
<tr>
<th>Drug Class and Active Ingredient</th>
<th>Usual average dose for adults (mg/day)</th>
<th>Sedation</th>
<th>Anticholinergic Action</th>
<th>Orthostatic Hypotension</th>
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</thead>
<tbody>
<tr>
<td>Tricyclic Antidepressants (TCAs)A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imipramine</td>
<td>150-200</td>
<td>Moderate</td>
<td>Moderate</td>
<td>High</td>
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<tr>
<td>Amitriptyline</td>
<td>150-200</td>
<td>High</td>
<td>Very high</td>
<td>Moderate</td>
</tr>
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<td>Nortriptyline</td>
<td>75-100</td>
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<td>Moderate</td>
<td>Lowest of TCAs</td>
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<td>Clomipramine</td>
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<td>Low</td>
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<td>Tetracyclic AntidepressantsA</td>
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<td></td>
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<tr>
<td>Mapiptone</td>
<td>150-200</td>
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<td>Moderate</td>
<td>Low</td>
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<tr>
<td>Monoaminoxidase Inhibitors (MAOs)</td>
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<tr>
<td>Tranilcipromine</td>
<td>30</td>
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<td>Very low</td>
<td>High</td>
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<tr>
<td>5-Hydroxytryptamine reuptake inhibitors (SSRIs)</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Fluoxetine</td>
<td>20-40</td>
<td>Low</td>
<td>None</td>
<td>Very low</td>
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<td>Paroxetine</td>
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<td>Sertraline</td>
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<td>None</td>
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<td>Citoxetine</td>
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<td>None</td>
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<tr>
<td>Fluoxetine</td>
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<td>Low</td>
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<td>None</td>
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<td>Escitalopram</td>
<td>10-20</td>
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<td>None</td>
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<tr>
<td>Serotonin-norepinephrine reuptake inhibitors (SNRIs)</td>
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<tr>
<td>Venlafaxine</td>
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<td>Very low()</td>
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<tr>
<td>Duloxetine</td>
<td>66</td>
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<td>Very low</td>
<td>Very low</td>
</tr>
<tr>
<td>Serotonin-norepinephrine-dopamine reuptake inhibitors (SNDRIs)</td>
<td>300</td>
<td>Low</td>
<td>Very low</td>
<td>Very low</td>
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<tr>
<td>BupropionC</td>
<td>300</td>
<td>Low</td>
<td>Very low</td>
<td>Very low</td>
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<td>Noradrenergic and specific serotonergic antidepressant (NorSSAs)</td>
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<tr>
<td>Reboxetine</td>
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<td>Very low</td>
<td>Very low</td>
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<td>Noradrenergic and specific serotonergic antidepressant (NorSSAs)</td>
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<td>Mirtazapine</td>
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<td>Low</td>
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<td>Serotonin reuptake inhibitors and serotonin antagonist (SARI)</td>
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<td></td>
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<tr>
<td>Trazodone(D)</td>
<td>150-400</td>
<td>High</td>
<td>Very low</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

(Mezzasalma, 2010)


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doi: 10.1136/bmjopen-2016-014912


Kerr, L. K., & Kerr, L. D., Jr (2001). Screening tools for depression in primary care: the effects of culture, gender, and somatic symptoms on the detection of depression. The Western Journal of Medicine, 175(5), 349–352. doi:10.1136/ewjm.175.5.349

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https://nurseslabs.com/major-depression-nursing-care-plans/

https://www.health.harvard.edu/blog/ketamine-for-major-depression-new-tool-new-questions-2019052216673


major depressive disorder. *Canadian family physician Medecin de famille canadien*, 57(6), 659–663.

National Alliance on Mental Health Disorders. (2019). Depression. Retrieved from
https://www.nami.org/Learn-More/Mental-Health-Conditions/Depression


https://www.nimh.nih.gov/health/topics/depression/index.shtml


Retrieved from https://suicidepreventionlifeline.org/
DEPRESSION AND SUICIDE


Zhang, J., & Li, Z. (2013). The association between depression and suicide when hopelessness is controlled for. *Comprehensive psychiatry, 54*(7), 790–796. doi:10.1016/j.comppsych.2013.03.004