
Signs and Symptoms of the Exacerbation of Mental Illness: What to Do?

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Scenario

TD is an 83-year-old woman that was admitted to an assisted living facility because of increasing problems of caring for herself and mismanagement of medication. She had a 10-year history of opioid use that started following a total knee replacement in 2010. In 2019 she had a cerebral vascular accident with residual slurring of her speech and possibly some cognitive changes. Besides chronic pain her only other diagnosis is hypertension that is well controlled on lisinopril. She was gradually tapered off the opioids but in the process experienced increased pain and depression. Primary care started her on duloxetine for depression and she was on gabapentin 100 mg 1 time a day for pain. She was referred to psychiatry for treatment of her depression. On initial evaluation by psychiatry she was not experiencing any withdrawal symptoms from opioids, expressed anxiety and depression with a score of 3/5 on the Geriatric Depression Scale short form, and her cognitive screening with the Mini Mental Status exam was 17 with suspected vascular dementia given history of cerebral vascular accident. The gabapentin was increased to address her pain and anxiety and the duloxetine was increased from 30 to 60 mg. After four to five weeks, the resident's pain and anxiety were well controlled, and her depression was in remission. She adjusted well to the facility and staff reported no behavioral issues.

On the initial interview with TD's son the APRN asked about her past psychiatric history and her son said that he did not have much knowledge but did not think his mother ever sought the care of a mental health professional. He thought that she might have an undiagnosed mental health issue because she was always dramatic, has a bad temper if she feels she is being ignored, can get hostile for no reason, had a habit of making up stories about the strangest things, and had been that way for as long as he remembered. None of these behaviors were noted by staff at

TD's assisted living facility until approximately 7 months later TD's behaviors began to change. She stopped letting housekeeping clean her room because she was feeding her pet roaches. She started calling staff "stupid and idiots" and left messages to the executive director that she was calling the local newspaper to report them. She stated in public that she was going to kill herself which frightened other residents. Emergency services were called but when they arrived, she was pleasant, denied she would hurt herself and said that she thought it was funny because she wanted to cause problems. She was not taken to the hospital.

Psychiatry was called for urgent visit and upon exam the resident was pleasant but socially inappropriate – yelling out loud comments about other residents, her speech was pressured, she was argumentative, impulsive, had irrational thought content and process with idiosyncratic ideas about calling the CDC about conditions at the facility. Her diagnosis was updated from major depressive disorder to bipolar type I with current episode manic with psychotic features. She was started on mood stabilizer; divalproex sodium and symptoms began to resolve within two weeks. When the diagnosis and treatment were explained to her son, he was relieved that what he had seen most of his life, a long-standing pattern of relapsing and remitting symptoms were finally being addressed.

The story of TD is not unique. People that experience serious mental illness often have a lifetime of exacerbations and remissions of symptoms. Moreover, it is not completely unique that a person can live with a serious mental illness such as bipolar disorder, schizophrenia, or depression without ever being diagnosed or treated by a mental health professional until they are institutionalized in a nursing facility or assisted living facility. Recovery from mental illness has not always been an accepted concept, yet more literature describes the concept of recovery with

different outcomes such as the symptom remission and attainment of psychosocial milestones (Leonhardt et al., 2017) or the concept of personal recovery defined by the individual (van Weeghel et al., 2019). But recovery can be elusive and the cost of SMI is high for the individual with SMI and society. For example, older adults living with SMI have more somatic complaints (e.g., fatigue, dry mouth, inner agitation), high rates of extrapyramidal side effects from medication, more comorbidities, and shorter life spans than people without SMI (Houben et al., 2019, Substance Abuse and Mental Health Services Administration, 2019). The cost to society is evidenced in research conducted by Rowan, et al., (2019) demonstrating in Texas Medicaid recipients with SMI had annual cost 57.4% greater than those without SMI. Within the total annual cost for people with SMI, almost a 24% of the total cost were SMI-related care. The average total acute care cost for adults with SMI was \$18,181 compared to adults without SMI at \$11,550. But there are other costs that are not as well quantified in the literature such as cost to the healthcare workers trying to care for the individual without appropriate training.

Certified nurse assistants (CNA's) are the front line worker interacting with residents more hours of the day than any other team member, CNA's will interact with residents experiencing symptoms of their mental illness from mild symptoms of depression or anxiety to psychosis and aggressive behaviors. People with SMI experience disruptive behaviors including aggression. McCarthy, Blow, and Kales (2004) analyzed resident assessments and administrative data of 9,618 residents of VA nursing homes and found that residents with SMI and no dementia had the highest rates of verbal aggression (e.g., yelling baiting, or threatening) while residents with dementia had higher rates of physical aggression (assertive or combative to self or other with the possibility of injury) and residents with both a dx of SMI and comorbid dementia had the highest prevalence of socially inappropriate behaviors (disruptive, infantile, or repetitive or

antisocial physical behavior that creates disruptions with others). CNA's ability to deal with disruptive behavior varies. Research from national data bases demonstrated that in sample of over 2500 CNAs 42% thought their training was excellent, 34% good and 24% felt their training was fair or poor in the area of working with residents with abusive behaviors (Sengupta, Ejaz & Harris-Kojetin, 2012). However, Kusmaul (2016) found on questions regarding knowledge about mental health, nurse assistants only answered questions correctly 65% of the time suggesting a need for improved education because, formal caregivers that experience aggressive behaviors (e.g., kicking, hitting and screaming) develop negative feelings and the quality of care they deliver can be compromised (Holst & Skär, 2017). Being able to recognize early signs and symptoms of exacerbations of mental illness could be beneficial in lowering the occurrences of disruptive behaviors. Therefore, the purpose of this paper is to increase awareness of the symptoms of SMI and suggestions for early action.

Symptoms and Signs of Relapse

Being familiar with the symptoms of SMI is the first step to being able to recognize a change in status or exacerbation of SMI. Box 1 – 4 provide the DSM symptom criteria for anxiety and panic attacks, depression, mania and hypomania that occurs in bipolar disorder, and schizophrenia. In Box 3 the symptoms are the same for mania and hypomania. The difference between the two is the degree of severity of the symptoms. In mania, the symptoms are severe enough the person is not be able to function in their normal roles at work or social roles. In hypomania the severity is such that other people notice the change in the individual, but they are still able to fulfill their roles. Using the example of TD from the opening scenario, with hypomania other residents and staff may have found her talking more than usual about different subjects within the same conversation or seeming to not need as much sleep. But TD showed

mania when she was behaving beyond the bounds of normal social roles by yelling and calling other residents and staff names or threatening suicide for attention and showing no remorse.

Bipolar patients that are diagnosed as type 1 will have had at least one manic episode in their lifetime as well as episodes of depression (see Box 2 for symptoms of depression) while bipolar type 2 patients will have only experienced hypomania and depression. Evidence of these symptoms emerging or increasing should be a trigger for further evaluation by nursing and referral to primary healthcare provider or psychiatry.

There are some symptoms that are consistent through all four diagnoses and can be considered early warning signs of potential relapse. Changes in sleep pattern is the common symptom in all four diagnoses and is reported as a prodromal symptom of depression and bipolar disorder (Jaussent, Buouyer, Ancelin, Akbaraly, Pérés, Ritchie, Besset & Dauvilliers, 2011; Takaesu, 2018). While sleep changes are not a part of the symptom criteria for the diagnosis of schizophrenia it does occur and has been reported to exist 6 weeks before a relapse of schizophrenia (Spaniel, Bakstein, Anyz, Hlinka, Sieger, Hrdlicka, Görnerová, & Höschl, 2018). Weight change and restlessness are also associated with relapse of depression, and restlessness was noted 8 weeks before relapse in schizophrenia (Sakurai, Suzuki, Yoshimura, Mimura & Uchida, 2017; Spaniel, Bakstein, Anyz, Hlinka, Sieger, Hrdlicka, Görnerová, & Höschl, 2018).

Another sign or major risk factor for relapse is disruption in medication regimens. Sometimes patients with depression that are in remission feel they do not need their antidepressant anymore, or bipolar patients beginning to feel hypomanic may likewise feel medicine is unnecessary and stop or refuse medications. Residents transferred to the hospital for medical situations may have psychotropic medications stopped, or there may be a miscommunication of continuance of psychotropic medications in transitions creating a

disruption in medication. Another scenario is a trial of a gradual dose reduction of a psychotropic lowered to a subtherapeutic level resulting in relapse. Therefore, any refusal of psychotropic medications should be considered a warning sign, and medication reconciliation must be done with residents transferring in or out of the facility, and close monitoring of patients with dose reductions are all critical in managing or preventing potential relapse of SMI.

Actions to Take When Signs and Symptoms of Relapse Appear

CNA's as mentioned are the front-line workers with hours spent daily interacting and providing care for their residents that may have a diagnosis of SMI. Any sign or symptoms seen in Box 1-4 or changes in behaviors that seem different than baseline for the resident should be reported to nursing. Special attention should be given to those residents that have transitioned back to the facility from hospital or rehabilitation facilities because of potential disruption of medication. Nursing's role is to evaluate the resident and situation and provide information to the health care provider (HCP) for intervention if necessary. An excellent guideline to follow is the Situation, Background, Assessment and Recommendation (SBAR) communication tool. The SBAR tool has shown to improve communication between nursing and HCP and improve nurse's sense of confidence in communication by providing a way to organize thinking (Renz, Boltz, Wagner, Capezuit, & Lawrence, 2013). In organizing thinking, the S requires that the nurse identify the situation including the symptoms, onset, duration, aggravating/relieving factors and other observations. Background ("B") includes the primary diagnosis, pertinent history, vital signs, functional change, mental status change, medications, and any labs, allergies and could include advanced directives. Next is the "A" or the nurse's current assessment and "R" is the request for action. Using TD as an example the nurse's communication with the HCP may have looked for sounded like this.

Doctor Smith TD has had a change in status over the last 3 weeks. She has become argumentative, rude to other residents, and even aggressive. She has had bizarre thoughts and made accusations that are paranoid in nature. This occurs throughout the day and we've noticed she is not sleeping at night (S). Her current diagnoses include depression and hypertension which has been stable. She has no recent labs (B). On assessment today she is alert and oriented, but her conversations are disorganized, and she is belligerent and threatening to call the police. Physically there is no sign of infections (A) Can you see her as soon as possible and do you want any labs or recommend any medication adjustment (R).

This communication would give the HCP a good start in deciding about the urgency and need for intervention.

But before intervention, the HCP must determine if there are possible causes for the signs and symptoms observed besides a relapse of the primary SMI. For example, an atypical presentation of an infection in an older adult can be psychosis. A resident with a urinary tract infection can experience a delirium including psychosis of visual or auditory hallucinations, paranoid ideation, confusion and altered mental state. Medication side effects can cause insomnia and induce depression. For example, many of the psychotropic drugs have insomnia as a potential side effect but insomnia can be caused by levothyroxine, donepezil, carbidopa-levodopa, and pain medications like hydrocodone or tramadol commonly used in older adults (Do, 2020). Insomnia caused by medication side effect may not be a sign of relapse for a SMI but if not address could trigger the relapse of the SMI. Medications with depression as a potential adverse effect include a wide range of medications like antihypertensive medications (e.g., metoprolol and atenolol), analgesics (e.g., tramadol and hydrocodone), gastrointestinal agents (e.g., omeprazole and ranitidine) and corticosteroids (Qato, Ozenberger, & Olfson, 2018).

The HCP must do a thorough medication review on any resident with a change in status and a medication reconciliation for any residents that have gone through a transfer from one facility to another. Finally, the HCP will need to work with nursing and other care team members to identify if there are behavioral or environmental triggers that account for the change in status that may need to be addressed behaviorally instead of with a medication adjustment. For example, a new roommate with disruptive behaviors at night may trigger insomnia in a person who has not experienced insomnia and has comorbidity of SMI. A change in medication aide with a different approach may trigger refusal of medication. The death of a friend within the facility may trigger grief versus clinical depression. An evidence based standardized approach to the assessment and management of behavioral and psychological symptoms of dementia is called DICE which stands for describe, investigate, create, and evaluate (Kales, Gitlin, & Lyketsos, 2015). This approach to assessment and management could also be applied to analyzing signs and symptoms of potential relapse in SMI because, the need to describe the signs and symptoms thoroughly and then investigate all potential causes has been described thus far. The next step is to create a holistic approach that includes nonpharmacological or behavioral strategies as well as pharmacological interventions to reduce the chance for relapse. Finally, there must be an evaluation to assess the efficacy of the strategies employed.

In conclusion, SMI can be a lifelong experience of remission and relapse for the individual with SMI and the burden of relapse is carried not only by the person with SMI but family members and caregivers as well. In institutional settings whether nursing facilities or assisted living facilities, it is a team approach to identifying the potential onset of relapse. The first step is familiarizing oneself with the characteristic symptoms of the different serious mental illnesses and then being vigilant in addressing observed signs and symptoms of potential relapse.

Each member of the health care team has a role in easing the burden of relapse by addressing signs and symptoms as soon as possible thus enhancing the quality of life for the resident as well as their caregivers.

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