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Schizoaffective Disorder: Implications of Social Dysfunction

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ABSTRACT

Background: Schizoaffective disorder is a personality and mood disorder that has symptoms of schizophrenia and bipolar disorder. Loss of gray matter in several lobes of the brain leads to social impairment and difficulty adhering to treatment. Due to the complexity of the schizoaffective disorder, it can affect every day social functioning and interactions. **Purpose:** The purpose of this review was to determine the implications of social dysfunction in schizoaffective disorder. **Method**: A review of pertinent literature was performed to collect available data. **Findings:** Pharmaceuticals such as antipsychotics, antidepressants, or mood stabilizers can be used to diminish symptoms and improve the quality of life. Other options include hormone therapy and cognitive behavioral therapy. Each treatment plan is tailored to the individual based on their presenting symptoms. **Conclusion:** Severe impairment can occur, leading to an inability to function independently. Therefore, treatments are almost always necessary, with antipsychotics, oral, or long-acting injections being the most effective. Other therapies used for schizoaffective disorder include cognitive-behavioral techniques, hormone therapy with oxytocin, and self-management techniques, such as organizational skills. These options are only effective when the individual possesses self-management and dedication to the treatment plan.

INTRODUCTION

Schizoaffective disorder is defined as bipolar disorder and schizophrenia combined (see Figure 1). Individuals with this disorder struggle with delusions and hallucinations, as well as episodes of depression and mania. The National Alliance of Mental Illness (NAMI) propagated some cases where only depressive episodes are present [1]. The disorder affects the patient's social function, changing social patterns, medical adherence, and brain function. The purpose of this review was to determine the implications of social dysfunction in schizoaffective disorder.

The characterizations of the disorder include hallucinations, delusions, disorganized thinking, depressed mood, and manic behaviors [1]. People may experience different symptoms based on the type of mood disorder they are diagnosed with, which is depression or bipolar disorder. The exact cause is unknown, but researchers imply that multiple factors can contribute to schizoaffective disorder. The number one possible cause is genetics, as the trends of the disorder tend to run in families. Stress and drug use are also possible triggers to the onset of the development of symptoms. NAMI states that the disorder is insufficiently researched; therefore, they utilize findings and treatments of bipolar disorder and schizophrenia to treat schizoaffective. Treatments include mood stabilizers, antipsychotics, and antidepressant medications. Pharmacology treatments may be concurrent with cognitive behavioral therapy or family-focused therapy [1].

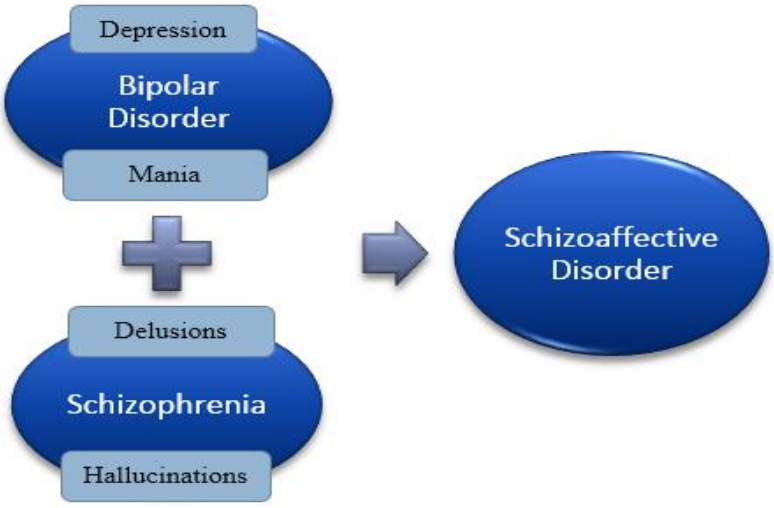

Figure No. 1: Schizoaffective is bipolar disorder and schizophrenia combined

CASE STUDY

Case 1: Delusional Characteristics

The behaviors of an individual with schizoaffective disorder were observed. The individual was able to hold a conversation and interact. However, certain triggers in the environment would cause a shift in her mood. She would go from calm to agitated. When agitated, her actions become more erratic. After spending time reflecting on the situation, she became apologetic and regretful of her actions. This reflection period was a common theme throughout the day. She was suspicious of those around her and would voice those suspicions consistently.

Talking to this individual provided an opportunity to listen to her story and hear her thought process. Her reasons for not liking people came from a place of memories. She would see resemblances between a memory and an individual and base her interactions on those feelings. Spending time with her allowed observations of how she processed events as well. The events that lead to being institutionalized are typically shrouded in confusion and lost memories. As she recalled her recent hospitalization events, she could only remember the people who surrounded her and where she was. She talked about cops peering into her window before dragging her out of her house. As she told her story, she spoke about her husband's fears turning on her and worrying that he might be the person who had her committed. However, she could not describe the events that preceded her being taken to the psychiatric ward. This seemed to be a common theme as she told other stories about her hospitalization.

Case 2: Depression and Hallucination Characteristics

Characteristics and behaviors of a person with schizoaffective disorder were observed. The patient was very withdrawn from any social situation. When others approached him, he would not even look at them; instead, he would stare at the ground. While others played a card-game called “Apples to Apples,” someone asked if he would like to play. Despite being asked, he did not respond to them. He seemed too preoccupied to talk with anyone, shuffling slowly around or staring blankly at the floor while sitting. As he would slowly make his way through the halls and common rooms, his eyes shifted from place to place or would stay fixated on the ground. The patient looked exhausted as if he were trying to escape something.

Later, in his meeting with the treatment team, he sat there with his knee bouncing and looking at his hands folded in his lap. The treatment team members proceeded to ask questions about how he was doing. It was then it was made clear that he was experiencing hallucinations. Some of them were command hallucinations, explaining why he appeared like he wanted to escape something. He would pause before saying a one-worded response, such as “fine” and "good" when answering the questions. The team members only asked how he was doing and if he was still hallucinating. They then described the treatment he was on and how they would keep the regimen like that for a little longer to observe more of the effects. After the meeting, he slowly rose from his chair and shuffled back to his room, making eye contact with no one. After observing him, it was clear he was in a depressive episode from the bipolar side of schizoaffective disorder. He had decreased interest in everyday activities, a lack of energy, and slowed thinking and body movements. Hallucinations were also present, going to the schizophrenia side of the disorder.

Case 3: Mania and Delusional Characteristics

A patient with schizoaffective disorder was sitting in the hospital lounge. He started to talk about his family. He was speaking in flight of thoughts, and his story was hard to follow. His speech was rushed, and he was unable to finish his ideas. He was very joyful and provided the nurse with various nicknames. The patient was also experiencing delusions. The stories he shared included ideas on space travel and gamma rays that he could control. The patient believed he had traveled to Mars with the president and the governor. He also thought that he was a millionaire and the creator of Chewy, the dog food brand. Based on the patient's speech patterns and delusional thoughts, it was clear he was experiencing the manic phase of the bipolar side of schizoaffective disorder. The patient did not report any hallucinations, and the nurse did not notice any signs of the patient being distracted by hallucinations. However, the patient was experiencing some paranoia. He was very aware of the other patients and students in the room and always commented on why they were leaving. He also was upset when someone would walk behind him. The patient said that he did not like that because they could be trying to hurt him. When he was admitted to the hospital, he experienced paranoia and believed that he was in danger. This shows the schizophrenic side of schizoaffective disorder.

LITERATURE REVIEW

Due to the complexity of the schizoaffective disorder, the ways this disorder can affect everyday social functioning and interactions were investigated. A literature review was conducted looking into peer-reviewed articles and studies on this disorder and social function. Search for databases included Oxford Academic, Elsevier, ProQuest, and Clinical Key. For current best practices, the time range on the published articles was between 2017 and 2020. Reports included information on the patient's understanding of the condition, treatment options, and neurological factors. All studies used related the information to how it impacts social functioning. Keywords included schizoaffective disorder, treatment, social functioning, mood disorders, and personality disorder. Throughout the vast array of articles that were used, some common concepts emerged (See Figure 2).

Brain Dysfunction

In people with schizoaffective disorder, there is dysfunction with the brain. These abnormalities can be seen in multiple areas. There is a loss of gray matter density spread throughout the brain and is heavily seen in the frontal lobe, anterior, and temporal regions. With the remaining gray matter, there is a reduction in the amount of volume [2]. Reduction of volume and gray matter leads to impairment in planning and solving problems in the frontal lobe and shape and sound issues in the temporal lobe. Languages become difficult to understand, and there is an impairment in social ability [3]. Other alterations in the brain include dysregulation of dopaminergic signaling, dysregulation of the mesolimbic dopamine system, and N-methyl-D-aspartate receptor functioning insufficiently. These alterations lead to psychosis and contribute to psychotic symptoms such as hallucinations and delusions [2].

Social Dysfunction

Social dysfunction is a common characteristic of schizophrenia spectrum disorders. It can possibly be attributed to one of the defining characteristics of schizoaffective disorder: disorganized thinking. The person can jump from one topic to another very quickly, and their answers to questions may be unrelated to what a person asked [1]. Disorganized thinking can affect their speech, as well. Alterations in speech and disorganized thinking are attributed to

formal thought disorders, a common feature in schizophrenia [4]. Clang association, word salad, and associative looseness are common alterations in speech patterns [5]. People with this disorder show slower language processing for a single word and sentence levels [4]. Other dysfunctions include social cognition, a decrease in the ability to read social situations [6].

With the impairment of processing, conversations are difficult for the person to comprehend. A possible cause of impaired processing could be from overstimulation of background noise because of the inability to filter it out. Stimulation could be external or internal. Limited comprehension and overstimulation can lead to difficulty responding correctly or in a timely fashion, causing frustration on both ends of the conversation [6]. An individual talking to a person with schizoaffective disorder may have difficulty understanding what the person is saying or how to respond in the conversation. Clang association, associative looseness, and word-salad can cause people to stay away from someone who have schizoaffective disorder. Socializing with others is mainly based on conversating. If people with schizoaffective disorders have trouble conversating due to the issues stated above, it will impair their social function.

Other symptoms, such as hallucinations and delusions, do not create a mental environment conducive to effective social functioning. Hallucinations and delusions can cause preoccupation with thoughts, developing derealization. Derealization, in turn, can cause them to have little dependence on the reality around them [7]. The thoughts can be loud and distract them from reality, making it harder for them to distinguish what is real and what is not, especially when talking with someone. The person can be distracted from the conversation at hand, making it harder for them to focus on reality and the person that is talking to them [8]. It is as if they are in a noisy, crowded room having a conversation. Some hallucinations may appear as if the person has multiple people talking to them at once.

Along with hallucinations and delusions, a schizoaffective patient may experience social anhedonia. This is the reduced ability to experience pleasure and reward from social interaction or relationships [8]. A correlation has been found between social anhedonia and the perceived quality of life. Those who experience decreased pleasure and reward report a lower perceived quality of life. It is common for patients to experience a lack of pleasure from interactions when negative symptoms occur, such as depression and withdrawal. Promoting intact hedonic

functioning can lead to a patient experiencing higher self-esteem, social support, and overall psychological well-being [8].

The more severe a person's symptoms are, the more it impacts their socialization. The higher the severity, the lower perceived social support, quality of life, self-esteem, and self-efficacy they have. People also reported lower levels of pleasure from socialization, possibly attributing to the severity of their symptoms [8]. The low levels of satisfaction from socialization may attribute to them not wanting to be around people. If a person does not like to do something, they tend not to do it, which applies to individuals with schizoaffective disorder and having social interactions. If they tend to have a negative view of socializing, they avoid it and will reluctantly participate.

Treatment Noncompliance

One common barrier to treatment in individuals with schizoaffective disorder is treatment adherence. This is defined as the degree to which the patient follows the treatment plan agreed upon between them and the physician. Good treatment adherence has been correlated with increased functioning and quality of life. It is also associated with a lowered risk of relapse and rehospitalization [9]. Another issue that can decrease treatment adherence is the individual's view of their functional ability. Studies show that individuals with impaired cognitive function may overestimate their level of functioning. Individuals in a depressive phase of the disorder may underestimate their working functional abilities and will either drastically overestimate or underestimate their interpersonal functional abilities [10]. These patients are more likely to stop taking their medications as prescribed.

Due to this barrier to treatment across all patients with schizoaffective disorder, monitoring and evaluation procedures must be put in place. A study conducted at the University of North Carolina at Chapel Hill measured treatment adherence by having participants keep a daily medication diary and comparing the number of pills left at the end of the study compared to the start **[11].** Further research is needed to determine effective monitoring procedures for the promotion of treatment adherence. It may require multiple monitoring techniques before a method is found to work with an individual patient. It is also vital to educate the patient about the prescribed medications and the regimen they should be following. Providing the patient with

adequate information will increase adherence to their adherence treatment. Doing so will reduce instances of relapse and rehospitalization while promoting social functioning.

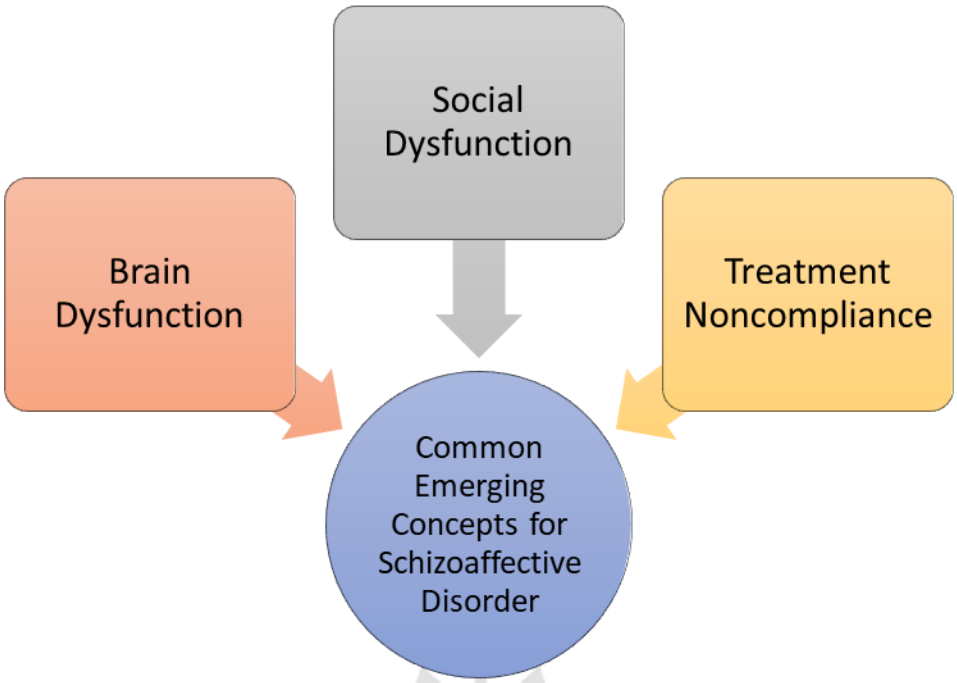

Figure No. 2: Common Emerging Concepts for Schizoaffective Disorder

Interventions for Treatment

Treatment for schizoaffective disorder is dependent upon the presentation of symptoms and usually involves a multifaceted approach. Initiation of therapy relies on presenting symptoms and the individual's willingness to stick to the treatment plan. In the articles that were used, major interventions were commonly focused on, including cognitive behavioral therapy, hormone therapy, and pharmacotherapies such as antipsychotics, antidepressants, mood stabilizers, and long acting injectables.

Hormone Therapy as Short-Term Treatment to Improve Social Detachment

One study used oxytocin therapy to improve social functioning in schizoaffective patients. Oxytocin is a hormone produced in the hypothalamus. Previous studies have identified that oxytocin has a role in infant-maternal bonding, social recognition, affiliative social behavior, and interpersonal trust [11]. Previous studies have also focused on social deficits in general and

found that oxytocin has improved interpretation of the emotional content of speech. In a study conducted at the University of North Carolina at Chapel Hill, stable schizophrenic or schizoaffective patients in an outpatient setting were given either daily intranasal oxytocin or placebo. Oxytocin was not found to improve overall social functioning but was found to improve negative symptoms. These negative symptoms include social withdrawal and refusal to speak. Oxytocin was found to have a more significant effect on single doses and short-term therapy than long-term treatment. These findings would need further research and testing to confirm the results, but they show an interesting short-term treatment to improve social detachment in withdrawn schizoaffective patients.

Cognitive Behavioral Therapy

Cognitive-behavioral therapy (CBT) is a non-medication therapy commonly used in schizophrenia spectrum disorders, which includes schizoaffective disorder. CBT's primary goal is to help the person decrease distressing symptoms such as hallucinations and delusions. The therapy consists of helping the person learn ways to cope, safety-seeking behaviors, work-related skills, and more. It allows people with schizoaffective disorder to cope with the external world by teaching them to function in it and cope with internal issues. Learning these skills helps them retain jobs, socialize normally, and increase resilience when episodes arise [12].

Certain CBT's go through an outline called the 5 P's (see Figure 3). The first P is presenting issues with which the client is struggling. Next, it goes on to predisposing factors or what makes the client vulnerable to these symptoms. After that, the precipitating factors are looked at, including what components of their lives contributed to triggering the disorder. They then examine what causes the problems to continue and the perpetuating factors. Lastly, they look at the protecting factors of the client. It shows them their strengths, skills, supports, coping techniques, and more and how to improve them to decrease their symptoms. The 5 P's approach combines maintenance and resilience, and client history formulations to achieve better outcomes [12].

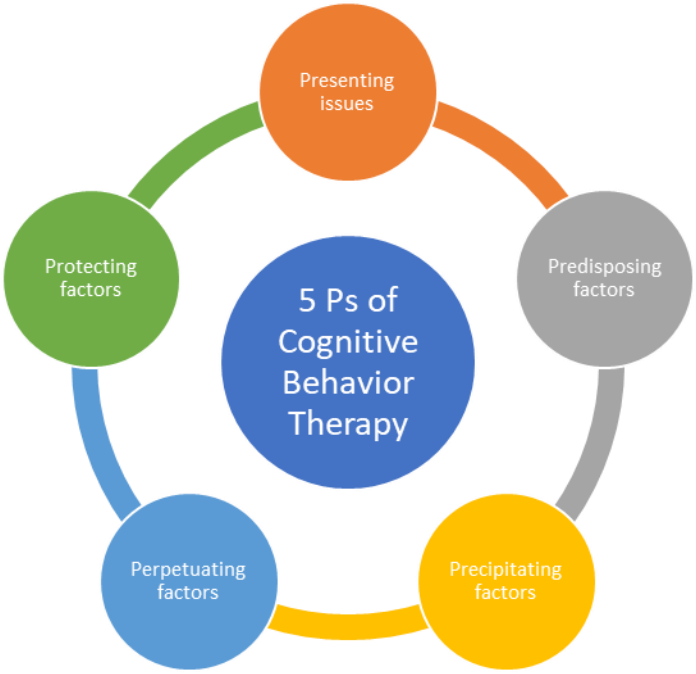

Figure No. 3: Five Ps of Cognitive Behavior Therapy

Another effective use of CBT is a treatment for individuals experiencing social anhedonia. For CBT to be effective, anhedonia should be viewed as a phenomenon that occurs due to a patient's beliefs instead of a symptom arising from neurological changes. These beliefs may stem from a negative memory or life experience that causes the patient to believe social interaction is bad or unenjoyable. Therapy would allow the individual to reflect upon those past negative memories or experiences that could have led to this alteration and learn new coping skills. During treatment, low expectancy for success in social interactions would be addressed, and skills to overcome the belief would be explained. When used with medications to treat depressive or withdrawn episodes, CBT can improve a patient's quality of life and perception of well-being. It can also reduce instances of relapse if the individual uses the skills and coping mechanisms they learned in therapy [13].

Medications

For the treatment of schizoaffective disorder, medications have proven to be effective. Several types of medications have been discovered as aiding in different areas of the disorder. These categories include antipsychotics, antidepressants, and mood stabilizers (see Figure 4).

Antipsychotics are the treatment of choice. There is currently only one drug on the market approved by the US Food and Drug Administration (FDA), and it is called paliperidone. It exists in two forms and has proven to be most effective in treating schizoaffective disorder. Paliperidone controls positive symptoms such as hallucinations and delusions and decreases anxious/depressive symptoms [14]. There are some cases where individuals do not respond to treatments, especially in cases of first-episode psychosis. When this occurs, another form of antipsychotic is used. Clozapine has proven to be most effective for these cases despite not being FDA approved for this disorder [15].

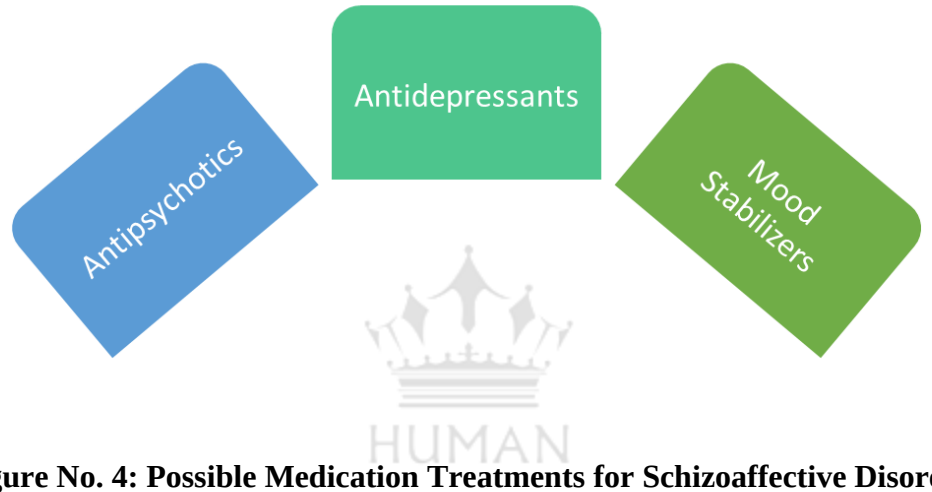

Figure No. 4: Possible Medication Treatments for Schizoaffective Disorder

Mood stabilizers are another form of pharmaceutical treatment that has proven effective for symptoms of schizoaffective disorder. Mood stabilizers help with the obsessive, affective, and paranoid symptoms that can accompany the disorder. Lithium is the first-line medication used and has proven to be highly effective in maintenance treatment [14]. Those with high agitation or aggression are considered for lithium. It has been approved for the treatment of acute mania and the prevention of recurring episodes of depression and mania. Studies also show that the risk of completed suicide decreases while individuals are taking this medication.

Another pharmaceutical class beneficial in treating schizoaffective disorder is antidepressants. The initiation of antipsychotics and antidepressants is the most therapeutic approach for those with the depressive type of this disorder. When paired together, there are decreased negative symptoms and a reduced risk of psychiatric hospitalization [15]. Depressive symptoms are aided,

which improves social and occupational functioning leading to improvements in the quality of life [14].

If treatment adherence is difficult for a patient, long-acting injectables (LAIs) are an option. LAIs can be used to replace oral antipsychotic medications but usually are used in combination with other oral medications such as mood stabilizers, antidepressants, and some other antipsychotics. These injectables reduce the rate of relapse and the need for rehospitalization because one injection can last from two weeks to a few months. As stated above, paliperidone is FDA approved; it is also an LAI used to treat the disorder. Another LAI used is risperidone. Risperidone is FDA approved as well, but for the treatment of bipolar disorder. Since many treatments of bipolar disorder are used to treat the bipolar side of schizoaffective, they are trying to receive FDA approval for this use [16].

Self-Management

Self-management is one way for a person to manage their diagnosis independently, in conjunction with the other therapy options. Colori [7] learned organizational skills that helped him with his schizoaffective disorder. Organizing the external world gave him a sense of control in his life and a sense of safety. The organization develops critical thinking skills to learn new concepts in a safe, low stakes environment. One concept that can be learned is prioritization, meaning organizing events in order of importance. Prioritization helps with cognitive development. People with schizoaffective disorder can take those prioritization skills from organizing and apply them to their thoughts to improve the way they think. It can create more of a sense of order in one's inner world [7].

CONCLUSION

Overall, schizoaffective disorder has a negative impact on a patient's social and interpersonal functioning. These individuals can even reach a point where they are unable to function independently. All aspects of the disorder impact social function. These include hallucinations, delusions, and paranoia that are present with schizophrenia, as well as the bipolar manic phase and depressive phase [17]. Treatment options can be used to improve their social functioning and quality of life. These include antipsychotics, long-acting injections, cognitive-behavioral

therapies, and hormone therapy. More research is needed to improve evaluation techniques for adherence to treatment and other self-management techniques to improve functioning.

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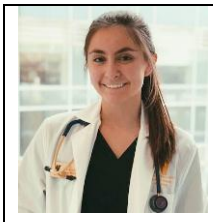	**Taylor M. Ash** *Bronson School of Nursing, Western Michigan University, Kalamazoo, Michigan, USA*
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