Case Study
Utility of Real-Time Video Teleconferencing in Conducting Family Mental Health Sessions: Two Case Reports

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ABSTRACT

Due to the worldwide mission of the military, service members often find themselves isolated from their families and other important people in their lives. Historically, this has been especially problematic during periods of illness, as the isolation has precluded the meaningful involvement of families in patient care. With the increased availability of real-time video teleconferences (VTCs), however, providers may now gain access to family members. The Inpatient Psychiatry Department at Tripler has conducted therapeutic trials of family meetings using real time VTCs. These meetings are used to facilitate social support and mend family disconnections. The high clarity images offered through this system were instrumental in developing a virtual interactive social presence among the participants. Despite the potential benefits of VTC in gaining accessing to family support, there is little mention of such clinical family meetings in the medical literature. This report describes two case examples of the application of real-time family VTC in the management of mental illness.

INTRODUCTION

The U.S. Army uses telemedicine technology in numerous applications throughout the world including mental health.1,2 One such example is the Inpatient Psychiatry Unit at Tripler Army Medical Center (TAMC) in Honolulu Hawaii. This unit provides service to active duty military members and their families stationed or deployed in various areas throughout the Pacific Rim Region. Notably, this includes 20% of all deployed U.S. service personnel worldwide.3

The Psychiatry Service is interested in utilizing teleconferencing capabilities in serving its patients who are often geographically separated from their immediate families for significant periods of time. This separation can play a significant role in the duration and intensity of mental illness. Hence, an effort to access the potential benefit of family support, treatment teams now utilize videoconferencing (VTC) to bring family members into the therapeutic process.4

Theoretically, important therapeutic benefits may also be accrued from family meetings by VTC. These include the capacity to establish an interactive virtual presence and to improve the therapeutic alliance between the treatment team and the family.5–13,25 Whereas there is
considerable literature on the relationship between the family and therapeutic outcomes, the use of VTC in this context has received only limited attention.\textsuperscript{14–23} The value of interactions with the family via VTC patients may be reflected in decreased length of inpatient stay and improved prognosis, and a quicker return to active duty. This paper presents two case reports that illustrate the potential utility of real-time family VTC in support of psychotherapy for geographically isolated psychiatric patients.

**MATERIALS AND METHODS**

Tripler Army Medical Center uses the videoconferencing system of the United States Army Medical Information System and Services Agency (USAMISMA). It consists of a multisite teleconferencing network, and it offers high-quality, cost-effective information exchange and technical support.\textsuperscript{9,24,26,27} The majority of patients admitted to the inpatient psychiatry ward at Tripler have family members within a 2-hour drive from a mainland VTC site in this system.

The treatment team locates a Department of Defense VTC site near the family’s home and schedules the conference. At the arranged time, the patient and care providers meet at the Tripler VTC site as the family meets at the other site on the mainland. Each conference lasts approximately 1 hour. The meetings begin with introductions of those present and an explanation about the equipment, confidentiality, informed consent, and risks (such as equipment failure or interception of message). Typically, the first part of the session is invested in rapport building, familiarization with the VTC system, and exchange of information about the patient’s diagnosis and course of treatment. Family members are encouraged to ask questions of the patient and the provider team. Similarly, treatment team members may solicit information from family members, and observe patterns of family interaction. As the session evolves, team members have the opportunity to facilitate the therapeutic process as they would in any other setting.

At present, 17 such conferences have been conducted, and the case reports are typical.

**CASE REPORT: #1**

The patient was a 34-year-old active duty military member, recently diagnosed with Bipolar Disorder (type 1). He was referred to psychiatry for evaluation after demonstrating inappropriate somnolence and emotional instability during legal proceedings. His behavior included grandiosity, inappropriate and persistent talking, and alternating episodes of sleep and uncontrollable crying. On one occasion during a formal hearing he took chewing gum out of his mouth, manipulated it, and then stuck it to his forehead. He was unable to relate to the proceedings or assist his defense counselors in court. He required admission to the Tripler inpatient psychiatry unit where he had a prolonged stay while his medications were adjusted for efficacy. At the time of his admission to the hospital, he was estranged from his wife and family, and he had no social or family supports on the island.

During the evaluation, the patient indicated that he had first received psychiatric outpatient care at the age of 13 when he experienced a period of depression. He was hospitalized in 1989 with symptoms that, in retrospect, were consistent with a manic episode. Again in 1997, he was hospitalized as a result of agitation and sleeplessness, accompanied by significant disorganization and hyper-religiosity after spending weeks staying up late at night consuming large quantities of caffeine while studying for professional advancement examinations. At that time, he was diagnosed with Bipolar Disorder. After discharge, he responded well to outpatient management until his court appearance when his symptoms reemerged.

During treatment for the current episode, it became evident that the patient’s only family support came from his father who lived near a mainland VTC site. The patient and the treatment team felt his father was generally supportive of his treatment. However, in telephone conversations, the father expressed doubts about his son’s treatment regimen. He was also concerned about certain rules at the inpatient unit, which he characterized as overly severe. This led him to question the sincerity of the treatment team’s interest in his son’s well-being. A videoconference was arranged to
strengthen the therapeutic alliance with the father and enlist his support as well as to address the patient’s feelings of isolation.

**Meeting**

The family meeting proceeded with introductions, a summary of the patient’s treatment plan, and a brief orientation to equipment. Briefly the patient and his father commented on each other’s looks, noting that it was good to see each other. The father asked if his son had received a letter he sent. He said it was nice finally to see the treating physician’s face after speaking with him by telephone on several occasions. He expressed his concerns about some of the inpatient ward rules, and wondered why his son had not been given privileges to move freely throughout the hospital. The clinician summarized the treatment to date, and explained that although the patient’s behavior had improved somewhat, his symptoms currently included socially unacceptable intrusions on people he met in the halls. The patient agreed and described how difficult it was at times to control his actions. The team answered several other questions. The patient’s father expressed his love for his son and encouraged him to keep trying to control these episodes. He also stated that he now feels the members of the treatment team were sincere in their efforts to help his son.

After his questions were answered, the father began to read scriptures from the Bible to his son. This prompted a supportive exchange between the two, which the patient described as encouraging and hopeful. At the end of the exchange, the father asked his son how his treatment was going. He said that his son looked tired and had, in fact, closed his eyes during the reading of the scripture. The son became tearful and expressed sorrow for his loss of function and the side effects of the medication (which made him drowsy). The father observed that his son had been smiling earlier, but now his expression was more sorrowful. He mentioned that he could see the tears streaming down his son’s face. He stated that such rapid changes in mood were one way he has experienced his son’s illness. He expressed his love and appreciation for his son and that he understood how distraught his son must be.

At the end of the meeting the father also became tearful stood up and slightly turned away. The son observed this behavior, and then acknowledged it as a characteristic of his fathers, demonstration of sorrow. The patient explained that this helped him to feel his father’s deep support for him. At this point, father and son expressed their love and support for each other, and the session ended. In later discussions, the patient and his father indicated that they found the VTC to be beneficial. Shortly after the meeting, the patient’s symptoms improved and he was granted privileges to move about the hospital. He verbalized a greater degree of acceptance of his condition, and readied himself for discharge from the hospital. In subsequent telephone conversations, the patient’s father expressed his confidence in and appreciation for the treatment team and thanked them for arranging the VTC.

**CASE REPORT #2: (CONSISTS OF TWO FAMILY VTC MEETINGS)**

A 52-year-old single homeless Vietnam veteran diagnosed with Schizoaffective Disorder was brought to the emergency room by police who apprehended him shoplifting. During the initial interview he was combative, wearing a pair of stolen women’s pajamas, and actively responding to auditory hallucinations. He was admitted to the psychiatric ward where he spent 5 weeks under court order. His condition improved substantially when treated with medication and therapy. However, he continued to suffer from episodes of mood lability and auditory hallucinations. Near the end of his stay, his treating physician contacted the patient’s family on the mainland. Who then described a 20-year history of multiple psychiatric admissions and arrests for petty theft. They had received only occasional disorganized telephone calls from him, as he roamed throughout the United States attempting to escape the voices (auditory hallucinations) that followed him. During treatment the patient was encouraged to contact family members he had not spoken to for several years. Through these conversations he learned that a sister was losing her job, and he expressed concern about her fi-
financial situation. He felt anxious for her welfare, but was unable to discuss his concerns with her on the telephone. He also wanted to address certain issues with his father, who he felt especially distant from despite the telephone conversations. The treatment team scheduled two VTCs with the father and sisters for the patient to reconnect with his family and to allow him to address issues with them.

First meeting

In the first meeting, the patient met with his sister on the mainland and his doctor. As usually, the session began with several minutes of introductions and familiarity with the equipment. The participants commented on each other’s appearance. Potential risks (including risks to confidentiality) were also discussed. The patient’s sister thanked the treatment team for arranging the VTC and then asked several questions concerning his care and treatment plan. The treatment team answered her questions directly and described the treatment plan briefly. During the meeting, the sister expressed her affection for the patient on several occasions. Each time he reciprocated appropriately. However, the team noted that whenever the sister gave direct advice, the patient interrupted her, became angry, and rejected her advice.

Near the end of the session, the patient mentioned his sister’s recent job loss, and expressed his concern about her financial condition. He expressed his love for his sister and desire to help her financially. She was able to explain the family situation and the arrangements that had been made to provide food and housing for her family. The patient expressed his relief that arrangements had been made.

After the meeting, the patient described his resentment toward his family for controlling him. He felt this one reason for him to stay away from home. He was also relieved that his sister had appropriate arrangements for housing and food. Along with his decreasing anxiety the treatment team noted substantial improvement in his symptoms of hallucinations and mood lability.

Second meeting

The second meeting occurred 1 week later. It included the patient’s father, stepmother, sister, and several nieces and nephews. The family expressed disappointment on learning that the patient’s primary physician on the ward would be rotating off the service. The sister noted that she had developed feelings of trust and rapport with the treating physician in the previous session. The patient was very happy to see his sister’s children for the first time in 5 years, and commented about how much they have grown. He repeated his concerns about his sister’s well-being. The patient’s father recounted some of his experiences with his son through the years and how difficult it had been for him to see the way his son was living. He said this is “the best I have seen you in a long time.” The patient was near tearfulness as his father expressed his emotions. Again, the patient became anxious and angry when his father and sister attempted to give him advice. In addition, his speech became less controlled, which allowed the therapist to note the adverse effect of advice giving on him. The therapist discussed this pattern of interaction during the patient’s individual therapy, which seemed to help him understand his anger when discounted and controlled by his family. He also began to understand how that pattern had affected his life and his illness. Several days later the patient was discharged after substantial improvement since admission. He was hopeful that with medication, continuing therapy, and more family involvement and interaction in his life he would continue to improve.

DISCUSSION

Some speculation may be warranted on the basis of the limited experience of these VTCs. For instance, VTC provides a basis for observing and interpreting body language and facial expression. In turn, this seems to facilitate the establishment of a virtual social presence (an atmosphere in which participants feel, communicate, and interact as if they are in the same room). In this environment participants are able to communicate in ways similar to what they do in-person. Hence, geographically isolated patients may be able to receive significant social support from their loved ones. On the other hand, clinicians observing these interactions may be able to identify dysfunctional as-
pects of the interaction and work toward their resolution. A skilled clinician may be able to utilize the VTC to develop an atmosphere of trust and comfort among the participants, and to encourage them to discuss important issues. A trusting atmosphere would allow family members to become more actively involved in the treatment plan. For example, they might encourage the patient to comply with medication recommendations or to change their pattern of relationship with the patient. All factors may mitigate some of the effects of geographical isolation on treatment of military patients.

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