Family-focused therapy via videoconferencing

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Summary
A 30-year-old veteran with a diagnosis of schizoaffective disorder and his mother were referred for family-focused therapy (FFT), an empirically-supported, manual-based treatment. The veteran had had multiple hospitalizations and experienced chronic auditory hallucinations for self-harm. Minor modifications to FFT were made for implementation via videoconferencing (at a bandwidth of 384 kbit/s). This may have enhanced the treatment by making the process of communication and problem-solving more explicit. The course of FFT was successfully completed, and the veteran and family showed a high level of satisfaction with care as well as improved medication adherence, good quality of life, high levels of hope, good interpersonal functioning, and very mild negative and positive psychiatric symptoms. This veteran had previous exposure to telemental health, which may have influenced his willingness to receive tele-FFT and perhaps affected the outcome of the case. The ability to provide this type of service to people in rural areas is important.

Introduction
Despite the growing practice of telemental health, there are few reports of structured, evidence-based, manualized psychosocial interventions focusing on psychiatric conditions. Only one of these reports concerned a structured family treatment. There have been randomized trials of videoconferencing for eating disorders, post-traumatic stress disorder and depression. These show equivalent psychiatric outcomes for telemedicine compared with face-to-face management.

Although there are published descriptions of telemental health with families, there is little information about structured family psychosocial interventions delivered via videoconferencing. Family interventions have been successful in preventing recurrences of major psychiatric disorders, but the value of videoconferencing is unknown.

Family-focused therapy (FFT) is an evidence-based, structured psychoeducational family intervention for individuals with bipolar disorder. Three randomized studies of FFT combined with pharmacotherapy have shown lower relapse rates and hospitalizations, enhanced mood stability and better adherence to medications relative to comparison treatments among bipolar adults. One of these studies, conducted in practice settings, indicated that FFT combined with pharmacotherapy led to a higher recovery rate and shorter times to recovery than brief psychoeducational intervention.

In 2005, the Denver VA Medical Center (VAMC) developed a programme of FFT and extended it to veterans in rural areas via telemedicine.

Background
In FFT, a therapist meets the patient and designated family members for 21 sessions over nine months. Sessions cover specific psychoeducational material, such as relapse prevention planning and skill training relevant to communication and problem solving. While FFT is structured in its approach, it has flexibility to address unexpected problems that arise.

Although FFT was designed for bipolar disorder, it was extended to individuals with schizoaffective disorder at the Denver VAMC. This required different diagnosis-specific psychoeducational materials, because of the differences between the diagnoses. The patient described in this report was treated by co-therapists, although FFT is usually provided by a single therapist.

The FFT took place from April 2006–September 2007. The co-therapists were located at the Denver VAMC in a small private office that housed a videoconferencing unit, with a 69-cm monitor. The veteran and his mother were located in a private room in a VA satellite clinic with a similar
Case report

John, a 30-year-old veteran with a diagnosis of schizoaffective disorder and his mother were referred for FFT by his psychiatrist who provided John with medication management through the satellite clinic for the previous year. At the time of intake, John lived in a house near his parents in a remote rural area. Earlier in his life, he had lived in a metropolitan area group home to ensure proximity to medical services and allow illness monitoring. John had been hospitalized at the VA approximately every 18 months. His length of stay ranged from 11 to 75 days. While John wanted to live independently, he knew that this meant that his mother would have to play a central role in his care (e.g., monitoring his medications). Prior hospitalizations were precipitated by medication noncompliance and psychotic decomposition marked by chronic auditory hallucinations for self-harm.

Engagement stage

In the first session, goals and expectations for the treatment were discussed with John and his mother. John noted that his goals were to ‘stay out of the hospital and to take responsibility for my meds’, ‘be less isolated and more independent’ and ‘have an open relationship with my mom, with less bickering’. John’s mother added that she would like to ‘have separate lives, but be there for one another’. FFT, with its emphasis on psychoeducation, communication enhancement training and problem solving, fits well with these goals.

Modifications for telemedicine

Treatment handouts were faxed to the satellite clinic for each session and provided to John and his mother when they checked in. Other modifications for telemental health included scheduling appointments to coincide with John’s medication management appointments every 2–3 weeks. Because travel to the satellite clinic took more than an hour, flexibility in scheduling appointments to coincide with other appointments was essential.

During the first telemental health session, John’s mother stated that she had impaired hearing and asked us to pan the camera so that she could read lips. With this modification, along with our efforts to speak slowly and continuously, we developed effective communication. Although potentially an obstacle, this process opened pathways to model communication skills, identify nuances in non-verbal and verbal interaction, and reinforce principles of effective communication.

Psycho-education

During the initial sessions, information about schizoaffective disorder was solicited using a symptom checklist. John described past episodes where he experienced paranoid delusions (e.g., his neighbour coming into his house), delusions of reference (e.g., the TV talking to him), auditory command hallucinations (e.g., voices telling him he was worthless and to hurt himself), and extreme mood fluctuation. Psychoeducation involved eliciting attitudes, beliefs and experiences regarding the illness and providing information, therefore heightening John and his mother’s awareness of how the illness had affected their relationship and how their relationship affected the illness. Medication adherence was also discussed as John’s medications had recently been changed. The psychoeducation module culminated with the formulation of a relapse prevention plan based on information such as symptoms and life events that typically precede an exacerbation, as well as risk and protective factors. The relapse prevention plan was generated through a discussion directed by John, and included specification of the person who John would ask for help if auditory hallucinations for self-harm returned (e.g., father, then mother) and what they should do to help him (e.g., to call specific VA providers and take him to the local hospital).

Modifications for telemedicine

We were able to include the psychiatrist in some of the sessions without difficulty, something which occurs rarely in face-to-face FFT. John had received medication management by telepsychiatry during the previous year. His psychiatrist had participated in several psycho-education sessions, enabling the psychiatrist to educate John and his mother about medications and coordinate care objectives. Although John experienced delusions of reference involving the TV talking to him in the past, he had no difficulty with videoconferencing in this treatment or during his prior telemental health treatments. Nor did he develop paranoia or ideas of reference focused on the equipment. His ease with the approach probably reflected his familiarity with the modality, consistent medication adherence and the supportive team approach.

Communication enhancement training

The communication skills presented in FFT include: expressing positive feelings, active listening, making a positive request for change and expressing negative feelings about specific behaviours. Verbal and non-verbal aspects of communication were addressed and John and his mother...
were encouraged to provide feedback to one another in this process. In FFT, skill training focuses on role playing these skills during sessions to learn the skill. Through this process, John and his mother realized several things. First, John’s mother was able to see how her tone of voice was perceived as critical because of her overcompensation due to her hearing loss (e.g. speaking loudly, sharply and repeating herself). John was able to experience his own impatience while listening to his mother and understand how this would sabotage communication between the two. John and his mother both required active redirection during practice and their joint tendencies were to talk for long periods of time without listening to the other.

**Modifications for telemedicine**

Modifications to communication skills training included the need to repeat instructions more than usual for FFT as well as having visual feedback from the monitor. With the former, non-verbal communication between the therapists and John and his mother was identified and discussed as well as the communication between them. Verbal feedback was continuously solicited regarding communication, in part, to clarify instructions. Feedback from the monitor and camera close-ups generated spontaneous discussion about verbal and non-verbal styles, as well as the opportunity to develop further rapport through humour in reflecting on the process necessary to communicate. Because John’s mother’s hearing impairment required us to pan the camera for almost every interaction, we used this opportunity to comment on coping with challenge.

**Problem solving**

Problem-solving was introduced as a multi-step process that included: defining the problem, generating solutions, evaluating each solution, choosing a solution, planning how to carry out the solution, anticipating what might go wrong and implementing the solution. John and his mother addressed a range of problems including the latter’s conflicts with his younger brother, how to handle problems with his pets and medication management issues. Both John and his mother tended to race through the first steps of problem solving, generate a solution, evaluate it instantly and dispose of it before fully describing it to the other. By slowing this process down and enabling them to fully assess a problem and reach a joint solution, they could enlist the other’s help in the problem. John enjoyed feeling that he could help his mother with problems and act as a resource, as opposed to being the source of her problems.

**Modifications for telemedicine**

The modifications for problem-solving were similar to those for communication skills, with an emphasis on making sure instructions were understood and that John and his mother moderated the process independently. Homework assignments were handled similarly to the way they were dealt with in face-to-face sessions. They were reviewed at the outset and completed in session if necessary.

During the course of the problem-solving module, John was beginning to develop more independence surrounding monitoring his own medications. During this time, John began to flush his medications down the toilet, believing that they were poison. John’s mother informed us that she suspected John was symptomatic and put the relapse-prevention plan into action. She contacted the VA when John reported that the voices were telling him to get rid of his medications and to hurt himself. John’s mother drove him to a local hospital emergency department and he was transferred to the Denver VA shortly thereafter. John recovered after a few days in the inpatient unit, not having decompensated as he had during past hospitalizations.

We used subsequent sessions to assess symptoms (including monitoring delusions of reference surrounding telemedicine) and problem solve around medication management, successfully working out a plan where John’s mother could monitor his medication unobtrusively.

**Outcomes**

When asked for verbal feedback regarding the treatment during the last session, both John and his mother spoke very positively about the experience. They specifically identified communication skills as the most helpful aspect of the treatment, specifically to stop and think about how to communicate a message effectively. John’s mother stated that she appreciated the therapists’ patience and efforts in panning the camera for each interaction to adapt to her hearing impairment. She noted that many people chose not to make efforts to communicate with her out of frustration. She compared her hearing loss with her son’s schizoaffective disorder: they both had debilitating conditions, but could cope and find ways to surmount the challenges. She added that the length of time spent in treatment was gratifying and having a plan had helped her to work through an acute episode.

Prior to FFT, John had been hospitalized for several weeks due to a relapse of his psychosis. While he had previously been hospitalized approximately every 18 months, John was not hospitalized for over two years after the treatment. John completed measures reporting quality of life, hope, general functioning and psychiatric symptoms 18 months after beginning FFT. His self-reported treatment outcomes included ‘good’ quality of life (Quality of Life Enjoyment Scale-Q), ‘high’ levels of hope (Hope Scale), ‘good’ interpersonal functioning (Life-RIFT), and ‘very mild’ negative and positive psychiatric symptoms (Brief Psychiatric Rating Scale). His medication adherence ratings changed from ‘not at all adherent’ to ‘fully adherent.’
Provider impressions and experience

The providers encountered occasional technical problems that did not affect the treatment. These included occasional freezing of the video picture, at which point providers and participants repeated what was said. This was an opportunity to model flexibility and problem-solving when a solution was possible (e.g., checking equipment) and find ways to cope with frustration when a solution was not possible (e.g., acknowledging an ongoing problem such as a slight echo in the audio).

Discussion

This appears to be the first report of FFT being administered via videoconferencing and is one of a small number of reports on structured, evidence-based psychosocial interventions delivered to rural populations using telemental health.2–6 At a conceptual level, the ability to provide this type of service to people in rural areas is important, as it is targeted at strengthening the natural ecosystem of the individual and family, regarding the signs and symptoms of mental illness. Two lessons can be learned from the present case. First, it is possible to provide this type of service via videoconferencing. Second, the potential obstacles to facilitating family dynamics (e.g., structuring role plays) were not detrimental to the treatment.

For example, interrupting to reset interactions appeared not to get in the way of teaching skills and may have enhanced self-monitoring on the part of participants through repetition and self-monitoring through the video feedback. Furthermore, as studies of FFT have shown impressive results regarding illness management and decreased hospitalization, these effects may also be relevant to those receiving FFT via videoconferencing.

This veteran had previous exposure to telemental health, which may have influenced his willingness to receive tele-FFT and perhaps affected the outcome of the case. In addition, the ability to coordinate with the psychiatrist in sessions was probably an asset, providing a team approach. Further work needs to be done to assess whether previous familiarity with telemental health affects treatment outcome. Clearly, further research is also needed to explore who may and may not benefit from this type of intervention, and methods of adapting evidence-based treatments to videoconferencing.

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