

# Telepsychiatric assessment of a mariner expressing suicidal ideation

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## ABSTRACT

*This case report highlights the successful use of telepsychiatric consultation by secure video chat to remotely assess a mariner expressing suicidal ideation. As a result of this intervention, telemedicine providers initiated psychiatric stabilisation while the mariner was still aboard the vessel, determined that he was safe for repatriation under the care of qualified medical escorts, and facilitated admission to a psychiatric facility near his home in the United States. Mental health emergencies are a significant cause of morbidity and mortality among mariners. Telepsychiatry is a validated method of establishing a psychiatric diagnosis and disposition as well as assessing risk of suicidality and the potential for violent decompensation. It has the potential to be a valuable adjunct to any traditional maritime telemedicine service.*

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**Key words: telepsychiatry, maritime medicine, telemedicine, suicidal ideation**

## INTRODUCTION

Data compiled between 1960 and 2009 indicate that approximately 5.9% of all seafarer deaths were a result of suicide. Fatigue, separation from family, social isolation, lack of shore leave, and personal disputes have been identified as common factors in the maritime industry that may contribute to suicidality [1]. Telepsychiatry – the use of telecommunications to both remotely assess and treat psychiatric patients – is a well-established practice in rural and other remote environments where access to traditional psychiatric care is limited [2–4]. As secure video communication equipment is becoming increasingly available aboard ships, maritime telemedicine providers may be able to leverage this capability to quickly assess and begin treatment for mental health emergencies at sea. In this case, emergency medicine and psychiatry physicians providing telemedicine support to a commercial shipping company used the Digigone® SecureChat™ system to remotely assess a mariner expressing suicidal ideation to his captain. As a result of this timely care, the patient was able to be remotely evaluated, avoiding psychiatric hospitalisation abroad, and repatriated to the United States for admission to a psychiatric facility for further evaluation and treatment.

## CASE REPORT

A 48-year-old Able-Bodied Seaman aboard a United States flagged 292 m container vessel awoke his captain in the middle of the night and admitted to having severe anxiety, depression and thoughts of wanting to jump off the ship into the ocean. The captain called his maritime telemedicine support service (The George Washington University Medical Faculty Associates Maritime Medical Access [GW MMA]) where he was connected to an emergency medicine physician. The captain had implemented suicide precautions immediately and, after physician consultation, the patient was confined to a secured stateroom devoid of dangerous objects. His belt and shoelaces were removed, and a diazepam regimen was established to treat his agitation, anxiety and insomnia. The captain notified his company that the patient required evacuation from the vessel and repatriation home. However, per company policy the patient could not return home until deemed “fit to fly” by a physician. Complicating matters was the fact that the vessel’s closest port would not allow the patient to disembark because he did not have a visa. This delayed his evacuation by 1 day. GW MMA provided a psychiatrist to perform a telepsychiatric assessment of the patient. Both telephone as well as secure video

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chat equipment were utilised to assess the patient's level of agitation, psychological history and to determine his risk of immediate further decompensation. It became apparent that the patient had been dealing with manic episodes of varying intensity for at least the last 15 years as well as untreated attention deficit disorder. He had been sporadically taking bupropion and paroxetine for several years. For the past 3 weeks, the patient had been experiencing intense feelings of grandiosity and optimism consistent with his manic episodes followed by feelings of intense loneliness and hopelessness. He was unable to sleep for much of the past 3 weeks and developed severe anxiety. He admitted to feeling like a burden to his crewmates which precipitated his suicidal ideation. Of note, he also stopped and then restarted his bupropion and paroxetine. By using the secure video chat equipment, the psychiatrist was able to visually and verbally assess that the patient – after having started to take diazepam – was calm and not acutely agitated. He assessed that the patient's recent manic episode may have been caused by the abrupt cessation of his antidepressant medications as well as by multiple psychosocial stressors that resulted from being away from home and at sea. He recommended that suicide precautions be maintained while aboard the vessel and agreed with the use of diazepam to control agitation and help the patient sleep. He determined that the patient was fit to fly if accompanied by a repatriation team consisting of a paramedic and an assistant who were equipped with injectable haloperidol and lorazepam. He also prescribed valproic acid to help control mania. The repatriation team met the patient on the vessel in port the following day and escorted him back to a psychiatric facility in the United States without incident, and without stopping for evaluation in a local hospital.

## DISCUSSION

Mariners with previously well-controlled psychiatric disorders that may have gone un-reported or un-noticed during pre-employment medical screenings may acutely decompensate while aboard the vessel due to these psychosocial stressors or by having an inadequate supply of their psychiatric medications. When a mariner experiences a mental health emergency at sea, crewmembers are often diverted from mission-critical tasks to help ensure patient safety as well as security of the crew and the vessel. Placing a mariner under continuous protective watch takes at least 1 crew member away from his usual assignment, and controlling an acutely agitated or aggressive patient may cause injury to the patient, the crew, or equipment. Vessels typically must divert to the nearest port where the patient can disembark and be taken to a psychiatric facility for evaluation and, if necessary, stabilisation prior to repatriation. The cost of diverting a commercial shipping vessel can

easily exceed \$100,000 USD [1], and under United States law, the employer must also cover the mariner's incurred medical expenses. According to data from the World Health Organisation, access to mental health services in low and middle income countries is severely lacking. In some cases, low income countries may only have 1 psychiatrist per 2 million people [5]. Psychiatric evaluation of a patient presenting for care in a foreign country is challenging – even under optimal circumstances – in that language barriers and differing cultural norms may skew a medical provider's assessment or hinder treatment.

Psychiatrists have been utilising telecommunications to evaluate and treat mental health patients in the United States since 1959, and several studies have demonstrated telepsychiatry's accuracy and reproducibility in establishing a diagnosis [3]. A recent study of mental health patients presenting to an emergency department in the United States assessed the inter-observer agreement in establishing an Axis I diagnosis and a disposition between psychiatrists interviewing the patient face-to-face and by video teleconferencing equipment. There was no statistical difference in the diagnoses given or the disposition of the patient between the face-to-face group and the video teleconferencing group. Additionally, there was no statistical difference in determination of violence risk or suicidal ideation using common assessment scales. Psychiatrists in both groups indicated a high confidence in their assessments [4]. These data collected in an emergency department cannot be completely extrapolated to the maritime environment, however it is encouraging to note that telepsychiatry does appear to have utility in psychiatric risk assessment. Assessing the potential for violence and suicidality are crucial aspects in determining whether immediate hospitalisation is required prior to repatriation.

Telepsychiatric assessment should ideally incorporate both audio and video components as video is necessary for the practitioner to engage the patient and to pick up on non-verbal communication [3]. It can be useful to help establish mental status and level of agitation as well. DigiGone® SecureChat™ technology utilizes satellite communications to provide a low-bandwidth, encrypted video teleconferencing capability for the maritime industry. In this particular case, the vessel in question was able to download the software and use a webcam to assist with the assessment. While this technology is well-suited for telemedicine due to the encryption and ability to consume only a small bandwidth, a simple webcam is readily available and economical and can be leveraged across other aspects of shipboard life (troubleshooting mechanical problems with a remote expert, maintaining connections with shoreside family, etc.).

While telepsychiatry can facilitate timely psychiatric evaluation and can potentially expedite repatriation and

treatment for some mariners experiencing mental health emergencies, we do recognise that patients who are acutely agitated or are assessed to have a high risk of suicidality or potential for violence should still be stabilised in the nearest port prior to any attempt to repatriate them. In the event a patient is not immediately fit to fly, the initial telemedicine encounter will still be useful to formally establish the need for immediate hospitalisation and to obtain a baseline evaluation of the patient's condition prior to any intervention.

## CONCLUSIONS

Telepsychiatric assessment in mental health emergencies is an established practice and improves access to care for patients in remote land-based environments. Maritime telemedicine providers should be encouraged to explore the possibility of expanding their practice to

incorporate remote psychiatric assessment by secure video chat. Doing so may help identify high risk patients, improve the quality of care, and potentially reduce costs to the client.

## REFERENCES

1. Iversen RT. The mental health of seafarers. *Int Marit Health* 2012; 63: 78–89.
2. Hilty DM, Ferrer DC, Parish MB, Johnston B, Callahan EJ, Yellowlees PM. The effectiveness of telemental health: a 2013 review. *Telemed J E-Health* 2013; 19: 444–454.
3. Deslich S, Stec B, Tomblin S, Coustasse A. Telepsychiatry in the 21<sup>st</sup> century: transforming healthcare with technology. *Perspect Health Inf Manag.* 2013; 10 (Summer): 1f.
4. Seidel RW, Kilgus MD. Agreement between telepsychiatry assessment and face-to-face assessment for emergency department psychiatry patients. *J Telemed Telecare* 2014; 20: 59–62.
5. Investing in Mental Health: Evidence for action. World Health Organization, Geneva, 2013.