

Byeongsang Oh, PhD , Diana Van Der Saag, RN, PGC, Morita Morgia, MBBS, FRANZCR, Susan Carroll, MBBS, FRANZCR, Frances Boyle, MBBS, FRACP, PhD, Michael Back, MBBS, FRANZCR, PhD, and Gillian Lamoury, BMED, FRANZCR



# An Innovative Tai Chi and Qigong Telehealth Service in Supportive Cancer Care During the COVID-19 Pandemic and Beyond

**Abstract:** *Supportive cancer care services, including acupuncture and Tai Chi and Qigong (TQ), are offered to cancer patients to manage cancer symptoms and/or treatment-related adverse effects and improve quality of life during and after standard care. Normal face-to-face acupuncture and TQ group services were suspended during the coronavirus (COVID-19) pandemic to reduce the risk of transmission of infection and meet social distancing restriction guidelines. This led to a sudden shift from face-to-face sessions to telehealth sessions in the health care system. We report patients' experiences of TQ telehealth services as a new initiative developed for cancer care. We found that delivery of TQ telehealth is feasible and resulted in increased overall patient satisfaction with cancer care services during the lockdown. The delivery of TQ telehealth experiences and challenges are discussed.*

**Keywords:** Tai Chi; Qigong; telehealth; cancer; supportive care

Several countries worldwide, including Australia, implemented lockdown during the outbreak of the novel coronavirus pandemic (coronavirus disease 2019 [COVID-19]) in early 2020 that posed extremely difficult challenges for health care globally.<sup>1</sup> In March 2020, the

and Skype, while face-to-face allied health services, including acupuncture, were suspended from March 23, 2020, to May 22, 2020, at GenesisCare (Private Cancer Centre, Mater Hospital in North Sydney, Australia). The GenesisCare Cancer Centre had introduced

 **TQ [Tai Chi and Qigong] combines gentle stretching exercises with meditation and is a classical mind-body exercise . . . [and] has been practiced as a health preserving activity for many centuries.** 

Australian government introduced new telehealth services in the health care system to reduce the risk of COVID-19 transmission.<sup>2</sup> In response to the pandemic and the government's telehealth initiative, a Tai Chi and Qigong (TQ) program shifted from face-to-face group sessions to individualized telehealth sessions via ZOOM, FaceTime,

acupuncture and TQ services in 2018 as supportive care for cancer patients during and after cancer treatments.

Several studies have demonstrated that physical activity and meditation have positive impacts on the physical and psychological well-being of cancer patients and are recognized as essential adjunctive treatments to support usual

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cancer care.<sup>3,4</sup> TQ combines gentle stretching exercises with meditation and is a classical mind-body exercise originating in China that has been practiced as a health preserving activity for many centuries.<sup>5</sup> Recently, a number of TQ studies have demonstrated the positive impact of TQ on physical conditions such as arthritis,<sup>6</sup> cancer,<sup>7</sup> diabetes,<sup>8</sup> falls prevention,<sup>9</sup> fibromyalgia,<sup>10</sup> osteoarthritis,<sup>11</sup> chronic pain,<sup>6</sup> and cognitive function.<sup>12</sup> Evidence also supports the psychological benefits of TQ, particularly for symptoms of anxiety and depression.<sup>13</sup> In the current health care crisis, with the sudden outbreak of the COVID-19 pandemic, several TQ instructors and schools have attempted to promote TQ for well-being of the general public via online programs including ZOOM, FaceTime, YouTube, and Skype.<sup>14</sup> However, evaluation of TQ telehealth services in cancer care within hospital environments is limited at present. Here, we report our experience of delivering TQ telehealth in a cancer treatment center during a lockdown period in Sydney, Australia.

### TQ Service via Telehealth

During the lockdown period, 12 patients (breast cancer [n = 11], gynecology cancer [n = 1]) were referred to the TQ program. Eleven patients joined the TQ program via telehealth and one patient did not respond to the referral by email. A total of 39 sessions were offered at the cancer center during the lockdown. Of the 11 patients who participated in the TQ telehealth program, 3 completed 2 sessions, 5 completed 3 sessions, and 3 completed more than 6 sessions.

Participants main symptoms were anxiety (n = 7), stress (n = 10), disturbed sleep (n = 5), fatigue (n = 5), peripheral neuropathy (n = 3), and joint pain and stiffness (n = 6). All participants had more than one medical symptom. After 2 to 6 sessions of TQ, participants reported that they felt relaxed, enjoyed the TQ telehealth sessions, and were satisfied with the

services, which helped them better manage their cancer-related symptoms. After the lockdown was lifted, 2 patients continued with an ongoing TQ program via telehealth and the face-to-face group TQ program recommenced on 20 June with 2 to 3 patients. In July, a face-to-face TQ program was offered with a maximum of 5 participants enrolling and followed social distancing guidelines to prevent the risk of COVID-19 transmission. Prior to the pandemic, 3 to 15 participants attended a weekly Saturday face-to-face TQ group program.

### Challenges in the Administration of TQ via Telehealth

In the beginning of the first week both TQ instructors and participants were not familiar with the telehealth ZOOM and Skype software programs. The FaceTime software program was easier and simpler to use, but a major barrier was using the software with the small screen of a mobile phone, as the movements on the small screen were not clear to instructors and participants. Delivering TQ telehealth via ZOOM and Skype was more comfortable and effective using a bigger screen on laptops/desktops after installing the software program. However, time-lag delays in movements and screen interference often occurred when an internet connection was not stable. To improve the delivery of TQ via telehealth, it will be necessary for both the TQ instructors and participants to trial the software programs and internet connections before commencing TQ telehealth and for both to become familiar with connection procedures. Providing internet technical (IT) services by an IT department will also be worthwhile, particularly as some elderly participants will likely have difficulty with new telehealth software programs.

Prior to the pandemic, most TQ instructors were concerned more about limitations of TQ via telehealth than its benefits with concerns expressed about its cost-effectiveness. TQ communities

also expressed concern that telehealth was not an appropriate mode of delivery for TQ because of the complexity of TQ movements and safety-related aspects of remote delivery. The cost of the TQ telehealth service was reimbursed by the GenesisCare allied healthcare financial packages available to participants during the pandemic. After the lifting of the lockdown, limited funding was the main barrier for participants continuing with long-term TQ telehealth sessions and patients who received telehealth TQ services reported that they wanted to continue the program to help manage their medical conditions. At present, TQ services are not included in the Medicare benefits schedule or in private health insurance rebates in Australia. Future studies are planned to evaluate the delivery type and benefits of TQ services (face-to-face vs telehealth) in cancer care. Although public awareness of telehealth in allied health has increased as a result of the current pandemic, lessons learned from our experience suggests that guidelines on TQ telehealth training and education including referral pathways, safety concerns, documentation, patient's privacy, and remuneration of costs must be developed to allow TQ telehealth programs to become an integral part of the health care system for other cancer care centres.<sup>15</sup>

### Conclusion

The COVID-19 lockdown and social distancing restrictions during the pandemic allowed an opportunity for the prompt commencement of telehealth services in health care. We found that the delivery of TQ services via telehealth was feasible and increased patient's overall satisfaction with cancer care services and improved their quality of life. During this difficult period, the introduction of an innovative TQ telehealth program to maintain supportive cancer care services was welcomed by patients and a need to develop guidelines for TQ telehealth training and education for

clinical applications in cancer care was identified as essential for the future development of telehealth services.

### Author Contributions

BO, GL, and DS cooperated on developing the concept design and preparing the manuscript. Drafting of the manuscript: BO and GL. Critical revision of the manuscript for important intellectual content: All authors.

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### ORCID iD

Byeongsang Oh  <https://orcid.org/0000-0002-7204-6716> 

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