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Introduction

Genetic counselling empowers patients and their families who may have or be at risk for genetic disorders, to make informed decisions by providing them with the necessary information and tools. Undoubtedly, the COVID-19 pandemic imposed significant challenges to the continuance of this valuable service. With genetic counselling services being offered almost exclusively through telehealth, genetic clinicians had to adjust the way in which they fulfilled their responsibilities.

This study focused on over-the-phone services offered by clinical genetics professionals who practice at the Autism Integrated Medical Services (AIMS) clinic in Richmond, BC, and/or the Provincial Medical Genetics Program (PMGP) at B.C. Children's and Women's Health Center in Vancouver, BC.

Three clinical genetics professionals were interviewed in depth and feedback was collected regarding their satisfaction, efficiency and productivity with virtual or over-the-phone genetic counselling services in light of the COVID-19 pandemic.

Methods

Research Question Formation

Comprised a list of open questions that explored the different aspects of telehealth from the perspectives of genetics health professionals.

Participant Selection

Recruited three experienced and skilled clinical genetics professionals by email.

Interview Conduction

Conducted and recorded 15-30 minute phone interviews. Questions were sent out to interviewees prior to the interview. Created transcripts based on the recordings.

Data Analysis And Interpretation

Analyzed all 3 transcripts, drew comparisons between the participants' answers and summarized the major themes.

Results

Prior Experience with Telehealth:

While none of the participants in this study had experience providing genetic counselling over the phone as an initial appointment tool, one participant had experience collecting relevant information such as birth and medical history via phone prior to a patient's first genetic counselling appointment. Another participant occasionally reviewed results over the phone during follow up appointments, in instances where an in-person visit was not possible.

Transition to Telehealth:

In comparison to other virtual services, such as Zoom For Health or Skype, the participants expressed that over-the-phone counselling was a more popular and efficient method during the pandemic. According to one participant, the transition to over-the-phone genetic counselling only took 48 hours in early April. For the other two participants, it took until the end of April for both phone counselling and Zoom For Health to become available.

Overall Findings:

The participants expressed greater satisfaction using this service and noted increased efficiency and productivity. They believe that the benefits of over-the-phone genetic counselling outweigh its limitations and are hopeful that it will become a permanent addition to genetic counselling services.

Table 1. Overall feedback obtained regarding important aspects of telehealth

Categories	Feedback
Benefits	<ul style="list-style-type: none"> Greater efficiency Increased convenience Reduced travel time Lower no-show rates Shortened waiting times Greater patient satisfaction Increased degree of anonymity Greater opportunity to discuss deeper issues Largely uncompromised social presence and connection
Limitations	<ul style="list-style-type: none"> Lack of visual aid for patients Less thorough physical examinations Greater effort required to build rapport Inefficient language interpretation services Minor technological difficulties Confidentiality concerns

Conclusion

Our results indicate that as a consequence of the COVID-19, the transition to over-the-phone genetic counselling has been largely successful in increasing the efficiency, satisfaction, and productivity of genetics health professionals. However, it must be noted that this transition has not been without its challenges. It is evident that the inability to carry out full physical examinations, to notice physical cues, and to provide visual aid to patients poses barriers to providing the best possible care for patients. As suggested by participants in this study, there is an opportunity for genetic counselling services to move towards a system which incorporates both of these methods for maximum satisfaction and improved clinical management. Therefore, it would be important to explore the ways in which this system can be streamlined and perfected in order to overcome the aforementioned barriers.

Future Directions

The results of our small scale study cannot confidently rule out the possibility of decreased satisfaction, productivity and/or efficiency of genetics health professionals with regards to telehealth. More data and interviews with physicians and genetic counsellors are required before any concrete conclusions can be drawn. Future participants will be asked to fill out a survey posing similar questions as the ones used in this study, which will allow us to quantify the collected data.

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