**Which Interprofessional Journal ?**

**Interprofessional Care**

*Looks at collaboration with and between professions and organisations and with service users, carers and communities.*

**journal of interprofessional education and practice**

*provides innovative ideas for interprofessional educators and practitioners through peer-reviewed articles and reports.*

**TITLE**

**Introduction**

Telehealth is the technology-based (e.g., phone, internet-based communication) provision of clinical services (e.g., medical consultations also called ‘Telemedicine’) and non-clinical services (e.g., meetings, education/training) to remote locations. During alert levels 3 and 4 of the recent Covid-19 lockdown, many professionals working in Aotearoa New Zealand found themselves ‘working from home’ using online video/audio calling services (e.g., Zoom, Skype etc.) to engage with colleagues and clients. Health practitioners also went from ‘in person’ consultations to online video/audio calling consultations with clients/patients and it is this use of telemedicine that is the focus of the work reported here

**Background**

In 2019 an Educational Research Forum was developed within the Christchurch Health Precinct (Te Papa Hauora) the aim of bringing together those involved in both undergraduate and postgraduate education across professions and organisations to develop a collaborative forum for research innovation and sustainability. Te Papa Hauora was established in Christchurch in ……….. and at its heart is the Manawa building which was established as an educational facility designed to foster collaboration between the Ara Institute of Healthcare, the University of Canterbury and the District Health Board. The University of Otago also has presence within Te Papa Hauora and their Christchurch Simulation Centre is nearby. The purpose of Te Papa Hauora are to promote:

* Advocacy and Leadership
* Health Research
* Professional Learning and Development
* Innovation in Health

It is not clear what model works to build collaborative understanding of each other’s perspectives, profession and each other’s professions perspectives of education ‘with, from and about’ each other in the process of doing research. As a group we sort to move beyond networking to build a dual Professional & Interprofessional Identity (Dual Identity). Referring to the development of robust sense of belonging to both own profession (In-Profession) and to the interprofessional community in which individuals view themselves simultaneously as a member of own profession and the interprofessional team/community (Khalili, 2019; Khalili et al., 2014, 2013). The two lead researchers (DS / MGM) invited colleagues from the Health Precinct Educational Research Forum as well as other colleagues interested in the area of Telemedicine to develop a Research Project that aimed to investigate the experiences of clinicians in Telemedicine consultations during the New Zealand period of lockdown. A interprofessional methodology was developed with the intention of developing interprofessional understanding within the research group, the capability of each professional researcher in the area of qualitative interprofessional research.

**Methodology**

**Study Aim**

The aim of this research was to study the experiences and reflections of Canterbury-West Coast-based health practitioners of their use of Telehealth/Telemedicine during levels 3 and 4 of the recent nationwide Covid-19 lockdown in 2020?

**Design**

Qualitative research was conducted by an interprofessional team of researchers with the aim of documenting the experience of arrange of clinicians from diverse clinical backgrounds using semi structured interviews conducted via a telemedicine environment (zoom or phone)

***Development of semi structured interview questions:***

All researchers contributed to the development of the questions by participating in a face to face brainstorming sessions facilitated by a researcher experienced in this methodology (DS). The questions were refined and then trialled by two of the researchers (DS and DSu before being sent back to the group and refined, so all interviewers were highly involved in Questionnaire development – IP perspectives of language used, and views of practice and questions to ask, eg: major discussion of what are the parameters from viewpoint of participating professionals, what is health etc.

**Conducting Interviews:**

The researchers / interviewers were encouraged to find 2/3 interviewees either from their own field or a work area that they were familiar with (eg: midwives and lactation consultants, SLT & GP). That is they interviewed a colleague in their own zone of practice, but not necessarily from the same profession. This allowed the interviewer to bring an insider perspective because of their understanding of the practice environment and case nix of that person. The interviews were either conducted by phone with video image , or over zoom and were all recorded (either using zoom or separate audio software) with the participants consent. This was a practical approach for a Covid 19 environment , and at the time was a familiar and comfortable environment for all and mirrored the research agenda.

**Recordings were download and stored in a secure on ine environment with password access. They were transcribed by one researcher and then deleted.**

**Theme Development**

***Initial Theme Development:*** Two researchers independently blind-coded transcribed text. The two lead researchers (one of whom had transcribed the majority of recordings) independently conducted a thematic analysis before meeting to talk through possible patterns and agreeing on five initial themes – to take tothe wider interviewer group for further discussion

***Interprofessional Theme development***: The interdisciplinary interview team met in person and virtually to talk through the potential themes with reference to their own experiences in interviewing. The themes were refined during this process

***Final Thematic Analysis of Transcripts***: The final stage involved each interviewer coding and thematically analysing two or three transcripts (excluding their own transcript) that they were randomly allocated using the refined themes.

**Ethics**

Ethical approval was received in ## 2020 from the University of Canterbury Human Ethics Committee and updates to this to allow interviewees to be from outside of Canterbury was approved in ###. An information sheet and consent form was provided for those being interviewed who were made aware that the only personal information collected was profession and gender.

**Results**

**Numbers of interviewees and Demographics**

|  |  |  |  |
| --- | --- | --- | --- |
| **Intervier profession** | **Interviewer gender** | **Interviewee profession** | **Interviewee Gender** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Themes**

There were 6 main themes, each of which had a number of sub themes and these are also summarised in the appendix #:

***Inequities***

The themes demonstrated a perception of Inequity of access to the Telemedicine service during the lockdown. The root causes of the inequity experienced are illustrated by the sub themes which explored reasons that ranged from those within the individual and their own context through to the available systems available to the clinician.

***Table 1***

|  |  |  |
| --- | --- | --- |
| ***Sub theme*** | ***Definition / explanation*** | ***Examples*** |
| Maori – Kaupapa |  |  |
| Other Cultural elements | Cultural grief (immigrant)  Cultural acceptability of telemedicine  language and need for interpreting | – 6 weeks in isolation without support |
| Socio -economic inequalities | multiple means of access, amount broadband, money on phone; - access to media (including people in the house sharing media) |  |
| Digital Literacy |  |  |
| Geographic location | Lack of internet eg rural cover |  |

***Connection***

The term connection was used to illustrate the need for a relationship or at least flexible instinctive conversational two way communication between the participantsclinician and their client. The sub themes shown in Table 2 illustrate the types of connection that were either facilitated or inhibited by the telehealth consultation.

***Table 2***

|  |  |  |
| --- | --- | --- |
| ***Sub theme*** | ***Definition / explanation*** | ***Examples*** |
| Whanaungatanga |  |  |
| Family connection |  |  |
| Professional collaboration (multi and interprofessional) | eg Working with other professions (worked for some others it fell away) |  |
| Geography; | Rural versus City (another contrast) |  |

***Information and decision making***

The decision making for a patient / client requires the assimilation of information gained from the patient interaction and this theme developed sub themes that explored the factors that inhibited decision making in a telehealth consultation and factors that could also enable improved decision making

**Table 3**

|  |  |  |
| --- | --- | --- |
| ***Sub theme*** | ***Definition / explanation*** | ***Examples*** |
| ***Senses*** | Unable to use full repertoire of senses including instinct |  |
|  | Cues harder / unavailable (nonverbal / smell / touch) |  |
|  | Being present important in some assessment |  |
|  | Finding simple things that worked and reusing them eg the videoing breast feeding, using facebook. |  |
|  | The digital space helped some clients (esp children easier being at being at home than a clinic - able to use environment (children , parkinsons, autism) others missed info got from home visit sense of the dynamics |  |

***Clinician Choice***

The experience of those interviewed and the autonomy which they had over conducting a Telehealth consultation varied widely and some of the factors that had influence on the clinician are explored in the sub themes.

***Table 4***

|  |  |  |
| --- | --- | --- |
| ***Sub theme*** | ***Definition / explanation*** | ***Examples*** |
|  | Is role professional or organizationally determined – professional identity (eg midwives with pt) |  |
|  | How does the digital space (at each end) inhibit or support the purpose of the consultation |  |
|  | Prioritization of telehealth or meeting |  |
|  | Innovations / creative |  |
| ***Cognitive load*** | Relevance of Digital and Clinical Experience |  |
| ***Novice to expert (clinical and technological*** | Those new to practice and those new to technology a double whammy for cognitive load! |  |

***Setting boundaries***

This theme explored the implicit and explicit influences on the telehealth consultations that occurred during the period of lockdown.

***Table 5***

|  |  |  |
| --- | --- | --- |
| ***Sub theme*** | ***Definition / explanation*** | ***Examples*** |
| Boundaries for families |  |  |
| when available |  |  |
| Fear |  |  |
| Boundaries for professional |  |  |
| Feeling let down (Office and phone take over, GPs unavailable |  |  |
| Available all the time - extended day |  |  |

***Clinicians and Telehealth***

This final theme focused on the potential enablers and disablers in the use of the telehealth technology

***Table 6***

|  |  |  |
| --- | --- | --- |
| ***Sub theme*** | ***Definition / explanation*** | ***Examples*** |
|  | How clinicians learnt about telemedicine (eg peers and social media predominately / Use (or otherwise) of guidelines / Too much inappropriate information from “above” – overload |  |
| Clinician choice of tech |  |  |
| System support - Digital Technology as a package |  |  |
| For technology |  |  |
|  | For booking patients / setting up patients - Where are the patients situated how can they get help. What can they do prior (eg BP) |  |
|  | How clinicians used telemedicine (eg more explicit in set up etc to get the correct information / clarity of what potential information there is / Splitting a consult between zoom/ phone and brief face to face (mid wives) – prioritising who you must see and what you need to see eg if just had ultrasound. Separating out the tasks. |  |
|  | Making greater use of tech for sharing notes resources etc / Learning what the media you are using can do and what it can’t innovation |  |

**Discussion**

In developing these themes, we went beyond having a multi-professional research team, to developing a research team that continually improved their interprofessional understanding as practitioners and researchers. We challenged assumptions and professional biases that appeared to arise from the individual’s own profession’s lens. In this methodology we are valuing and prioritising that we really understand others professional perspectives while learning about their practice.