INPLASY PROTOCOL

Corresponding author:
Gergana Kodjebacheva

gergana@umich.edu

Author Affiliation:
University of Michigan Flint.

Review Stage at time of this submission: Preliminary searches.

Conflicts of interest: None declared.

Satisfaction with telehealth among children, adolescents, caregivers, and medical providers during the COVID-19 pandemic: A systematic literature review

Kodjebacheva, GK[1]; Culinski, T[2]; Kawser, B[3]; Coffer, K[4].

Review question / Objective: What is the satisfaction regarding the use of telehealth among pediatric patients, their caregivers, and their medical providers, during the COVID-19 pandemic? PI(E)COS structure: Outcome: Satisfaction (i.e. experiences, perceptions, attitudes); Participants: pediatric patients, their caregivers, and their medical providers; Intervention: Telehealth; Comparison group: A group not receiving telehealth or no comparison group.
Study designs to be includedd: Inclusion: All designs are included specifically RCTs, quasi-experimental studies with control group or with no control group, and qualitative studies. Not only interventions are included. Observational studies involving surveys and interviews discussing experiences with telehealth are included. Exclusion: Review protocols, studies that present no qualitative or quantitative data on experiences with telehealth.

INTRODUCTION

Review question / Objective: What is the satisfaction regarding the use of telehealth among pediatric patients, their caregivers, and their medical providers, during the COVID-19 pandemic? PI(E)COS structure: Outcome: Satisfaction (i.e. experiences, perceptions, attitudes); Participants: pediatric patients, their caregivers, and their medical providers; Intervention: Telehealth; Comparison group: A group not receiving telehealth or no comparison group.

Condition being studied: Patients can be seen through telehealth for any physical or mental health conditions in this review. No

restriction on the type of condition is placed.

METHODS

Search strategy: For caregivers: (telehealth or telemed* or telemonit*) AND (children* or adolesc* or youth* or child* or teen* or kids* or paediatric* or pediatric*) AND (covid-19 or coronavirus or 2019-ncov or sars-cov-2 or cov-19 or pandemic or 2019 novel coronavirus or coronavirus disease) AND (famil* OR caregiver* OR mother* OR father* OR parent*) AND (satisfact* or experien* or percept* or attitude* or perspective* or convenien*)

For medical providers:
(telehealth or telemed* or telemonit*) AND (children* or adolesc* or youth* or child* or teen* or kids* or paediatric* or pediatric*) AND (children* or adolesc* or youth* or child* or teen* or kids* or paediatric* or pediatric*) AND (covid-19 or coronavirus or 2019-ncov or sars-cov-2 or cov-19 or pandemic or 2019 novel coronavirus or coronavirus disease) AND (doctor* or physician* or "healthcare professional*" or "medical provider*" or pediatrician* or paediatrician* or "allied health professional*" or "primary care provider*" or "family doctor*" or "family physician*" or "general practi*" or "mental health provider*" or psychologist* or counselor* or therapist* or psychiatrist* or clinician* or "specialty care*") AND (satisfact* or experien* or percept* or attitude* or perspective* or convenien*)

For patients:
(telehealth or telemed* or telemonit*) AND (children* or adolesc* or youth* or child* or teen* or kids* or paediatric* or pediatric*) AND (covid-19 or coronavirus or 2019-ncov or sars-cov-2 or cov-19 or pandemic or 2019 novel coronavirus or coronavirus disease) AND (patient* or client* or individual*) AND (satisfact* or experien* or percept* or attitude* or perspective* or convenien*).

Participant or population: Inclusion criteria: Patients (i.e. children and adolescents from 0 to 18), caregivers (such as biological parents either mother and/or fathers, relatives, and other caregivers), and any medical providers (such as pediatricians, family physicians, physicians, psychologists, mental health providers, nurses, and specialty care doctors) during the COVID-19 pandemic. Some studies combine adolescents with young adults; we include these studies where adolescents and young adults are combined in one category. Exclusion criteria: Adults discussing experiences with their own telehealth and medical providers not serving children and adolescents are excluded. Studies focusing on experiences with telehealth among pregnant women are also excluded.

Intervention: Inclusion: Telehealth services such as video and telephone visits and remote monitoring are included. Synonyms of telehealth we use include telemedicine and telemonitoring.

Comparator: Comparison: A group not receiving telehealth if one exists in the study. Most studies do not include a comparison group and studies with no comparison group are included.

Study designs to be included: Inclusion: All designs are included specifically RCTs, quasi-experimental studies with control group or with no control group, and qualitative studies. Not only interventions are included. Observational studies involving surveys and interviews discussing experiences with telehealth are included. Exclusion: Review protocols, studies that present no qualitative or quantitative data on experiences with telehealth.

Eligibility criteria: Not applicable.

Information sources: PubMed/MEDLINE, EMBASE, CINAHL, PsycINFO, and PsycARTICLES.

Main outcome(s): DEFINITIONS OF OUTCOME: We include both positive and negative experiences with telehealth. Experiences can include positive or neutral views such as: satisfaction, perception, preference, value, perspective, and acceptance. Experiences that entail more

negative views include challenges, limitations, dissatisfaction, and concerns.

MEASUREMENT OF OUTCOME: There is no standard measurement. We include studies that create their own measurements as well as studies that use reliable and valid measurements. Some of the standardized surveys that yield measures include the Telemedicine Satisfaction and Usefulness Questionnaire, Telemedicine Satisfaction Questionnaire, and the Telehealth Usability Questionnaire. Examples of measures found commonly across the literature include: degree of satisfaction with the convenience of video visits on a Likert scale; degree to which a video visit was the same as a face-to-face visit on a Likert scale.

Quality assessment / Risk of bias analysis:

We will use the critical appraisal tools available here based on the type of study in the review: https://jbi.global/critical-appraisal-tools

Specifically, for RCTs, we will use the tool for RCTs. For qualitative studies, we will use the tool for qualitative studies.

We will pay particular attention to measurements such as "Were valid methods used for measurements?" We will be able to summarize the number of studies using reliable and valid methods vs. those that developed their own untested measurements.

In addition, the conflict-of-interest statement in each article will be reviewed to assess the existence of any studies that may have conflict-of-interest and the type of conflict-of-interest. To prevent publication bias within studies, we will assess each study to understand if only positive findings were reported to benefit a particular medical institution or show only positive feedback from children-caregivers-providers on telehealth.

Strategy of data synthesis:

After using the search words in the attachment in each database, we will use an automated strategy to remove duplicates across the databases. We will combine all resulting titles in an Excel file. Two authors will review all titles and abstracts separately. If the title and abstract do not make it clear whether the study qualifies, the reviewer will open the full text of the article. The authors will write in the Excel file whether they believe that the study fits the inclusion and exclusion criteria. Then, the two authors will resolve any disagreements after reviewing the full-text of the article. For records excluded, we will report the number of articles excluded due to being duplicates, non-pediatric related, and not on experiences with telehealth.

Tables will synthesize the information and will include columns for location, sample size, study purpose, methods, limitations, and findings of each study. The studies will be categorized based on the group where satisfaction was assessed. Our review tables will be divided as follows: experiences among caregivers only, experiences among patients and caregivers, experiences among providers only, and experiences among caregivers and providers. If more groups become apparent, the review tables will be further sub-divided.

Subgroup analysis:
We do not plan to perform analysis of sub-groups such as males or females.

Sensitivity analysis:
We do not plan to perform sensitivity analysis.

Language restriction:
English.

Country(ies) involved:
United States.

Keywords:
telehealth; children; caregivers; medical providers; pediatric.

Contributions of each author:
Author 1 - Gergana Kodjebacheva.
Email: gergana@umich.edu
Author 2 - Taylor Culinski.
Author 3 - Bushra Kawser.
Author 4 - Katelynn Coffer.