



CAREGIVER SATISFACTION WITH TELEHEALTH DELIVERY OF THE INTERNATIONAL GUIDE FOR MONITORING CHILD DEVELOPMENT (GMCD) INTERVENTION DURING THE LOCKDOWN IN TURKEY



Ezgi Ozalp Akin¹, S. Canan Atasoy¹, Selin Ince¹, Aysen Akbas¹, Merve Cicek Kanatli¹, Bahar Bingoler Pekcici¹, Revan Mustafayev², Bedriye Tugba Karaaslan³, İlgı Ertem¹

¹Developmental Pediatrics Division, Department of Pediatrics, Ankara University School of Medicine, Ankara, Turkey

² Department of Pediatrics, Acibadem Maslak Hospital, Istanbul.

³ Department of Child Development, Izmir Katip Celebi University, Faculty of Health Sciences, Izmir, Turkey.

BACKGROUND Early intervention programs have been seriously disturbed during the COVID-19 pandemic and thus programs that can use telehealth have gained importance (1,2). International Guide for Monitoring Child Development (GMCD) intervention is a comprehensive early intervention program to address developmental difficulties using an individualized plan based on family-centred, strengths-based, World Health Organization The International Classification of Functioning, Disability and Health (ICF) framework-based philosophy (3,4). Caregiver satisfaction is a key outcome for family-centred early intervention programs (5,6). We examined long-term caregiver satisfaction with the international GMCD intervention delivered through telehealth during the pandemic.

METHODS Using a mixed-methods longitudinal design, we recruited children aged 0-42 months who were seen at Ankara University Developmental Pediatrics Division (AUDPD) only once before the pandemic if they had an appointment to be seen during the lockdown. Four developmental pediatricians used the GMCD intervention to assess and support children's development over the telephone. Caregiver satisfaction was assessed during a telephone interview one year later by two blinded researchers. For the quantitative analyses, we provided descriptive statistics as frequencies, and percentages, means and standard deviations for normal distributions; median and interquartile ranges otherwise. We used thematic qualitative analysis to determine the reasons for satisfaction and suggestions for improvement.

RESULTS Of 135 eligible children, 122 (90%) received the intervention, outcome interviews were conducted with 102 (84%) caregivers after a year. Median child age was 15.5 (IQR: 8.7-27.2) months and 51% of the children were girls. Most (98%) caregivers remembered the intervention content and the clinician's name (76%); 92% reported that the intervention was useful and 70% reported implementing most of the recommendations. Qualitative analysis revealed that caregivers' reasons for satisfaction were related to receiving: a) information on how to support their child's development; and b) psychological support including "being held in their clinician's mind" (Table 1).

Parents' suggestions for improvement of the intervention included increasing telehealth frequency and using video calls. Most families (80%) stated not receiving distant services from other sources during the lockdown.

Table 1. Examples of caregivers' expressions about the GMCD Intervention delivered through telehealth

"We felt so valued, Hira Nur remembers her doctor."

"I got very pleased, I told my relatives and they were also surprised that my clinician called me."

"They cared for us, their suggestions were appropriate in our situation, we didn't have enough money, but we were given suitable suggestions. These suggestions were of great benefit for my daughter's development speech and walking. My clinician didn't force us to do anything. Her speech and closeness felt very good, she treated me like a sister or a mother."

"... (intervention) made a huge difference, there have been great changes in a good way about my daughter's daily life, about her behavior. Those suggestions were suitable to us, they were easy to apply with tools that everyone has at home."

DISCUSSION This study provides long term outcome related to caregiver satisfaction with the GMCD intervention delivered during the COVID-19 pandemic lockdown period in Turkey. Over 98% of the caregivers remembered the intervention content after one year and found the GMCD intervention applicable. These findings have important implications for the telehealth delivery of the GMCD intervention.

Use of telehealth for developmental support has increased in high income (HIC) countries (7). A study from the United States reported similar parent satisfaction with an intervention in the group that received the same intervention that was delivered through telehealth compared to the face-to-face intervention group (8). There are limited number of studies on caregiver satisfaction of early intervention programs applied using telehealth from LMICs (9). A mixed methods study from India investigated the perceptions of parents on an online delivery of a parent-mediated autism spectrum disorder intervention. Parents of twelve children aged 1-6 years using the 15-item Satisfaction Survey. Parallel to our findings, parents found the telehealth intervention beneficial and acceptable (10).

The satisfaction and competence of families of children with autism spectrum disorder was examined in 18 families in eight countries (Turkey, Greece, Mexico, Saudi Arabia, Costa Rica, United States, Ukraine and Russia). Families were administered the Parent-implemented functional analyses and treatment with functional communication training intervention package using telehealth. Parents were generally satisfied with the intervention, indicated that they would be willing to implement them, and that the intervention would be effective with their children (11).

CONCLUSION: Our findings indicate that the the GMCD intervention applied through telehealth during the pandemic lockdown was remembered, appreciated and applied by most caregivers. Our review of the literature suggest that early intervention applied using telehealth may be acceptable and satisfactory to families of children with developmental difficulties in different cultures. Further research is needed to examine the the effectiveness of telehealth interventions in LMICs.

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