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Research Article

The Necessity of Sharing Medical Information for Congenital GIT Anomalies in Virtual Space

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ABSTRACT

Congenital anomalies of the gastrointestinal tract (GIT) require timely diagnosis and surgical intervention. With the advancement of information technologies, there is a growing need to establish virtual platforms for the exchange of medical information between healthcare professionals, parents, and patients. This article explores the necessity of such information sharing through a mobile application designed to provide accessible guidance, consultation options, and support for families caring for children with congenital GIT anomalies. [1], [2].

A survey conducted among parents of 30 surgically treated children revealed a strong willingness to use such an application, especially if it includes features like direct chat with doctors, a consultation calendar, and educational resources. The findings emphasize the critical importance of reliable, comprehensible information and highlight ethical and legal challenges related to personal data protection. [3], [4].

The study concludes that sharing medical information in the virtual space can significantly improve patient care, provided that mechanisms are in place to ensure information accuracy and data security. [1], [4], [5].

Keywords: Congenital gastrointestinal anomalies, medical information sharing, virtual healthcare, mobile health applications, pediatric surgery.

INTRODUCTION

Congenital anomalies of the gastrointestinal tract (GIT) arise during embryonic development and lead to various defects in the digestive system. These conditions require prompt diagnosis and urgent surgical treatment.

The development of information technologies and the expansion of the virtual space create new opportunities for the exchange of information and experience among doctors, parents, and patients. By sharing clinical symptoms, diagnoses, and treatment options online, a global community of specialists and patients is formed, significantly improving access to critical information and accelerating recovery processes. A smart device application provides an opportunity for parents of children with congenital GIT anomalies to get informed and receive guidance from doctors and medical specialists when performing certain procedures. This alleviates the emotional and psychological stress associated with caring for a child with a congenital condition [1], [2].

This article examines the necessity and effects of sharing medical information online concerning congenital GIT anomalies. The study focuses on the benefits of this approach in improving clinical outcomes, raising awareness among parents and the public, and facilitating knowledge exchange. The challenges related to ethical and legal aspects of personal data protection and ensuring the reliability of the provided data are also discussed.

MATERIAL AND METHODS

A smart device application has been created to provide information about congenital GIT anomalies. The app is accessible to the parents of these children and contains summarized information about the types of GIT anomalies. A survey was conducted among the parents of surgically treated patients regarding the need for sharing medical information in the virtual space [2].

A survey has been created with the aim of exploring the need for the development of a specialized mobile application for the exchange of information between parents of children with congenital GI anomalies and pediatric surgeons. The responses are completely anonymous and will help in the development of a useful informational platform. The survey has been completed by the parents of 30 patients with congenital GI anomalies [3].

RESULTS

The aim of this survey was to investigate the necessity of a mobile application that facilitates access to information and communication between parents of children with GIT anomalies and specialists such as pediatric surgeons. Thirty people participated in the study.

Summary of Results

1. Accessibility of information regarding the children's condition

- 36.7% of respondents rate the information as "Satisfactory."
- 20% respond with "Good," while 20% rate it as "Poor" or "Very Poor."
- Only 10% consider the information to be "Very Good."

Conclusion: There is a significant need to improve access to reliable and understandable information.

2. Willingness to use a mobile application

- 53.3% of respondents would definitely use such an application.
- 30% are inclined to use it ("Rather Yes").
- Only 6.7% are unsure, and 6.7% are inclined not to use it.

Conclusion: The application would be widely accepted if it offers appropriate functionalities.

3. Preferred functionalities

The most desired features are:

- Option for direct chat or video call with a doctor (83.3%).
- Information about GIT anomalies (66.7%).
- Calendar for tracking consultations and check-ups (60%).
- Symptom and condition diary (50%).
- Access to specialized articles and recommendations (33.3%).

Conclusion: The application should focus on communication with doctors and access to practical information.

4. Frequency of contact with a doctor

- 40% of parents contact their doctor weekly.
- 33.3% monthly, while 13.3% almost daily.
- Only 13.3% contact less frequently.

Conclusion: Parents have a regular need for consultations, highlighting the importance of an application for easy communication.

5. Impact of the application on child care

- 60% of parents believe the application would significantly improve the care for their children.
- 33.3% think it would have moderate influence.
- Only 6.7% are uncertain, while no one thinks it would not help.

Conclusion: Expectations for the application's effectiveness are high.

6. Willingness to pay

- 33.3% of parents would not pay for the application.
- 40% are willing to pay up to 5 BGN per month.
- 20% would pay up to 10 BGN, and 6.7% more than 10 BGN.

Conclusion: A free version with optional paid features would attract the most users.

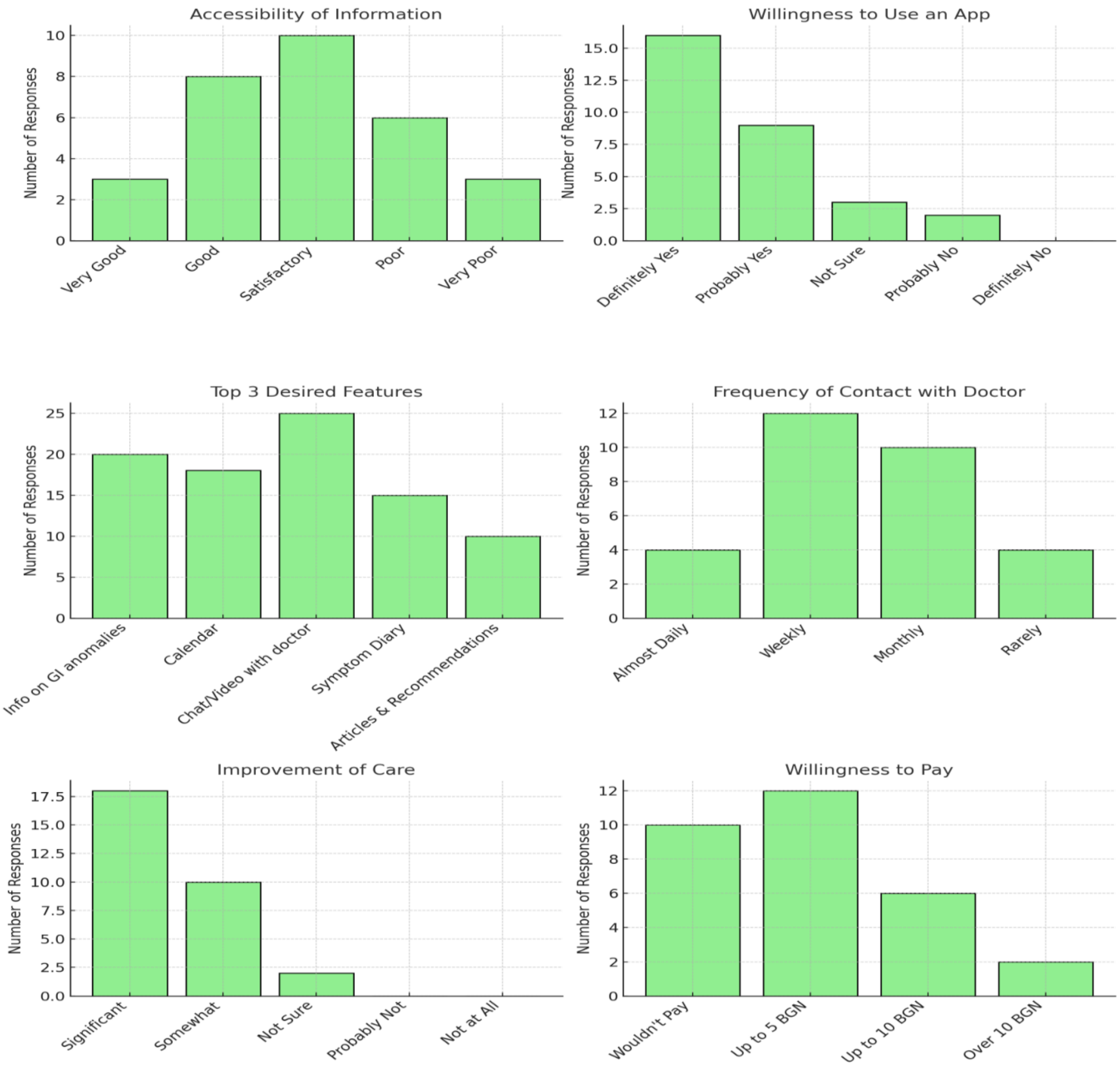

Figure 1. Summary of Results

DISCUSSION

Sharing information about the condition of patients with congenital GIT anomalies online provides numerous opportunities to ease parental efforts in caring for their children. Analysis of existing research and data shows that access to information and the exchange of clinical data are key factors in improving treatment quality. Platforms such as medical databases, specialized online forums, and social networks enable parents and medical professionals from different countries and regions to share experiences and knowledge about these conditions. This process not only facilitates diagnosis and treatment of complications but also contributes to establishing good clinical practices and appropriate treatment[3] .

Parental involvement is particularly important in this process. Parents of children with congenital GIT anomalies often face difficulties in finding up-to-date and detailed information about their child's condition. This support reduces social isolation and stress associated with caring for a child with a GIT anomaly and increases the psychological resilience of families.

Despite its many benefits, sharing medical information in the virtual space poses significant risks. One of the main issues is the protection of patient and parent personal data. Although smart device applications and databases introduce measures to safeguard personal information, there is still a risk of unauthorized access or misuse. Adhering to data protection legislation and introducing ethical codes for sharing medical information are critically important to minimize these risks [3].

The reliability of information shared in the virtual space is another aspect that should not be overlooked. The possibility of spreading misinformation or outdated data can lead to misdiagnosis or ineffective treatment. To avoid such cases, standards for verifying and controlling the quality of published information must be established, such as expert review or using reputable sources [4].

Sharing medical information about congenital GIT anomalies and ensuring its wide accessibility is a powerful tool for improving patient care. Implementing regulations and creating systems for data protection and quality assurance will enable broader and safer use of this approach, providing significant benefits to the parents of these children [1],[4] .

CONCLUSION

The survey results indicate strong interest and potential for a successful mobile application to assist parents of children with GIT anomalies. The main areas for improvement are access to information and facilitation of communication with doctors. The application should offer an intuitive interface and essential features such as doctor chat, consultation calendar, and educational articles [5].

The survey conducted among parents of surgically treated children reflects their positive attitude toward sharing medical information in the virtual space. The possibility of timely access and consultation with a pediatric surgery specialist makes telemedicine a particularly preferred means of communication between doctors and patients [6].

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