

Understanding the potential role of cell phones and the Internet to support care for diabetic patients and caregivers in Peru

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ABSTRACT

The objective is to get an understanding of the potential role of cell phones and the Internet to support diabetes care in Peru. We conducted two focus groups with 19 adult diabetic patients and six caregivers from a national hospital in Lima. Patients had positive perceptions towards a computer-based system using cell phones and the Internet to support their health. Caregivers suggested that patients should use technologies on their own to support their health.

INTRODUCTION

Internet tools, cell phones, and other information and communication technologies (ICT) are being used by diabetic patients to facilitate health care support and communication. There is no previous report about the use or perceptions of diabetic patients towards ICT in Peru. The objective of this paper is to get an understanding of the potential role of cell phones and the Internet to support care for diabetic patients.

METHODS

We conducted two focus groups in a large hospital in an urban area in Lima, Peru during February 2009. We purposively sampled ambulatory, adult patients with diabetes with a diverse use of ICT. The first focus group included patients who did not use the Internet and their caregivers who regularly use ICT. The second focus group included only patients who regularly used the Internet (at least once per month), but not their caregivers. A focus group guide was adapted from previous formative work. Three health informatics physicians and a public health researcher reviewed the topic guide to determine content validity. The groups were facilitated by a professionally trained moderator with expertise in formative research (MV). Each group's discussion was digitally recorded, and a research assistant took notes. The groups were transcribed by the research staff and reviewed by the first author. Themes were coded independently using a content analysis approach by two of the researchers (WHC and MV),

who prepared summaries of all the data. In addition, we convened a multidisciplinary meeting, including eHealth physicians (EG and JRA), who reviewed all data and reached consensus on the interpretation.

RESULTS

Nineteen adult diabetic patients (15 women, 4 men) with median age 54 years [37-72 years] and six family members (4 women, 2 men) with median age 34 years [15-38 years] participated in two focus groups. Most of the patients were interested in participating in a program using cell phones and the Internet to support their diabetes care. For those patients who do not access the Internet, they preferred that their caregiver, usually a family member, could help them to overcome the potential barrier. Caregivers mentioned that a system using cell phones and the Internet seems novel, but they did not show too much enthusiasm for the idea that they can support patients for a long period of time. Most of the patients reported their willingness to use cell phones to receive reminder messages for their medication, and to receive appointment reminders. The majority of patients expressed their interest in receiving messages about diabetes care, including information about nutrition, physical activity, complications from diabetes, control of cholesterol and blood pressure, emotional support, and oral health, among others. Caregivers suggested that patients should use technologies on their own to support their health.

CONCLUSION

Patients' perception towards a system using cell phones and the Internet for diabetes support is positive. Caregivers suggested that patients should use technologies on their own to support their health. It is necessary to develop studies that evaluate the feasibility of those interventions using ICT.

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