TeleNutrition: Development, Pre-Testing, and Pilot Testing of a Telehealth Website for Nutrition Counseling of Registered Nutritionist-Dietitians in a Tertiary Level Hospital in Lipa City, Batangas, Philippines

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Introduction

The ongoing COVID-19 pandemic has severely weakened the healthcare industry causing the continuous decline of face-to-face healthcare delivery and putting millions of people at increased risk of mortality and malnutrition. As a response, the study aims to pioneer the way towards the development and testing of a dedicated Telenutrition website in the Philippines, in partnership with a selected tertiary level hospital, as this would help provide a means of continuity for the provision of nutrition services without the hassle and danger of physically going to the hospital.

Methodology

The development process consists of the (1) development, (2) pre-testing, and (3) pilot testing phases, following an explanatory sequential study design which is a mixed method. Standardized questionnaires were used to determine website’s usability and effectiveness, and user satisfaction, followed by qualitative structured online interviews. The data gathered were analyzed through descriptive statistics for the questionnaires, and thematic analysis for the interviews.

Objectives

To develop a TeleNutrition website that would serve as the means, exclusively, for Registered Nutritionist-Dietitians (RNDs) to continue providing nutrition counseling (NC) virtually. The researchers also aimed to pre-test and pilot test the TeleNutrition website for perceived usability, satisfaction, and effectiveness.

Results

- **Duration of Nutrition Counseling**
  - Majority of RNDs said that both face-to-face and online NC with pre-existing platforms usually take 30-40 minutes, but more participants exceeded the said time in face-to-face NC.
  - With the TeleNutrition website, no participant exceeded 30-40 minutes for their NC.

- **Usability of the TeleNutrition Website**
  - The pilot test indicated high satisfaction among both RNDs and patients with an overall score of 2.31 (SD=0.31) and 2 (SD=0.31) respectively.
  - Interface quality (INTERQUAL) among RNDs was noted to be higher than the reference value at 2.67 (SD=0.67) indicating that RNDs still found the interface lacking.

- **Effectiveness of the TeleNutrition Website**
  - Majority of the RNDs reported that the website helped in the achievement of positive nutrition outcomes.

Conclusion

The RNDs and patients have a positive perception towards TeleNutrition and are willing to adopt the website for their future NC needs. Safety, convenience, short duration of NC, and achievement of desired outcomes are noted advantages of TeleNutrition while internet and technological limitations are mentioned barriers to its use.
Safe and secure sign up and log in system that requires email verification for patients, and 2 valid IDs including their license for RNDs.

Online database for patients' anthropometric, biochemical, and clinical data.

Displays available consultation dates and offers a variety of payment options.
Built in calendar system to keep track of both current and incoming appointments.

Chat function for actual consultation.

Provides access to a variety of nutrition tools such as the Pinggang pinoy, Food guide pyramids, and many more which enhance patient outcomes.