

Housing and Daily Living

Develop a healthy recipes website platform for the elderly diabetics Chiao-Sih Wang, Tsong-Shin Sheu.
Gerontechnology 25(s)

Purpose As the society nowadays has changed from an aging society to a “super-aged society” with the constantly increasing elderly diabetes rates, quality of life of the elderly as well as the related health services and products are gradually being valued and in high demand [1]. Elderly people with diabetes face a unique set of complications, including higher risks of cardiovascular diseases, neuropathy, and kidney failure[2]. However, many diabetic elderly struggle with maintaining a balanced diet due to factors such as limited access to healthy foods, lack of nutritional knowledge, and the presence of coexisting medical conditions that affect appetite and digestion [3]. This study aims to design an educational and meaningful website that provides various healthy recipes and basic knowledge about diabetes that is easy for everyone to read and understand. **Method** This study employed an in-depth interview method. The research participants consisted of elderly individuals aged 65 and above with diabetes, with a total of eight elderly participants included in the study. In addition, this study also conducted expert interviews with service providers. A hospital institution that provides diabetic meals was selected, and the social work supervisor responsible for the service was interviewed. The interview content focused on the healthy diet needs of elderly diabetic patients in their daily lives, including specific nutritional requirements, limitations, meal preparation assistance, dietary patterns, and feasible strategies. The data collected were analyzed using content analysis. Based on the analysis results, UX/UI tools were applied to ultimately design an information platform website that meets the needs of elderly diabetic patients. **Results and Discussion** After conducting content analysis, the study found that elderly diabetics have several key needs, including healthy diet knowledge, healthy diet suggestions, and exercise. Based on these identified needs, this study applied UX/UI methods and tools to design a meal information website platform specifically for elderly diabetic patients. The website includes seven main sections: Home, Philosophy, Effects, Prevention, Test, Blog, and Recipes. The Philosophy section introduces the definition and types of diabetes. The Effects section presents the impacts of diabetes on the body, including symptoms and treatments. Prevention provides methods for preventing diabetes and promoting healthier lifestyles. The Test section introduces diabetes testing methods, particularly self-monitoring at home. The Blog section corrects misconceptions and addresses common myths about diabetes. Meanwhile, the Recipes section focuses on dietary therapy, demonstrating how different nutrients in meals can influence diabetes management. The educational pages include information about the effects of diabetes on different parts of the human body, possible treatments, myth debunking, and prevention strategies. The Recipes page features 10 or more meal recipes with explanations, taking into account dietary variety and appropriate food textures for elderly users. The website interface is shown in *Figure 1*.

References

1. Darmawan, E. S., Permanasari, V. Y., Nisrina, L. V., Kusuma, D., Hasibuan, S. R., and Widayanti, N. (2024). Behind the Hospital Ward: In-Hospital Mortality of Type 2 Diabetes Mellitus Patients in Indonesia (Analysis of National Health Insurance Claim Sample Data). *IJERPH*, 21(5), 581.
2. Li, J., Rosalam, C. M., Faisul, A. A., and Zhu, Q. (2024). Investigating the Health Diet Needs of Diabetic Elderly in Daily Life: A Systematic Review. *Edelweiss Applied Science and Technology*, 8(4), 1131-1143.
3. Probst, S., Allet, L. J., Colin, Depeyre, S., and Buehrer Skinner, M. (2019). A targeted interprofessional educational intervention to address therapeutic adherence of venous leg ulcer persons (TIEIVLU): study protocol for a randomized controlled trial. *Trials*, 20(1), 243.

Keywords: elderly diabetics, healthy diet, daily needs, diabetes, ageing

Affiliation: Department of Marketing and Logistics Management, NanKai University of Technology, Taiwan

Email: tsheu@nkut.edu.tw

Acknowledgement: This study acknowledges the contributions of YU I-PO Memorial Association for Elderly Society Care and Research.

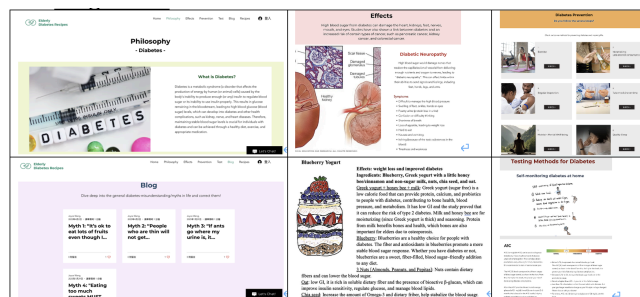


Figure 1. The website interface