Analysis of Home Health Care Needs of the Elderly and Smart Product Design

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China’s society has entered a period of population aging. The pension crisis has become a significant social problem in China. The object of this research is, through the analysis of the needs and problems of home health care of the elderly, to integrate up-to-date techniques for designing a smart product of home health care and home chronic disease cure for the elderly. I investigated the particulars of elderly home health care, home health equipment usage, home medicine usage, and the needs and problems of home health services through literature survey, questionnaire interviews and expert advice, etc. I found that there were few home health products in the market specifically intended for the elderly and most of the products had a single function. Thus none adequately satisfy the needs of the elderly for home health services. Based on the analysis of statistical data from the survey, I proposed a design for a home health care product which is to "focus on the needs of the elderly by means of networked communication and programmed intelligence "and adheres to the design principle of being "economical, practical, smart, and easy-to-use."According to this, I designed a home-based multifunctional health cabinet with reference to a bedside cabinet for the elderly. This cabinet utilizes home-bus control technology and cloud service platforms. There are five functions: integration of various health-care facilities, collection and monitoring of health indices, medicine management and reminders, alarms, and provision of remote health advice. This original creation of a smart home-based health product can meet the demands of the elderly.

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