Informal caregiver burden of disabled residing in a community according to use of care device

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Purpose The purpose of the study is to examine the differences in family caregivers' burden based on the usage of caring device such as bed for preventing bedsore, wheelchair, electric wheelchair etc., and the predictive factors (caregiver age, educational level, daily care time, satisfaction on interactive relationship between caregiver and care-recipient, and perceived stress) of care burden in informal caregivers of people with disability in Korea. Methods A cross-sectional survey study design was used through either telephone interview or self-report using Google form with family caregivers of people with severe disability. Data were collected from December, 2021 to Feb. 2022. A convenience sample of 103 family caregivers were included if they were giving care to people with severe disability who were older than 19 years old and had disability level 1-3, and needed lots of help from others, demonstrating difficulties in performing ADLs by themselves. Measurements were included Zarit Burden Interview-Korean version (Lee et al., 2004; Zarit et al., 1980), Barthel ADL Index (Collin et al., 1988, Kim et al., 2004), and Korean version of perceived stress scale (Hong et al., 2016). Data were analyzed using Pearson's correlation and hierarchical moderated regression analysis. Results and Discussion Mean age and educational level of the participants were 51.39 years old (SD = 8.64, range = 19 - 72) and 14.37 year (SD = 2.52, range = 6 - 20), respectively. Family members using care objects were significantly low on care burden (t = 3.32, p = .001). Longer daily care time (r=.37, p<.001), lower satisfaction on interactive relationship (r=-.28, p<.001), and higher stress (r=.58, p<.001) were related to higher care burden. With hierarchical multiple regression, perceived stress (Beta = .49, p = .000) was the strongest predictor on caregiver burden, followed by satisfaction on interactive relationship (Beta = -.19, p = .000). Although the variable of usage care device predicted on care burden significantly, it was not that strong predictor on care burden. Future research is suggested to increase sample size, and use detail questions on types of care device and care technology including care robot. Considering in increases in number of disabled older adults, it would be necessary to develop and apply technologies in caring based on personal needs.

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Keywords: care burden, persons with disability, perceived stress, care device **Address**: School of Nursing, Hanyang University, Republic of Korea **Email:** grson@hanyang.ac.kr

Acknowledgments This research was supported by the Translational Research Program for Care Robots funded by the Ministry of Health & Welfare, Republic of Korea (grant number: HK21C0008).