

# Report

[Health & Medicine, Nursing](#)



Research Report Assessment A research study regarding heart failure (HF) patients was analyzed for its content as well as its presentation. The study discussed the relevance of adding family partnership intervention (FPI) with regards to the control of dietary sodium intake of an HF patient. It was concluded that adding FPI could significantly decrease and thereby improve sodium intake in HF patients. The use of randomized quasi-experimental research design decreased the reliability of the results due to a lack of control group, but the results are still significant due to the additional data generated with regards to the effect of additional intervention programs to HF patients. The implication of the study in nursing is that by adding family involvement in patient treatment, HF patients' health could greatly be improved and sustained.

Research Report Assessment Article Summary The study aimed to compare a family and patient education intervention (FPI) combined with family partnership intervention to see if the sodium intake of the heart failure (HF) patient would be improved. There were reports of the role of family members in helping regulate the sodium intake of HF patients, but these reports were not that many, thus the need for the study (Dunbar, et al., 2005). Using a sample size of  $n= 61$  with two studied groups, dietary sodium baseline (BL) and after three months (3M) by measuring urine sodium were compared. It was found out that while the differences were not significant between two groups, the group with added FPI intervention was able to decrease urine sodium levels by at least 15% (Dunbar, et al., 2005). It was concluded that the addition of FPI in the intervention program for excessive sodium intake in HF patients is very important aside from the educational intervention in improving their dietary sodium levels. Research

Hypothesis Hypothesis: patients with heart failure who received education plus family partnership intervention were expected to show a greater reduction in indicators of dietary sodium intake in a span of three months than those who received patient family education alone (Dunbar, et al., 2005). Research Variables The independent variable was: the addition or non-addition of family partnership intervention to the necessary HF education. The dependent variable was: reported and recorded dietary sodium intake of the HF patient within the three-month study duration. The confounding variables were: BMI of patient; Left ventricular ejection fraction; Beck Depression Inventory II; and the Family Apgar score (Dunbar, et al., 2005). Research Design The research design was randomized quasi-experimental design: no control group but consists of only two experimental groups: HF education only; and HF education + family participation intervention (FPI) (Dunbar, et al., 2005). Population and Sample The population consisted of 61 sets of HF patient + a family member (n= 61 dyads). Randomized sampling produced two experimental groups: HF education only = 29; HF education + FPI = 32. All are willing and gave their written consent, and their names were withheld (Dunbar, et al., 2005). Patients were recruited from: three urban tertiary health care centers in the Southeast; selection through referrals from primary care/ HF providers/self-referral, as well as the respondents of posted/recorded announcements about the study. Inclusion criteria were: patients with persistent HF (according to ICD-9 codes - 428 range) with a participating family member (a spouse/adult member living in the same household and/or considered to be a willing participant primary caregiver); able to read, speak, or write in English;

on medications (ACE inhibitors and diuretics included); and no contraindications to the low-sodium diet proposed (2-gm/day). Exclusion criteria were: had acute myocardial infarction during the last 6 months; valvular heart disease; significant angina pectoralis; renal failure; HF secondary to a medical condition (e. g. hyperthyroidism); planned cardiac surgery; currently receiving home health care or a psychiatrist; and lacks telephone for follow up (Dunbar, et al., 2005).

**Data Collection Instruments**  
Patient data were collected through phone interviews, surveys, mailed questionnaires, as well as the existing patient records in their respective hospitals (Dunbar, et al., 2005). Phone interviews, surveys and existing records were used to assess whether the patient fits the description of having HF, and the questionnaires were used together with phone interviews to get information about the patient's urine NA levels.

**Data Collection Procedures**  
Data were collected through the interviews of both the HF patient and the family member via mailed questionnaire and phone follow-ups, which included urine NA levels of the patient (urine NA is approx. 95% of ingested sodium (Bates, Thurnham and Birmingham, 1997 as cited in Dunbar et al., 2005)). These were done before and after the duration of the study to compare results during baseline (BL) and after 3 months (3M) of observation.

**Data Analysis and Results**  
The study utilized descriptive statistics such as t-test and chi-square test to check for any significant differences between the two experimental groups (Dunbar, et al., 2005).

**Researchers' Discussions and Conclusions**  
The lack of a control group made it hard to generalize the study. The small sample size, as well as the consent of the test subjects was also limiting. However, the results were important

because the additive effect of family involvement in patient interventions was established further. It was suggested that full participation of the family be explored in the future as well (Dunbar, et al., 2005). Assessment of the Research Article I agree with the study on the stand that family members should also be responsible for maintaining the health of the member with HF, because they could help in motivating the patient. The problem was clearly presented for the reader, which made it easier to find out why the study was conducted. The hypothesis, the sampling plan, as well as the number of literature available related to the study was applicable, however the study design as well as the sample size made the findings seem limited. However, the fact that the impact of the intervention involving the family made the study significant in the field of nursing through the use of applications of experiment-based results in providing health care. Increasing the sample population may have further validated the results of the study. Presentation and Stylistic Dimensions The authors used fairly comprehensive language, but did not leave out the meanings of all acronyms used, which made it helpful for readers. The data presented were fairly sufficient, and the limitations encountered were also given. The tables were able to summarize their findings, which is helpful for readers that only need a capsulated form of their data and results. Reference Dunbar, S., Clark, P., Deaton, C., Smith, A., De, A., & O'Brien, M. (2005). Family education and support interventions in heart failure. *Nursing Research*, 54(3): 158-166.