sw&s | Social Work and Society International Online Journal

Resource mobilization service at the General Hospital of Tien Giang Center, Vietnam: The demands of in-patients with diabetes and cardiovascular disease

Vu Thu Trang, *Hanoi National University of Education*

Nguyen Hanh Dung, *Hanoi National University of Education*

Tran Ngoc Yen, *General Hospital of Tien Giang Center*

Nguyen Thi Phuong, *Hanoi University of Public Health*

Pham Tien Nam, *Hanoi University of Public Health*

Abstract: Studies on the demands of resource mobilization service among in-patients with diabetes and cardiovascular disease remain limited. This study aimed to estimate the demands of resource mobilization service and to examine several associated factors among in-patients with diabetes and cardiovascular disease at the General Hospital of Tien Giang Center, Vietnam. This was a cross-sectional study conducted on 196 in-patients, of which 98 were in-patients with diabetes disease and 98 were in-patients with cardiovascular disease. Additionally, this study used 8 in-depth interviews to collect data. The study results showed that in-patients with diabetes and cardiovascular disease had a high demand for resource mobilization services (over 90%). In the univariate regression models, significant factors for the demands of resource mobilization service among in-patients with cardiovascular disease were living area, marital status, economic condition, and the number of treatments. We did not find a statistically significant association with the resource mobilization demands of diabetic in-patients. The study provided recommendations to stakeholders to promote resource mobilization services for diabetic and cardiovascular in-patients in difficult circumstances. These findings had important implications for future research on factors associated with resource mobilization services among in-patients with diabetes and cardiovascular disease.

Keywords: demands; resource mobilization service; in-patients with diabetes and cardiovascular disease; associated factors; Vietnam.

1 Introduction

Weida and colleagues have recently described financial well-being as an important measurable social determinant of health, where lack of financial well-being--or financial stress-- serves as a root cause of other insecurities such as economic burden and vulnerability to other social risks (Weida, Phojanakong, Patel, & Chilton, 2020). During hospital treatment, in-patients with diabetes and cardiovascular disease face financial problems. This is the cause of mental health problems among the in-patients such as stress, anxiety, depression, and sleep disorders (Rane, Wajngot, Wändell, & Gåfvels, 2011; Rodwin, Spruill, & Ladapo, 2013). In Vietnam, social health insurance was established in 1992, and is currently considered the

main means of public financing for health care. The government uses tax resources to subsidize vulnerable groups such as the poor, ethnic minorities, children under 6 years old, and the elderly over 80 years old. Current health insurance covers about 87% of the population. Out-of-pocket payments for health services have decreased but remain high, accounting for about 41% of total health spending (World Health Organization, 2016). Thus, in-patients in Vietnam face pressure on treatment costs, especially in-patients from poor households, without health insurance and with long-term treatment (Ngo-Metzger, Sorkin, Billimek, Greenfield, & Kaplan, 2012).

Social workers are members of multi-professional health care teams, making positive contributions to the medical examination and treatment process for patients (Ambrose-Miller & Ashcroft, 2016). Social workers in hospital use a biopsychosocial approach, which emphasizes understanding a person in the context of their environment (Berkman, 1996; Cowles & Lefcowitz, 1992). The role of hospital social workers is to improve patients' capacity for social functioning through targeted interventions and mobilization of internal and external resources and support (Australian Association of Social Workers, 2016). In Vietnam, central, provincial and district hospitals provide patients with social work services as prescribed in Circular No. 43/2015/TT-BYT of the Ministry of Health (Ministry of Health, 2015). Among these services, resource mobilization services can be performed inside and outside the hospital from volunteers, donors, and potential supporters. This service provides both physical and mental support to in-patients, helping them feel secure during treatment and comply with treatment regimens (Nam, Yen, & Liem, 2022). In some other countries, hospital social workers also perform the task of mobilizing resources for patients and their families, especially financial support for travel and treatment costs (Alston, 2007).

In Vietnam, there have been several studies of social work services among patients in data collected from one hospital (Hien, 2015; Truc, Bong, & Nam, 2020), but there has been no study of demands of resource mobilization service among in-patients with diabetes and cardiovascular disease and associated factors. To our knowledge, several international studies in the United States, Ireland, and Australia have discussed social work services in the hospital (Cleak & Turczynski, 2014; Craig & Muskat, 2013; Davis, Baldry, Milosevic, & Walsh, 2004; Heenan & Birrell, 2019; Judd & Sheffield, 2010). These services included assessment, discharge planning, counselling, case management, education and information, liaison, advocacy, referral, resourcing, bereavement interventions, and crisis interventions. Medical Social Work Association in Taiwan invited the government, and social work professional organizations to discuss the medical social work core professional practice in Taiwan, which includes psychosocial assessment, psychological counselling, social resource linkage, intervention, patient and family advocacy, appropriate discharge preparation, and community resource development (Medical Social Work Association in Taiwan, 2014). Although previous studies provided valuable information on the social work services in hospitals (Crisp, 2000; Judd & Sheffield, 2010), they lacked an in-depth exploration of the demands of resource mobilization service among in-patients with diabetes and cardiovascular disease at provincial hospitals and its associated factors. This shortage could be one of the study gaps. Therefore, the study aimed to estimate the demands of resource mobilization service and to examine several associated factors among in-patients with diabetes and cardiovascular disease at the General Hospital of Tien Giang Center, Vietnam.

2 Background of hospital social work development at the General Hospital of Tien Giang Center

The development of social work as an officially recognized profession has seen dramatic changes over the last 10 years, with corresponding implications on healthcare service provision. On March 25, 2010, as a policy response to the increasing vulnerability of disadvantaged groups (e.g. lonely elderly, orphans, homeless children, and people with disabilities) in a rapidly changing society, the Vietnamese Government approved and launched Project 32 on the "Development of Social Work as a Profession" (based on Decision No. 32/2010/QD-TTG) (Office of the Prime Minister, 2010). This landmark policy is a sweeping national program for the institutional development of social work under the leadership of the Ministry of Labour, Invalids, and Social Affairs and in partnership with the United Nations, non-government organizations, and the academic community (Ha & Trang, 2015). To achieve the strategic objective of developing professional social work in Vietnam, the main activities of Project 32 were: (1) building and promulgating a system of legal documents on social work; (2) consolidating and developing a network of social work agencies and professional and para-professional social workers; (3) building and completing the training programs on social work; and (4) raising the awareness of related parties and the general public on the social work profession through public information (Office of the Prime Minister, 2010). Project 32, consequently, served as the legal basis and policy foundation for resource allocation and the implementation of social work programs in the healthcare sector. Building on the broader directives of Project 32, on July 15, 2011, the Ministry of Health (MOH) promulgated Decision No. 2514/QD-BYT for the "Development of Social Work Profession in the Healthcare Sector in the Period of 2011-2020". The general goal of this policy was the formation and development of social work in the healthcare sector, contributing to improve the quality and effectiveness of people's health protection and care (Ministry of Health, 2011). Decision No.2514 set out standards for the provision of social work services for patients and is being implemented in Vietnam until the end of 2020 with specific targets: 80% of central hospitals, 60% of provincial hospitals, 30% of district hospitals, and 40% of commune or ward hospitals (Ministry of Health, 2011). Since these targets were determined in 2011, 34 out of 35 (97%) central level hospitals and more than 80% of provincial and district hospitals have established their respective social work units (Ministry of Health, 2018). Furthermore, 4 out of 6 hospitals (67%) belonging to the University of Medicine and Pharmacy under the MOH have created social work units. According to MOH's Circular 43, the social work unit is responsible for the following tasks: supporting and counseling patients and family members during the health examination and treatment, informing and educating them on legal issues, mobilizing funds to support social work services, providing support to health workers, organizing voluntary teams for social work activities in the hospitals, and organizing social work activities in the community, if any (Ministry of Health, 2015). One of the qualification requirements of Circular 43 is that social work unit employees may have different majors such as social work, communications, health sciences and other social sciences. If an employee of a social work unit does not graduate with a social work major, they need to be trained in social work knowledge and skills. Circular 43 requires professional qualifications of employees of social work units from vocational to postgraduate level (Ministry of Health, 2015).

The social work unit's structure differs in each hospital but usually includes the following parts: communication, charity reception, patient assistance, and customer care. Human resources for hospital social work are currently very limited. There are 10-15 social workers at the central hospital, 5-10 social workers at the provincial hospitals, and 1-5 social workers

at the district hospitals. Some of them are part-time staff (Hanoi University of Public Health and Ministry of Health, 2019). Most hospitals have established a network for the inter-professional collaboration on patient care. These networks include doctors, nurses, and other medical staff from other hospital departments. They provide pertinent information on the patient's conditions or refer patients with difficult circumstances to the social work unit for support. Some central hospitals have established a team of volunteers who are mainly students in universities to participate part-time in the provision of social work services (Ministry of Health, 2018). A study in Vietnam in 2020 showed that the hospitals at provincial and district levels are quite limited in providing social work services for patients. Some central level hospitals have provided effective social work services to patients and their families such as Vietnam National Cancer Hospital, National Institute of Hematology and Blood Transfusion, Bach Mai Hospital, etc (Nam, Son, Quan, & Minh, 2020). Most hospitals at all levels in Vietnam provide the following social work services: information instruction and consultation services, communication and health promotion services, resource mobilization and coordination services (Nam et al., 2020). The patients with poor families, ethnic minorities, disabilities, etc are prioritized for assistance (Dong, 2020; Nam et al., 2021). However, the service of psychosocial support and case management for patients has so far only received limited attention. Moreover, MOH has not yet developed specific guidelines for social work practice for patients in hospital (Nam, Dung, Hung, et al., 2022; Nam, Dung, Liem, et al., 2022; Quan, 2019).

Regarding social work education on health care in Vietnam, only the Hanoi University of Public Health under MOH offers a bachelor's degree in social work that is oriented towards a medical setting. This program was created only in 2016, and its first cohort will graduate in 2020. At present, many social work students from universities lack knowledge of health care and health policy, and social work skills when working directly with patients (Pham Tien et al., 2022; Quan, 2019). Conversely, some nurses and doctors are currently employed in hospitals' social work units. However, they lack the knowledge and skills on hospital social work. Nationwide, a short training program, reference materials, and journal articles on hospital social work do not currently exist. These gaps in knowledge, education, and training have significantly affected the provision of social work services in the healthcare sector in Vietnam (Nam et al., 2020).

Tien Giang is a coastal province in the southern Mekong Delta, Vietnam. This province has many rural areas and the main occupations of the people are agriculture and fisheries. The General Hospital of Tien Giang Center is located in My Tho city, Tien Giang province (People's Committee of Tien Giang province, 2019). The hospital is a first-class hospital, the last level of the medical system in Tien Giang province. Currently, the hospital has 8 function rooms and 26 clinical and subclinical departments. The total number of officials and employees is 832 people (General Hospital of Tien Giang Center, 2016). The social work unit of the hospital was established on March 2, 2016, under Decision No.233/QD-SYT. There are 6 officers in the unit including the head of the unit, the deputy head of the unit, and 4 social workers (General Hospital of Tien Giang Center, 2018). The social work unit has provided social work services according to Circular 43 of MOH. Among these services, the resources mobilization service is provided to help in-patients in difficult circumstances.

3 Materials and Methods

3.1 Study design and participants

This was a cross-sectional study. The quantitative method was used to clarify demographic and treatment characteristics, the demands of resource mobilization service among in-patients with diabetes and cardiovascular disease at the General Hospital of Tien Giang Center, and related factors. The qualitative method was employed to add more information on the demands of resource mobilization services among the in-patients with diabetes and cardiovascular disease at the hospital.

The inclusion criteria for participants were as follows: (1) being over 18 years old; (2) being treated at the cardiovascular and diabetes departments, the General Hospital of Tien Giang Center; (3) having at least 3 days in the hospital; (4) having the ability to read, understand, and respond to the questionnaire; (5) agreeing to participate in the study.

3.2 Study time and site

This study was conducted from March to October 2018. The study site was at the cardiovascular and diabetes departments, the General Hospital of Tien Giang Center (No.2, Hung Vuong street, ward 1, My Tho city, Tien Giang province, Vietnam).

3.3 Sample size

For the quantitative study, this study used the formula of a population proportion to calculate the sample size (Nam, Yen, et al., 2022):

$$n = Z_{(1-\alpha/2)}^2 . (p.(1-p))/d^2$$

In which: confidence level (α) was 95%, absolute precision required (d) was 0.07, and population proportion (p) was 0.5 as there was not any similar study on this topic. The calculated sample size after adding 10% of withdrawal was 216 in-patients. In reality, 196 in-patients participated in this study including 98 in-patients from the cardiovascular department and 98 in-patients from the diabetes department. The reasons for the exemplary selection of the cardiovascular and diabetes departments was to compare the demands of mobilization service among in-patients with diabetes and cardiovascular disease.

For the qualitative study, the study conducted 8 in-depth interviews (IDI) including the deputy director of the hospital, the head of the social work unit, the nurse of the cardiovascular department, the nurse of the diabetes department, 4 in-patients (2 in-patients from cardiovascular department and 2 in-patients from diabetes department).

3.4 Data collection

The representative of the research team asked permission from the director of the General Hospital of Tien Giang Center to collect data from April to June 2018. We met directly with the head of the department to inform the time and objective of the study.

At the cardiovascular and diabetes departments, in-patients would be examined in the morning by the doctor, and then the nurse would follow the doctor's medical instruction. Therefore, the appropriate time to have an interview with the participants was early afternoon. We met in person with the in-patients to introduce the purpose and significance of the study and how to answer the questionnaires. We gave a consent form to the in-patients. If the

participants agree to participate in the study, he/she would sign a consent form to participate in the study and answer questions. The time to answer the questionnaires was from 10 to 15 minutes and the in-depth interview lasted from 30 to 60 minutes.

3.5 Study instruments and variables

The study instruments were based on Circular No. 43 of MOH that regulates the tasks of hospital social work (Ministry of Health, 2015). To assess the demands of resources mobilization service among in-patients with diabetes and cardiovascular disease at the General Hospital of Tien Giang Center, a five-level Likert scale was used in the study: “Absolutely not necessary”, “Unnecessary", "Normal", "Necessary ", and "Very necessary". The demands of the in-patients at the hospital were assessed as "Had the demand" if they had a level of demand from "Normal", "Necessary" and "Very Necessary". The in-patients selected a level of demand from “Absolutely not necessary”, and “Unnecessary" as “Did not have the demand” (Nam, Yen, et al., 2022).

Dependent variable

The demands of resources mobilization service were measured as having the demands of resources mobilization service by in-patients with diabetes and cardiovascular disease including cash support for partial treatment cost, cash support for living cost, belongings support, free meals provision, and accommodation support for caregivers during the care period. The answers were then categorized as (1) Yes, I had the demand, and (2) No, I did not have the demand.

Independent variables

Demographic variables were included, such as gender, age group, occupation, educational level, living area, marital status, and economic conditions. According to Vietnam's division of administrative units, urban areas include people living in urban districts, urban wards, and towns. Meanwhile, rural areas include people living in communes (General Statistics Office, 2016). Economic conditions was divided into 5 groups: wealthy (over 121,72 USD/month), normal (from 79,12 USD/month to 121,72 USD/month), average (from 52,74 USD/month to 79,11 USD/month), nearly poor (from 36,51 USD/month to 52,73 USD/month), and poor (under 36,51 USD/month) (Prime Minister of Vietnam, 2015).

Treatment variables were included, such as health insurance, health insurance coverage, types of disease, number of treatment/year, number of treatment days in this time, and affordability.

For IDI guides, these were the main questions: What were the demands of resource mobilization service among in-patients with diabetes and cardiovascular disease at the General Hospital of Tien Giang Center? What were the recommendations for better improvement of the provision of resource mobilization services at the General Hospital of Tien Giang Center? These questions were supplemented with any relevant sub-questions pending the answers received.

3.6 Data Analysis

The study’s quantitative data were analyzed using SPSS version 18. A univariate regression model was used to find out factors related to the demands of resource mobilization service among in-patients with diabetes and cardiovascular disease. P-value <0.05 was statistically

significant. For qualitative data, all tape recordings were transcribed into written files and utilized thematic analysis (Nam, Yen, et al., 2022).

3.7 Ethical approval of the study

The study was approved by the Institutional Review Board of the Hanoi University of Public Health, with Decision No. 294/2018/YTCC-HD3 on April 26, 2018. All information about the participants was strictly confidential. The data collected were stored. The study results would be returned to the General Hospital of Tien Giang Center.

4 Results

4.1 Demographic and treatment characteristics

Table 1 presents the demographic characteristics of the participants. Data show that 196 in-patients participated in the study, including 98 in-patients with diabetes disease and 98 in-patients with cardiovascular disease. The prevalence of females was higher than men, respectively 63.3% and 36.7%. The majority of participants in the survey were people aged over 55 years old (75.5%). The prevalence of people living in rural areas was higher than that of urban areas, respectively 71.9% and 28.1%. 36.2% of participants reported that they are working in agriculture. Regarding educational level, secondary school accounted for the highest rate of 40.3%. Many of the participants were married (81.1%). Average economic conditions among the participants accounted for the highest prevalence (72.4%).

Table 1. Demographic characteristics among in-patients with diabetes and cardiovascular disease

Demographic characteristics		**In-patients with cardiovascular disease n (%)**	**In-patients with diabetes disease n (%)**	**n (%)**
Gender	Male	38 (38.8%)	34 (34.7%)	72 (36.7%)
	Female	60 (61.2%)	64 (65.3%)	124 (63.3%)
Age group	18-26	1 (1.0%)	0 (0.0%)	1 (0.5%)
	27-40	8 (8.2%)	5 (5.1%)	13 (6.6%)
	41-55	14 (14.3%)	20 (20.4%)	34 (17.3%)
	Above 55	75 (76.5%)	73 (74.5%)	148 (75.5%)
Occupation	Civil servant/office-holder	13 (13.3%)	8 (8.2%)	21 (10.7%)
	Retirement	4 (4.1%)	10 (10.2)	14

Demographic characteristics		In-patients with cardiovascular disease n (%)	In-patients with diabetes disease n (%)	n (%)
				(7.1%)
	Agriculture	43 (43.9%)	28 (28.6%)	71 (36.2%)
	Trader	17 (17.3%)	12 (12.2%)	29 (14.8%)
	Students	1 (1.0%)	0 (0.0%)	1 (0.5%)
	Homemaker	13 (13.3%)	28 (28.6%)	41 (20.9%)
	Others	7 (7.1%)	12 (12.2%)	19 (9.7%)
Educational level	Primary school	30 (30.6%)	41 (41.8%)	71 (36.2%)
	Secondary school	44 (44.9%)	35 (35.7%)	79 (40.3%)
	High school	19 (19.4%)	17 (17.3%)	36 (18.4%)
	College/ University/ Postgraduate	5 (5.1%)	5 (5.1%)	10 (5.1%)
Living area	Urban area	30 (30.9%)	24 (24.5%)	55 (28.1%)
	Rural area	67 (69.1%)	74 (75.5%)	141 (71.9%)
Marital status	Unmarried	4 (4.1%)	3 (3.1%)	7 (3.6%)
	Married	75 (76.5%)	84 (85.7%)	159 (81.1%)
	Widowed/Divorced/Separated	19 (19.4%)	11 (11.2%)	30 (15.3%)
Economic conditions	Wealthy	7 (7.1%)	0 (0.0%)	7 (3.6%)
	Normal	14 (14.3%)	8 (8.2%)	22 (11.2%)
	Average	62 (63.3%)	80 (81.6%)	142 (72.4%)

Demographic characteristics		In-patients with cardiovascular disease n (%)	In-patients with diabetes disease n (%)	n (%)
	Nearly poor	12 (12.2%)	7 (7.1%)	19 (9.7%)
	Poor (certified)	3 (3.1%)	3 (3.1%)	6 (3.1%)
Total		**98**	**98**	**196**

Table 2 reports the treatment characteristics of participants. Data show that the majority of the participants had health insurance (93.4%). The prevalence of 80% health insurance coverage among the participants occupied the highest prevalence (52%) and the prevalence of 40% health insurance coverage accounted for the lowest prevalence (2.2%). The participants receiving treatment for the first time occupied the highest prevalence (45.9%). Most individuals/families had affordability, accounting for the highest prevalence (93.9%). The prevalence of over 7 treatment days accounted for the highest prevalence for in-patients with diabetes disease (57.1%) and the prevalence of 2 treatment days accounted for the highest prevalence for in-patients with cardiovascular disease (45.9%).

Table 2. Treatment characteristics among in-patients with diabetes and cardiovascular disease

Treatment characteristics		In-patients with cardiovascular disease n (%)	In-patients with diabetes disease n (%)	n (%)
Health insurance	Yes	92 (93.9%)	91 (92.9%)	183 (93.4%)
	No	6 (6.1%)	7 (7.1%)	13 (6.6%)
Health insurance coverage	0%	8 (8.2%)	5 (5.1%)	13 (6.6%)
	40%	2 (2%)	2 (2%)	4 (2.0%)
	80%	52 (53.1%)	50 (51%)	102 (52.0%)
	95%	15 (15.3%)	15 (15.3%)	30 (15.3%)
	100%	21 (21.4%)	26 (26.5%)	47 (24.0%)
Number of treatment/year	First time	40 (40.8%)	50 (51.0%)	90 (45.9%)
	Second time	35 (35.7%)	23 (23.5%)	58 (29.6%)
	Third time	12 (12.2%)	17 (17.3%)	29 (14.8 %)
	More third time	11 (11.2%)	8 (8.2%)	19 (9.7%)
Number of	2 days	45 (45.9%)	16 (16.3%)	61 (31.3%)

Treatment characteristics		In-patients with cardiovascular disease n (%)	In-patients with diabetes disease n (%)	n (%)
treatment days in this time	3- 7 days	39 (39.8%)	26 (26.5%)	65 (33.2%)
	More 7 days	14 (14.3%)	56 (57.1%)	70 (35.7%)
Affordability	Individual/family can afford it	93 (94.9%)	91 (92.9%)	184 (93.9%)
	Need to borrow money	5 (5.1%)	7 (7.1%)	12 (6.1%)
Total		**98**	**98**	**196**

4.2 Demands of resources mobilization service among in-patients with diabetes and cardiovascular disease

Quantitative results: Table 3 reports the demands of resources mobilization services among in-patients with diabetes and cardiovascular disease. The in-patients had a high demand for resource mobilization services (average over 90%). For in-patients with cardiovascular disease, the demand for accommodation support for caregivers during the care period accounted for the highest prevalence compared to other demands (98%). 96.9% of in-patients with diabetes disease asserted the demand for free meals provision and this demand accounted for the highest prevalence compared to other demands.

Table 3. Demands of resource mobilization service among in-patients with diabetes and cardiovascular disease

Demands of resource mobilization service	In-patients with cardiovascular disease n (%)	In-patients with diabetes disease n (%)	Total n (%)
Cash support for partial treatment cost			
Yes	88 (89.8%)	89 (90.8%)	177 (90.3%)
No	10 (10.2%)	9 (9.2%)	19 (9.7%)
Cash support for living cost			
Yes	85 (86.7%)	89 (90.8%)	174 (88.8%)
No	13 (13.3%)	9 (9.2%)	22 (11.2%)
Belongings support			
Yes	86 (87.8%)	92 (93.9%)	178 (90.8%)
No	12 (12.2%)	6 (6.1%)	18 (9.2%)
Free meals provision			
Yes	92 (93.9%)	95 (96.9%)	187 (95.4%)

No	6 (6.1%)	3 (3.1%)	9 (4.6%)
Accommodation support for caregivers during the care period			
Yes	96 (98%)	93 (94.9%)	189 (96.4%)
No	2 (2.0%)	5 (5.1%)	7 (3.6%)
Total	**98**	**98**	**196**

Qualitative results: All in-patients, especially in-patients with cardiovascular disease stated that the demands of accommodation support for caregivers during the care period were very necessary. This support could help caregivers have good physical and mental health, and ensure safe accommodation. An in-patient from the cardiovascular department mentioned that: "I suffer from heart disease. I was hospitalized for almost a month. My home is in Cai Be district so my son comes here to take care. Every night, he sleeps on the floor. If the hospital has accommodation for caregivers to take a rest. That would be too great!". The deputy director of the hospital shared that: "I have also directed the social work unit to connect with sponsors to build housing in the hospital for caregivers. To be honest, they mostly sleep on the hospital's floor. I understand their difficulties". Furthermore, it was very essential to provide free meals for in-patients, especially in-patients with diabetes disease. These meals were timely material support and ensured food safety for in-patients. The chief nurse of the diabetes department said: "Social work unit also has a lot of support. They help in-patients with free meals, guide in-patients, and caregiver to receive meals from sponsors. Besides, according to Decision No.29 of the People's Committee of Tien Giang province, if in-patient has a poor household certificate, they will be supported the meal expense of 39,000 VND/day (equivalent to 1,7 USD/day) during the treatment period at the hospital". The majority of the participants in the study said that in-patients had a high demand for belongings support, cash support for partial treatment costs, and cash support for living costs. The head of the social work unit mentioned that: "Our social work unit always tries to find sponsors to best support for in-patients. We have several sponsors that provide belongings for in-patients". An in-patient from the diabetes department shared that: "I desperately need cash support for treatment cost. I have health insurance but it expired. I was admitted to the hospital for more than 2 weeks and it costs more than 10,000,000 VND (equivalent to 432 USD). Our farmer is very poor. In the city, everything is expensive".

4.3 Factors associated with the demands of resource mobilization service among in-patients with diabetes and cardiovascular disease

Table 4 shows the relationship between the demographic characteristics and demands of resource mobilization service among in-patients with cardiovascular disease at the General Hospital of Tien Giang Center. The living area, marital status and economic conditions were factors related to the demands of resource mobilization service. Cardiovascular in-patients from rural areas had a higher demand for resource mobilization services than cardiovascular in-patients from urban areas ($p=0.003$). Cardiovascular in-patients with widowed/divorced/separated status had a higher demand for resource mobilization than unmarried or married in-patients. Cardiovascular in-patients with nearly poor economic conditions had a higher demand for resource mobilization services than cardiovascular in-patients with other economic conditions ($p=0.001$). We did not find other factors that are statistically significant with $p<0.05$. Table 5 shows the relationship between the demographic characteristics and demands of resource mobilization service among diabetic in-patients and no factors were associated with $p<0.05$.

Table 4. Relationship between the demographic characteristics and demand of resource mobilization service among in-patients with cardiovascular disease

In-patients with cardiovascular disease		**Demand of resource mobilization service**		
		Yes n (%)	**No n (%)**	**P**
		77	21	
Gender	Male	34 (44.2%)	4 (19.0%)	0.036
	Female	43 (55.8%)	17 (81.0%)	
Age group	18-26	1 (1.3%)	0 (0.0%)	0.12
	27-40	4 (5.2%)	4 (19.0%)	
	41-55	13 (16.9%)	1 (4.8%)	
	Above 55	59 (76.6%)	16 (76.2%)	
Occupation	Civil servant, office-holder	11 (14.3%)	2 (9.5%)	0.69
	Retirement	4 (5.2%)	0 (0.0%)	
	Agriculture	32 (41.6%)	11 (52.4%)	
	Trader	15 (19.5%)	2 (9.5%)	
	Students	1 (1.3%)	0 (0.0%)	
	Homemaker	9 (11.7%)	4 (19.0%)	
	Others	5 (6.5%)	2 (9.5%)	
Educational level	Primary school	24 (31.2%)	6 (28.6%)	0.52
	Secondary school	32 (41.6%)	12 (57.1%)	
	High school	17 (22.1%)	2 (9.5%)	
	College/ University/ Postgraduate	4 (5.2%)	1 (4.8%)	
Living area	Urban area	18 (23.7%)	12 (57.1%)	**0.003***
	Rural area	58 (76.3%)	9 (42.9%)	
Marital status	Unmarried	3 (3.9%)	1 (4.8%)	**0.04***
	Married	55 (71.4%)	20 (95.2%)	
	Widowed/Divorced/Separated	19 (24.7%)	0 (0.0%)	
Economic conditions	Wealthy	7 (9.1%)	0 (0.0%)	**0.001***
	Normal	4 (5.2%)	10 (47.6%)	
	Average	53 (68.8%)	9 (42.9%)	

In-patients with cardiovascular disease		Demand of resource mobilization service		
		Yes n (%)	No n (%)	P
	Nearly poor	11 (14.3%)	1 (4.8%)	
	Poor (certified)	2 (2.6%)	1 (4.8%)	

* Statistical significant with $p<0.05$

Table 5. Relationship between the demographic characteristics and demand of resources mobilization service among in-patients with diabetes disease

In-patients with diabetes disease		Demand of resources mobilization service		
		Yes n (%)	No n (%)	P
		84	14	
Gender	Male	30 (35.7%)	4 (28.6%)	0.60
	Female	54 (64.3%)	10 (71.4%)	
Age group	18-26	0 (0.0%)	0 (0.0%)	0.23
	27-40	5 (6.0%)	0 (0.0%)	
	41-55	19 (22.6%)	1 (7.1%)	
	Above 55	60 (71.4%)	13 (92.9%)	
Occupation	Civil servant, office-holder	7 (8.3%)	1 (7.1%)	0.84
	Retirement	9 (10.7%)	1 (7.1%)	
	Agriculture	22 (26.2%)	6 (42.9%)	
	Trader	11 (13.1%)	1 (7.1%)	
	Students	0 (0.0%)	0 (0.0%)	
	Homemaker	24 (28.6%)	4 (28.6%)	
	Others	11 (13.1%)	1 (7.1%)	
Educational level	Primary school	31 (36.9%)	10 (71.4%)	0.061
	Secondary school	34 (40.5%)	1 (7.1%)	
	High school	15 (17.9%)	2 (14.3%)	
	College/ University/ Postgraduate	4 (4.8%)	1 (7.1%)	
Living area	Urban area	20 (23.8%)	4 (28.6%)	0.70

In-patients with diabetes disease		Demand of resources mobilization service		
		Yes n (%)	No n (%)	P
	Rural area	64 (76.2)	10 (71.4%)	
Marital status	Unmarried	3 (3.6%)	0 (0.0%)	0.26
	Married	70 (83.3%)	14 (100%)	
	Widowed/Divorced/Separated	11 (13.1%)	0 (0.0%)	
Economic conditions	Wealthy	0 (0.0%)	0 (0.0%)	0.16
	Normal	5 (6.0%)	3 (21.4%)	
	Average	69 (82.1%)	11 (78.6%)	
	Nearly poor	7 (8.3%)	0 (0.0%)	
	Poor (certified)	3 (3.6%)	0 (0.0%)	

Table 6 and 7 show the relationship between the treatment characteristics and demands of resource mobilization service among in-patients with diabetes and cardiovascular disease at the General Hospital of Tien Giang Center. The number of treatments was a factor related to the demands of resources mobilization service among cardiovascular in-patients. Those who came to the hospital for the first time had a higher demand for resources mobilization than the second, third, and over three times ($p=0.005$). We did not find other factors that are statistically significant with $p<0.05$.

Table 6. Relationship between the treatment characteristics and demand of resource mobilization service among in-patients with cardiovascular disease

In-patients with cardiovascular disease		Demand of resource mobilization service		
		Yes n (%)	No n (%)	P
		77	21	
Health insurance	Yes	71 (92.2%)	21 (100%)	0.19
	No	6 (7.8%)	0 (0.0%)	
Health insurance coverage	0%	8 (10.4%)	0 (0.0%)	0.34
	40%	2 (2.6%)	0 (0.0%)	
	80%	41 (53.2%)	11 (52.4%)	
	95%	12 (15.6%)	3 (14.3%)	
	100%	14 (18.2%)	7 (33.3%)	
Number of	First time	35 (45.5%)	5 (23.8%)	**0.005***

In-patients with cardiovascular disease		Demand of resource mobilization service		
		Yes n (%)	No n (%)	P
treatment/year	Second time	30 (30.0%)	5 (23.8%)	
	Third time	7 (9.1%)	5 (23.8%)	
	More third time	5 (6.5%)	6 (28.6%)	
Number of treatment days in this time	2 days	36 (46.8%)	9 (42.9%)	0.64
	3- 7 days	29 (37.7%)	10 (47.6%)	
	More 7 days	12 (15.6%)	2 (9.5%)	
Affordability	Individual/family can afford it	73 (94.8%)	20 (95.2%)	0.94
	Need to borrow money	4 (5.2%)	1 (4.8%)	

* Statistical significant with $p<0.05$

Table 7. Relationship between the treatment characteristics and demand of resource mobilization service among in-patients with diabetes disease

In-patients with diabetes disease		Demand of resource mobilization service		
		Yes n (%)	No n (%)	P
		84	14	
Health insurance	Yes	77 (91.7%)	14 (100%)	0.26
	No	7 (8.3%)	0 (0.0%)	
Health insurance coverage	0%	5 (6.0%)	0 (0.0%)	0.094
	40%	1 (1.2%)	1 (7.1%)	
	80%	46 (54.8%)	4 (28.6%)	
	95%	13 (15.5%)	2 (14.3%)	
	100%	19 (22.6%)	7 (50.0%)	
Number of treatment/year	First time	44 (52.4%)	6 (42.9%)	0.77
	Second time	20 (23.8%)	3 (21.4%)	
	Third time	14 (16.7%)	3 (21.4%)	
	More third time	6 (7.1%)	2 (14.3%)	
Number of treatment	2 days	15 (17.9%)	1 (7.1%)	0.064
	3- 7 days	25 (29.8%)	1 (7.1%)	

In-patients with diabetes disease		Demand of resource mobilization service		
		Yes n (%)	No n (%)	P
days in this time	More 7 days	44 (52.4%)	12 (85.7%)	
Affordability	Individual/family can afford it	77 (91.7%)	14 (100%)	0.26
	Need to borrow money	7 (8.3%)	0 (0.0%)	

5 Discussion

In terms of demographic and treatment characteristics, this study was in line with the findings from a previous study conducted in Vietnam (Hao, 2016; Pham, Oanh, Liem, & Van Minh, 2019).

In this study, the demand for accommodation support for caregivers during the care period accounted for the highest prevalence. This could be explained that most in-patients with diabetes and cardiovascular disease and their caregivers come from rural areas that are quite far from the city. Most in-patients in this study were in the age group> 55 years old so one or two family members are taking care of them during the treatment process at the hospital. Moreover, accommodation support for caregivers has not been implemented in the hospital. The demand for cash support to partially cover treatment costs occupied 90.3% which was higher than a study in Vietnam in 2015 (72.7%) (Ngoc, 2015). Previous studies pointed out that one of the social worker's roles is to connect and assist finance for patients, especially patients who have financial difficulties (Pockett & Beddoe, 2017). In this study, the economic conditions of in-patients with diabetes and cardiovascular disease were mostly average. This may be the main cause of financial anxiety among the in-patients during treatment. Currently, facilities to provide social work services at the hospital are limited. The social work room is currently very narrow. The financial source for sustaining social work activities comes mainly from the support of the hospital's leader. Besides, there is also the support of My Tho City Charity Association and other organizations, agencies, individuals, and unions. The social work unit is currently making great efforts in seeking and mobilizing resources from sponsors in the community and society to meet the demands of in-patients. The study found that the demand for cash support for living cost among in-patients with diabetes and cardiovascular disease was 88.8%. This was higher than from the findings from the study by Ly Thi Hao (2016) with a rate of 73.8% (Hao, 2016). For the in-patients from rural areas, the cost of living in the city for them is quite high so they want to receive this support. The demand for free meals provision and belongings support among in-patients with diabetes and cardiovascular disease accounted for 95.4% and 90.8% respectively. Poor in-patients in this study, who come from remote districts, need to be provided free meals during treatment at the hospital. Free meals and gifts from social organizations are comfort and encouragement for the poor in-patients. It also shows that the hospital is paying attention to the vulnerable group in society. Currently, in the hospital, there is a "charity kitchen" (bếp ăn từ thiện) belonging to the charity association of My Tho city, Tien Giang province. Every day, this kitchen offers 3 main meals. Each meal provides more than 250 meals for the poor in-patients (General Hospital of Tien Giang Center, 2018; Nam, Yen, et al., 2022).

The study found that factors such as living areas, economic conditions, and the number of treatments were associated with the demands of resource mobilization services among in-patients with cardiovascular disease at the General Hospital of Tien Giang Center. This relationship was statistically significant with $p < 0.05$. According to qualitative research results, many in-patients with cardiovascular disease have to undergo exploration and interventional treatment techniques at high costs. In addition, most of them are from rural areas so their economic conditions are mostly average. They are hospitalized for the first time. Therefore, in-patients with cardiovascular disease are very concerned about the demands of resource mobilization services. Cardiovascular in-patients with widowed/divorced/separated status may have few support resources from family members such as spouses and children. Therefore, they have a higher demand for resource mobilization services in this study.

One of the strengths of this study was a mixed-methods study; as a result, the findings were good. This is the first study in Vietnam to investigate associated factors for the demands of resource mobilization service among in-patients with diabetes and cardiovascular disease.

This study was also subjected to several limitations. The study has a cross-sectional design, so the results indicate associations rather than causation. Our findings may not be generalizable to the general hospital in Vietnam. The study focuses on in-patients with diabetes and cardiovascular disease. In the case of other diseases, such as cancer or mental illness, the psychosocial consequences of the disease may result in different needs for resource mobilization. Therefore, there is a need for future studies to address these limitations.

6 Conclusion

Our study found that in-patients with diabetes and cardiovascular disease at the General Hospital of Tien Giang Center had a high demand for resource mobilization services. The significant associated factors for the demands of resource mobilization service among in-patients with cardiovascular disease were living area, marital status, economic conditions, and number of treatments. There is a need to study these associated factors further to confirm the findings. Besides, the General Hospital of Tien Giang Center needs to promote resource mobilization for in-patients with difficult circumstances. Social workers need to pay attention to relevant factors when providing resource mobilization services for in-patients with cardiovascular disease. Vietnam's Ministry of Health should issue a process to guide resource mobilization for in-patients in hospitals, including early identification of in-patients with a potentially high need for support in resources mobilization and their targeted counseling.

References:

Alston, M. (2007). Globalisation, rural restructuring and health service delivery in Australia: policy failure and the role of social work? *Health & social care in the community*, 15(3), 195-202.

Ambrose-Miller, W., & Ashcroft, R. (2016). Challenges faced by social workers as members of interprofessional collaborative health care teams. *Health & Social Work*, 41(2), 101-109.

Australian Association of Social Workers. (2016). Scope of Social Work Practice: Hospital Social Work. Retrieved 3 April, 2020, from https://www.aasw.asn.au/document/item/8644.

Berkman, B. (1996). The emerging health care world: Implications for social work practice and education. *Social work*, 41(5), 541-551.

Cleak, H. M., & Turczynski, M. (2014). Hospital social work in Australia: emerging trends or more of the same? *Soc Work Health Care*, 53(3), 199-213. doi: 10.1080/00981389.2013.873516.

Cowles, L. A., & Lefcowitz, M. J. (1992). Interdisciplinary expectations of the medical social worker in the hospital setting. *Health & Social Work*, 17(1), 57-65.

Craig, S. L., & Muskat, B. (2013). Bouncers, brokers, and glue: The self-described roles of social workers in urban hospitals. *Health & Social Work*, 38(1), 7-16.

Crisp, B. R. (2000). A history of Australian social work practice research. *Research on Social Work Practice*, 10(2), 179-194.

Davis, C., Baldry, E., Milosevic, B., & Walsh, A. (2004). Defining the role of the hospital social worker in Australia. *International Social Work*, 47(3), 346-358.

Dong, B. T. M. (2020). Social work activities at some central hospitals in Hanoi. *Journal of Health and Development Studies (JHDS)*, 4(1), 48.

General Hospital of Tien Giang Center. (2016). Report on medical examination and treatment from 1 January to 31 December. Tien Giang province, Vietnam.

General Hospital of Tien Giang Center. (2018). Report on the provision of social work services at General Hospital of Tien Giang Center in 2018. Tien Giang: General Hospital of Tien Giang Center.

General Statistics Office. (2016). Indicator name: Urban and rural. 29 Feb 2024, from http://portal.thongke.gov.vn/khodulieuldvl/MetaData.aspx?Mct=2&NameBar=SI%C3%8AU%20D%E1%BB%AE%20LI%E1%BB%86U%20%3E%20Kh%C3%A1i%20ni%E1%BB%87m,%20%C4%91%E1%BB%8Bnh%20ngh%C4%A9a,%20c%C3%A1ch%20t%C3%ADnh#:~:text=T%C3%AAn%20ch%E1%BB%89%20ti%C3%AAu%3A%20Th%C3%A0nh%20th%E1%BB%8B,thu%E1%BB%99c%20khu%20v%E1%BB%B1c%20n%C3%B4ng%20th%C3%B4n.

Ha, N. T. T., & Trang, N. T. N. (2015). The Development of Professional Social Work Practice in Central Highland in Vietnam: The Gap between Policy Aims and Actual Implementation. *International Journal of Developing Societies* 4(3), 95-107. doi: 10.11634/216817831504693.

Hanoi University of Public Health and Ministry of Health. (2019). Report on the social work system in the hospital in Vietnam. Retrieved 27 June 2021, from https://huph.edu.vn/.

Hao, L. T. (2016). *Social work for patients with blood diseases at the National Institute of Hematology and Blood Transfusion*. Graduate Academy of Social Science.

Heenan, D., & Birrell, D. (2019). Hospital-based social work: Challenges at the interface between health and social care. *The British Journal of Social Work*, 49(7), 1741-1758.

Hien, L. M. (2015). *Results of social work services at Cho Ray Hospital, Hochiminh city*. (Master of Hospital Management), Hanoi University of Public Health, Hanoi.

Judd, R. G., & Sheffield, S. (2010). Hospital social work: Contemporary roles and professional activities. *Soc Work Health Care*, 49(9), 856-871.

Medical Social Work Association in Taiwan. (2014). Medical Social Work Core Professional Practice in Taiwan. 24 Feb 2024, from https://mswa.org.tw/tw/about/index.php?root=1&kind=31.

Ministry of Health. (2011). Development of Social Work Profession in Health Care in the Period 2011 to 2020 (Project Approval). *No.2514/QD-BYT*. Retrieved 4 April, 2020, from https://thukyluat.vn/vb/quyet-dinh-2514-qd-byt-de-an-phat-trien-nghe-cong-tac-xa-hoi-nganh-y-te-2011-2020-1f227.html.

Ministry of Health. (2015). Circular No. 43/2015 /TT-BYT on Regulation in Responsibility and Form of Social Work in Hospitals. *No.43/TT-BYT*. Retrieved 4 April 2021, from https://thuvienphapluat.vn/van-ban/the-thao-y-te/Thong-tu-43-2015-TT-BYT-hinh-thuc-to-chuc-thuc-hien-nhiem-vu-cong-tac-xa-hoi-cua-Benh-vien-296470.aspx.

Ministry of Health. (2018). Evaluation on the implementation of Circular No.43/2015/TT-BYT- regulating the tasks and forms of hospital social work. Cantho city.

Nam, P. T., Dung, N. H., Hung, N. T., Thu, L. T., Thuy, N. T. B., Trung, N. V., . . . Oanh, L. T. M. (2022). Social Work Services for Children at Vietnam's Hospitals: A Qualitative Study. *Journal of Social Service Research*, 1-12.

Nam, P. T., Dung, N. H., Liem, N. K., Hung, N. T., Giang, T. S., Trang, V. T., . . . Tung, T. V. (2022). Anxiety among hospital social workers in Ho Chi Minh City, Vietnam during the COVID-19 pandemic: Suggestions for social work administration. *International Journal of Mental Health*, 1-16.

Nam, P. T., Quan, H. L., Khanh, D. D., Liem, N. K., Thu, H. T., Tung, T., & Dung, N. H. (2021). Social Work Services at Dakto District Health Center, Kon Tum Province, Vietnam: Challenges and Policy Recommendations. *Social Work in Public Health*, 36(1), 54-67.

Nam, P. T., Son, N. H., Quan, H. L., & Minh, H. V. (2020). Hospital Social Work in Vietnam in the period of 2011-2020: Achievements and Challenges. *Journal of Health and Development Studies*, 4(1), 2.

Nam, P. T., Yen, T. N., & Liem, N. K. (2022). Demands for resources mobilization service among in-patients at the General Hospital of Tien Giang center, Vietnam, and associated factors. *Hnue Journal of Science,* 67(4), 133-143.

Ngo-Metzger, Q., Sorkin, D. H., Billimek, J., Greenfield, S., & Kaplan, S. H. (2012). The effects of financial pressures on adherence and glucose control among racial/ethnically diverse patients with diabetes. *Journal of general internal medicine*, 27, 432-437.

Ngoc, T. T. V. (2015). *The needs and situation of social work activities at National Hospital of Pediatrics* (Thesis of Master of Hospital Management), Hanoi University of Public Health.

Office of the Prime Minister. (2010). Development of Social Work Profession in the Period of 2011 to 2020 (Project Approval). Retrieved 5 April, 2020, from https://thuvienphapluat.vn/van-ban/van-hoa-xa-hoi/Quyet-dinh-32-2010-QD-TTg-phe-duyet-De-an-phat-trien-nghe-cong-tac-xa-hoi-giai-doan-2010-2020-102910.aspx.

People's Committee of Tien Giang province. (2019). Introducing Tien Giang province. 27 Feb 2023, from https://tiengiang.gov.vn/chi-tiet-tin?/gioi-thieu-ve-tien-giang/11243313.

Pockett, R., & Beddoe, L. (2017). Social work in health care: An international perspective. *International Social Work*, 60(1), 126-139.

Prime Minister of Vietnam. (2015). Decision on promulgating a multi-dimensional poverty line applicable to the period 2016 - 2020. 29 Feb 2024, from https://thuvienphapluat.vn/van-ban/Van-hoa-Xa-hoi/Quyet-dinh-59-2015-QD-TTg-chuan-ngheo-tiep-can-da-chieu-ap-dung-2016-2020-296044.aspx.

Pham, N. T., Oanh, N. K., Liem, N. K., & Van Minh, H. (2019). Demands and Factors Associated to Psychosocial Support of Cancer Patients at Vietnam National Cancer Hospital. *Asian Social Work Journal*, 4(3), 35-46.

Pham Tien, N., Hung, N., Tran, S. G., Dung, N., Le, V., Tran, T. K. H., . . . Nguyen Xuan, L. (2022). Hospital social work education in Vietnam: achievements, challenges, and lessons learned. *Social work education*, 1-16.

Quan, H. L. (2019). *Social work activities and some influencing factors at Dak To District Health Center, Kon Tum Province from March 2018 to March 2019*. (Hospital Management), Hanoi University of Public Health, Hanoi.

Rane, K., Wajngot, A., Wändell, P., & Gåfvels, C. (2011). Psychosocial problems in patients with newly diagnosed diabetes: number and characteristics. *Diabetes research and clinical practice*, 93(3), 371-378.

Rodwin, B. A., Spruill, T. M., & Ladapo, J. A. (2013). Economics of psychosocial factors in patients with cardiovascular disease. *Progress in cardiovascular diseases*, 55(6), 563-573.

Truc, D. T., Bong, P. V., & Nam, P. T. (2020). Provision of social work activities at Nguyen Dinh Chieu Hospital, Ben Tre Province, the period of 2016 - 2019. *Journal of Health and Development Studies*, 4(1), 37.

Weida, E. B., Phojanakong, P., Patel, F., & Chilton, M. (2020). Financial health as a measurable social determinant of health. *PLoS One*, 15(5), e0233359.

World Health Organization. (2016). Health finance in Vietnam. 23 Feb 2024, from https://www.who.int/vietnam/vi/health-topics/health-financing#:~:text=B%E1%BA%A3o%20hi%E1%BB%83m%20y%20t%E1%BA%BF%20x%C3%A3%20h%E1%BB%99i%20%E1%BB%9F%20Vi%E1%BB%87t%20Nam%20%C4%91%C6%B0%E1%BB%A3c,cho%20ch%C4%83m%20s%C3%B3c%20s%E1%BB%A9c%20kh%E1%BB%8Fe.

Author´s Address:
Vu Thu Trang
Hanoi National University of Education
136 Xuan Thuy street, Cau Giay district, Hanoi city, Vietnam
+84 964525858
trangvuthu90@gmail.com

Author´s Address:
Nguyen Hanh Dung
Hanoi National University of Education
136 Xuan Thuy street, Cau Giay district, Hanoi city, Vietnam
+84 948560880
hanhdung910@gmail.com

Author´s Address:
Tran Ngoc Yen
General Hospital of Tien Giang Center, Tien Giang province, Vietnam
No.2 Hung Vuong street, Ward 1, My Tho city, Tien Giang province, Vietnam
+84 396921748
yentran918454@gmail.com

Author´s Address:
Nguyen Thi Phuong
Hanoi University of Public Health
1A Duc Thang Road, Duc Thang Ward, North Tu Liem District, Hanoi city, Vietnam
+84 984890482
ntp@huph.edu.vn

Author´s Address:
Pham Tien Nam
Hanoi University of Public Health
1A Duc Thang Road, Duc Thang Ward, North Tu Liem District, Hanoi city, Vietnam
+84 915170715
phamtiennam1987@gmail.com