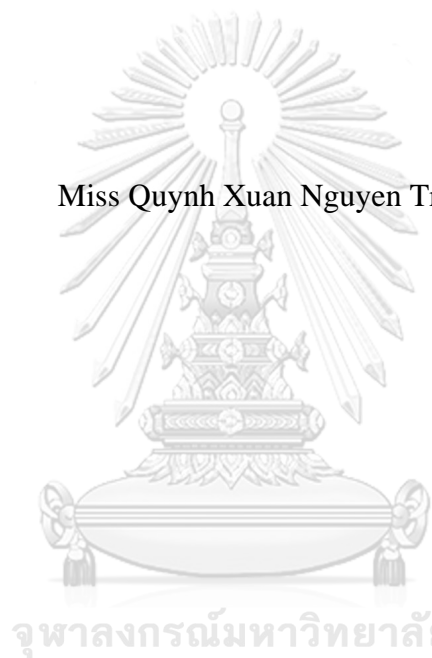


KNOWLEDGE, ATTITUDE, AND BEHAVIOR REGARDING MEDICAL SOCIAL WORK AMONG HEALTH CARE PROFESSIONALS IN ONCOLOGY HOSPITAL- HO CHI MINH CITY- VIETNAM

Miss Quynh Xuan Nguyen Truong



บทคัดย่อและแฟ้มข้อมูลฉบับเต็มของวิทยานิพนธ์ตั้งแต่ปีการศึกษา 2554 ที่ให้บริการในคลังปัญญาจุฬาฯ (CUIR) เป็นแฟ้มข้อมูลของนิสิตเจ้าของวิทยานิพนธ์ ที่ส่งผ่านทางบัณฑิตวิทยาลัย

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ความรู้ ทักษะ และพฤติกรรมด้านสังคมสังเคราะห์ทางแพทย์ของบุคลากรทางด้านสาธารณสุขในโรงพยาบาลมะเร็ง เมืองโฮจิมินห์ ประเทศเวียดนาม



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การทำความเข้าใจความรู้ทัศนคติและพฤติกรรมของผู้ให้บริการด้านการดูแลสุขภาพเกี่ยวกับ
งานด้านสังคมทางการแพทย์ถือเป็นสิ่งสำคัญมากที่จะต้องเข้าใจถึงความท้าทายที่นักสังคมสงเคราะห์
เผชิญอยู่ในทีม หรือในโรงพยาบาล และความเป็นไปได้ในการนำนโยบายใหม่มาใช้
การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาความรู้ทัศนคติและพฤติกรรมของผู้ประกอบงานด้านสังคม
สงเคราะห์ทางการแพทย์ในโรงพยาบาลโรคมะเร็งในเมืองโฮจิมินห์
ข้อมูลจากการศึกษาแบบตัดขวางนี้ได้ถูกรวบรวมโดยการสัมภาษณ์แบบตัวต่อตัวกับเจ้าหน้าที่ทางการแพทย์
ที่ทำงานเต็มเวลาที่โรงพยาบาลโรคมะเร็งมานานกว่าหนึ่งปี
จากการทบทวนวรรณกรรมและการศึกษาก่อนหน้านี้แบบสอบถามที่นำมาใช้มีการพัฒนาและตรวจสอบ
ความถูกต้องตามความคิดเห็นจากผู้เชี่ยวชาญเพื่อวัดระดับความรู้ทัศนคติและพฤติกรรม
ใช้เทคนิคการสุ่มตัวอย่างแบบแบ่งชั้นโดยใช้การทดสอบ Wilcoxon-rank test, Mann-Whitney U
test และ Multiple Linear Regression เพื่อวิเคราะห์ข้อมูล
การศึกษาพบว่ามีความรู้ต่ำในผู้ตอบแบบสอบถาม
เกือบครึ่งหนึ่งของผู้ตอบแบบสอบถามมีทัศนคติเชิงลบและสองในสามของบุคลากรทางการแพทย์มีต่อ
งานด้านสังคมทางการแพทย์ ในหมู่ผู้เข้าร่วม 298
คนซึ่งเป็นพยาบาลแพทย์เภสัชกรและช่างเทคนิคทางการแพทย์แพทย์มีคะแนนความรู้และพฤติกรรม
ต่ำสุดคะแนนต่ำสุดที่สอดคล้องต่ำสุด
เพศระดับการศึกษาและจำนวนชั่วโมงทำงานเป็นปัจจัยที่มีความสัมพันธ์กับคะแนนเจตคติอย่างมีนัย
สำคัญ สถิติ
ความถี่ในการติดต่อระดับการศึกษาและการมีปฏิสัมพันธ์กับนักสังคมสงเคราะห์มีความสัมพันธ์กับคะแนน
พฤติกรรมขณะที่คะแนนประสบการณ์เพียงอย่างเดียว
ควรมีการปรับปรุงความรู้ทัศนคติและพฤติกรรมการทำงานด้านสังคมสงเคราะห์ของบุคลากรทางการแพทย์
โดยใช้โปรแกรมการศึกษาการศึกษาครั้งนี้เป็นข้อมูลพื้นฐานเกี่ยวกับความรู้ทัศนคติและพฤติกรรม
ในการทำงานเพื่อสังคมและเป็นพื้นฐานในการดำเนินการวิจัยในอนาคตรวมทั้ง
การออกแบบโปรแกรมที่จะนำมาปรับใช้ในอนาคต

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QUYNH XUAN NGUYEN TRUONG: KNOWLEDGE, ATTITUDE, AND BEHAVIOR REGARDING MEDICAL SOCIAL WORK AMONG HEALTH CARE PROFESSIONALS IN ONCOLOGY HOSPITAL- HO CHI MINH CITY- VIETNAM. ADVISOR: PROF. SURASAK TANEEPANICHSKUL, M.D., 95 pp.

Understanding the knowledge, attitude and behavior of healthcare providers about medical social work is very important to understand the challenges that social worker might face in multidiscipline teams or hospital settings; and the feasibility of adopting new policies. This study is designed to investigate knowledge attitude and behavior among healthcare professional towards medical social work in Oncology hospital in Ho Chi Minh city. The data of this cross-sectional study was collected by face – to face interviews with full-time medical staffs who have working in the Oncology hospital for more than one years. Based on the literature review and previous studies, a structured questionnaire had been developed and validated by expert reviews to measure the level of knowledge, attitude, and behavior. The stratified random sampling technique was used Wilcoxon signed-rank test, Mann–Whitney U test, and Multiple Linear Regression were applied for data analyze. The study found there was a low level of knowledge. There were nearly a half of respondents had a negative attitude and two-thirds of medical staffs had towards medical social work. Among 298 participants who are nurses, physicians, pharmacists and medical technicians, physicians had the lowest knowledge and behavior score, second lowest attitude score. Gender, education level, and number of working hour were all the factors which were statistically significantly associated with attitude score. Interaction frequency, education level and interaction with social workers were associated with behavior score while just only experience factor was associated with knowledge score. their knowledge, attitude, and behavior towards medical social work of medical staffs should be improved by education programs. This study provides a baseline information on the knowledge, attitude, and behavior regarding social work and serves as a basis for

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ACRONYM

KAP: Knowledge, Attitude, and Behavior

WHO: World Health Organization

SW: Social Work

MOH: Ministry of Health

UNICEF: United Nations International Children's Emergency Fund



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CHAPTER I

INTRODUCTION

1.1 Background and Rationale

According to WHO: “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”(1). That means the psychosocial part plays an essential role in people's health. The patient who is treated just only physical health cannot be seen as a healthy person if they still are affected by the psycho or social determinant. Social determinants of health are seen as “the fundamental structures of social hierarchy and the socially determined conditions these structures create in which people grow, live, work and age.” (WHO Commission on Social Determinants of Health - Interim Statement 2007), Genetic inheritance plays a significant part in individual health, but the major factors influencing health are socially created, that is they are the result of structural and institutional arrangements and policies which are open to change(2). But the physicians cannot or are not trained to treat psychosocial part of patients, and they were less likely than their social work counterparts to identify patient/family problems related to an adjustment to illness and problems connected to hospital and community resources as well (3). That why from more than one hundred years ago, the hospital system in some countries required the new professional which can help to solve that problem: Medical social work.

In global, the history records the first medical social work formed in Western countries. In 1895, the Royal Free Hospital in London was hired the first social workers, called a hospital almoner. Ten years later, Massachusetts General Hospital was set up their first social work department in the United States. Shortly after that, many hospitals in all the country follow(4). In Ireland, in 1918, Winifred Alcock, the first almoner appointed by Webb physician to work in her dispensary for sick children that she established at the Adelaide Hospital in Dublin.(5)

In Asia, China is the first country had a medical social worker in 1921(6). Follow by, in 1946 in J.J. Hospital, Bombay, the first medical social worker was

appointed. In 1953, Miss Anna Mo Toll, a Swedish, medical social worker visited Karachi, in response to the request from the Govt. of Pakistan to UN. First medical social work was appointed at TB Control and Training Centre in 1953 under the joint auspices of the Govt. of Pakistan and the United Nations(7).

After over a hundred years, the benefit of medical social work on patient's outcomes has recognized. Some research demonstrates that a care coordination model which includes social worker as a member of treatment team could provide positive patient health outcome. Social work not only address the nonmedical issue and social need(8)but also increase patient's health outcomes(9). It is shown that develop medical social work is the trend can lead to developing the better health care.

In Vietnam, medical social work has formed very early as the time Vietnam became the colony of France. The social workers, graduated from Caritas Social Work School, had worked in hospitals and called "pink blouse" team to discern with "white blouse" team – medical team(10). After 1975, the social worker did not continue working in hospitals. Then, in 1985, Oanh Nguyen Thi who was a lecturer at Caritas Social Work School has provided healthcare education program for Ho Chi Minh City Department of Health. However, the social worker still works outside the health care system(11) because social work profession in Vietnam officially recognized from 2010 after the Prime Minister issued Decision No. 32/2010 /QD-TTg on 25/3/2010.

In 2005, UNICEF in their report "A Study of the Human Resource and Training Needs for the Development of Social Work in Vietnam" recommended that "Social workers should be engaged in working with children in need of special protection, adults (such as isolated elderly people) who are in need of social protection, the treatment and/or rehabilitation of those who are involved in or affected by 'social evils', social care and support to patients in hospitals and other health services and to students in schools and universities, social and community development, and in the planning and development of these services."(12)

In order to further promote the role of social work in hospitals, and form an official title for social workers in hospitals, on 26/11/2015, the Ministry of Health (MOH) has issued Circular 43/2015/TT-BYT regulation on the tasks and forms of organization to perform the tasks of social work of the hospital. This Circular takes effect from 1/1/2016, will be assessed to establish a new position of the social workers

in the hospital. According to the circular, all hospitals in Vietnam have to set up the department of social work and organize their social services(13). The development of medical social work will help improve the quality of patient care regarding social psychology, especially for patients who are facing a crisis or depression - which is inadequate treatment in Vietnam and other developing countries(14). Combining physical and psychological interventions can be useful and produce significant reductions in total health care costs in Vietnam(15). However, after one year adopted the circular, the organizing for social work department still is in process. According to the Ministry of Health, 80% of national level hospitals and hundreds of provincial level hospitals have set up a social work department, which is not included many district hospitals have also set up the social work department. Some barriers are existing because social work is a new area, the legal foundation is not strong enough, the awareness and attention of some medical staffs and hospital managers have not been adequate. The resources and funding for implementing social work in hospitals are limited in quantity and quality. (16).

Problem Statement

From 2016 until now, medical social work is a new concept in Vietnam hospital setting not only to patients but also to health care providers. It is not easy to apply the policy in the Vietnamese healthcare setting. Hospitals need modified the MOH circular to their policy and change their system. This procedure might influence the medical staffs such as physicians, nurses, pharmacists, physiotherapist. The report of MOH also points out some factors that affect the implementation of medical social work in hospitals is the scarcity of medical social workers, incomplete policy, hospital managers did not place considerable emphasis on medical social work and lack of accurate perception regarding this profession. But the report did not mention medical social work perception in hospitals among physicians as well as other occupations in the healthcare system. (16)

In order to provide quality service for patients, the medical social worker needs to collaborate with the medical team efficiently. A social worker cannot work without the support of the medical team. Working in the multidiscipline team may challenge. Because sometimes, social worker's role as client advocate can create tension between

the worker and the rest of the collaborative team(17). It has required the understanding of medical staff about medical social work, what social worker can do, the cooperative attitude and good behavior as well to maintain the close collaborative and their jobs(18). Therefore, understanding the knowledge, attitude, and behavior of health care providers is very important to understand the challenges that social workers might face in hospital settings and also can be beneficial to assess the feasibility of adopting new policies. However, the number of studies in this field is limited. In worldwide, before this study, these words: "medical social work," "social work in hospitals," "knowledge," "attitude," "behavior," "collaboration," "multidiscipline team," "health provider," "physician" were searched on PubMed and Google Scholar. No previous study was found for direct assessments of all knowledge, attitude, and behavior regarding medical social work among healthcare providers. Some research studied medical social work perception or attitude, or behavior among doctors, nurses and social workers. However, all of these researchers are qualitative studies. Also, no association was found between the practitioner perceptions about social work and their social demographic characteristics. In Vietnam; there is none of research on this topic. That is the rationale for this study.

Although every hospital in Vietnam has to establish their social work services, this study focuses on the public hospital at national level. To understand the knowledge, attitude and behavior regarding medical social work, national level public hospitals were randomly chosen, Ho Chi Minh City Oncology Hospital

1.2 Research Questions

1. What are the knowledge, attitude, and behaviors (KA&B) regarding medical social work among health care professionals?
2. Are there associations between demographic characteristics knowledge, attitude on medical social work and the behavior regarding medical social work among health care professionals?

1.3 Objectives

1.3.1. General Objective

To investigate knowledge, attitude, and behavior of health care professional towards medical social work in a hospital in Ho Chi Minh city

1.3.2. Specific objectives

1. To assess and determine the level of knowledge, different attitude, and extent of behavior regarding medical social work.
2. To identify factor related to the knowledge, attitude, and behavior of medical practitioners towards medical social work.

1.4 Research Hypotheses

Null Hypothesis

There is no association between social-demographic and other characteristics and KAB regarding medical social work of medical professionals in Hospital in Ho Chi Minh city.

Alternative Hypothesis

There is an association between social-demographic and other characteristics and KAB regarding medical social work of medical professionals in a hospital in Ho Chi Minh city.

1.5 Operational Definitions

- **Social worker:** a full-time staff working in social work department of the hospitals
- **Healthcare professionals:** staffs who are medical staffs such as: physicians, nurses, pharmacist, medical technicians... working in the hospital for more than one year.
- **Paraclinical staff:** the staff who work in a department which is related to the branches of medicine, particularly the laboratory sciences, that give a service for patients without direct involvement in care.
- **Clinical staff:** the staff who work in a department which gives a direct medical service for patients.

- **Demographic characteristics:** gender, age, marital status, income, education, occupation, duration of working experience, working hour, department.
- **Knowledge of social work:** the ability of staff to have a proper understanding of medical social work regarding definition, approaches, the role of social workers in hospitals.
- **Attitude toward medical social work:** the beliefs on the need of social support for patients in the hospital, the benefit of social work on patient's outcomes, attitude on the competence of social workers and attitude on the collaboration with a social worker
- **Behavior of medical social work:** routine activities and action of individual or group for collaborating with social workers in hospital
- **Multidisciplinary treatment team:** a team of professionals including representatives of different disciplines which include: medical, social work, pharmaceutical, rehabilitation, psychology, ... They coordinate the contributions of each profession, which are not considered to overlap, to provide the excellent treatment and improve patient healthcare.
- **Medical social work:** a special profession of social work in health care setting which provides services to support the patients who are dealing with non-medical problems. These problems are related to their socio-psycho well-being and the treatment outcome.
- **Age** was referred to self-reported by participants with an exact number.
- **Gender** of the participants, which was divided into three groups: male, female and others (LGBT or gender identity disorder), was self-reported by themselves
- **Income** was classified by the level of satisfaction of respondents
- **Education level** was reported as a highest educational certificate that the respondents have received, and it is categorized as a certificate, diploma, bachelor degree, master degree and others.

- **Occupation**, classified into technician, nurse, physiotherapist, pharmacist, and physician, was self-reported by respondents regarding their occupation status
- **The average of daily working hours:** was self-reported by respondents with the estimated average working time per day.
- **Numbers of patients** per day was self-reported by respondents with the estimated average patients received the provider's services per day.
- **Duration of experience** prefers to self-reported as how long participant has worked in medical professional
- **Department** was confirmed by the interviewers through the list of staffs
- **Social work training participation** was checked whether the participants have attended any training or workshop about social work (including include outside or in-house training)
- **Interaction with social workers** refers to the frequency of interaction between health care providers and social workers in a hospital setting.

1.6 Research Conceptual framework

The schematic below shows an explanation of the factors affecting the behavior of medical social work of the study medical professionals.

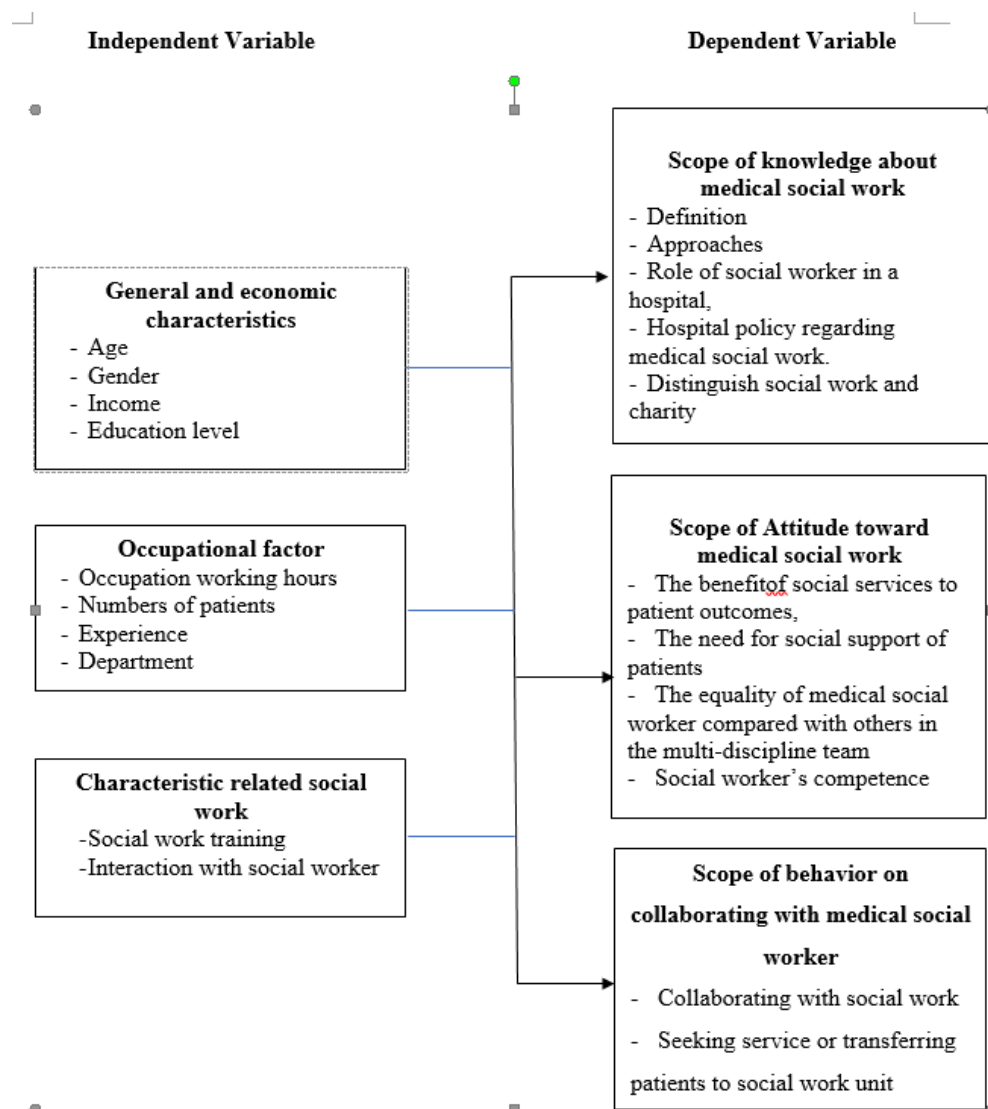


Figure 1: Conceptual framework of factors affecting KA&B of medical staff regarding medical social work

CHAPTER II

LITERATURE REVIEW

2.1 Medical Social work

2.1.1 Definition of social work

According to Canada Association of Social Work: *“Social work is a profession concerned with helping individuals, families, groups, and communities to enhance their individual and collective well-being. It aims to help people develop their skills and their ability to use their own resources and those of the community to resolve problems. Social work is concerned with individual and personal problems but also with broader social issues such as poverty, unemployment, and domestic violence. Human rights and social justice are the philosophical underpinnings of social work practice. The uniqueness of social work practice is in the blend of some particular values, knowledge, and skills, including the use of relationship as the basis of all interventions and respect for the client’s choice and involvement. In a socio-political-economic context which increasingly generates insecurity and social tensions, social workers play an important and essential role.”* (19)

The Australian Association of Social Workers (AASW) currently adheres to the following draft definition of social work that is jointly endorsed by the International Federation of Social Workers (IFSW) and International Association of School of Social Work (IASSW): *“The social work profession facilitates social change and development, social cohesion, and the empowerment and liberation of people. Principles of social justice, human rights, collective responsibility and respect for diversities are central to social work. Underpinned by theories of social work, social sciences, humanities and indigenous knowledge, social work engages people and structures to address life challenges and enhance wellbeing”*(20)

The NASW (1973) defines social work as *“The professional activity of helping individuals, families, groups or communities enhance or restore their capacity for social functioning or creating societal conditions favorable to that goal.”*(21)

According to the definition of International Foundation of Social work, “*Social work is a behavior-based profession and an academic discipline that promotes social change and development, social cohesion, and the empowerment and liberation of people. Principles of social justice, human rights, collective responsibility and respect for diversities are central to social work. Underpinned by theories of social work, social sciences, humanities and indigenous knowledge, social work engages people and structures to address life challenges and enhance wellbeing*”(22). This is the global definition which is accepted worldwide and was used in this study.

2.1.2 Medical social work

Medical social work or social work in hospitals is a specific form of social casework that focuses on the relationship between disease and social maladjustment. (23)

2.1.3 Social work methods

Social work has three primary methods which are:

- Individual social work – social casework: For example, in hospital, when a patient is diagnosed with Alzheimer, the disease could not have been treated, social workers will work with the physician to inform him or her about this situation and preparing for emotional support. Then, they will work with the patient to help them face that disease, arrange their new daily routine, planning for the future stage, finding some family and community resources.

- Social work with the group - social group work: Social workers can work with a peer group with the same disease such as diabetes, hypertension, cancer, dementia and motivate the patients to support themselves.

- Social work with communities - community organization: the social workers working with the community to develop health education, seeking resources for their patients, link the service of the hospital to public health services on the community.

2.1.4 Medical social worker

There are various definitions for medical social worker:

In the words of Ontario Association of Social Workers (OASW) in 2016, “*Social workers play a critical role in hospital settings by helping patients and families address the impact of illness and treatment ... Social workers, as part of the healthcare team, provide assessment and appropriate interventions to aid the patient in achieving optimum recovery/rehabilitation and quality of life.*” (24)

In the handbook: ‘Understanding the roles and competencies of medical social workers’, the Singapore Ministry of Health defined: “*Medical Social Workers (“MSWs”) play an integral role in a multi-disciplinary health care team to deliver patient-centric care across the care continuum. They provide interventions to help patients and their families manage medical conditions by mobilizing resources through partnerships with healthcare and community stakeholders and providing post-discharge support services. Through psychoeducation and counseling, MSWs help patients and their families regain physical and mental well-being to achieve self-reliance.*”(25)

Another definition for medical social worker which is given by NASW is the one who will “*help patients and their families understand a particular illness, work through the emotions of diagnosis, and provide counseling about the decisions that need to be made. Social workers are also essential members of interdisciplinary hospital teams. Working in concert with doctors, nurses, and allied health professionals, social workers, sensitize other health care providers to the social and emotional aspects of a patient’s illness. Hospital social workers use case management skills to help patients, and their families address and resolve the social, financial and psychological problems related to their health condition*”(26)

Social workers work in hospital settings to help patients and their families cope with a new diagnosis, injury, or chronic illness by providing direct services to meet their needs in assisting them to return to independent functioning within the community. Medical social workers provide psychosocial support to people, families, or vulnerable populations so they can better cope with their diagnosis and treatment. As part of a multidisciplinary team, medical social workers have many functions. Social workers provide a valuable resource to doctors and nurses by providing them with critical

information for the treatment and recovery process of patients by obtaining in-depth social histories and assessments. (27)

2.1.5 Role of social workers in hospital

In each country, the scope of social work practice in hospital social work depends on their policy and health care system characteristics.

The scope of practice in hospital social work in Australia (28) includes:

- Assessment
- Counseling, mediation, and therapeutic interventions
- Case management, service coordination, and multidisciplinary work
- Crisis interventions for clients who face psychological trauma, accident...
- Education, resourcing and practical assistance
- Advocacy for patients right
- Policy, program design, and research
- Providing specialist clinical expertise in addressing the psychosocial aspects

According to NASW in America(29), the role of social work in the hospital are:

- Initial screening and evaluation of patient and families;
- Comprehensive psychosocial assessment of patients;
- Helping patients and families understand the illness and treatment options, as well as consequences of various treatments or treatment refusal;
- Helping patients/families adjust to hospital admission; possible role changes; exploring emotional/social responses to illness and treatment;
- Educating patients on the roles of health care team members; assisting patients and families in communicating with one another and to members of health care team; interpreting information;
- Educating patients on the levels of health care (i.e., acute, subacute, home care); entitlements; community resources; and advance directives;
- Facilitating decision making on behalf of patients and families;
- Employing crisis Intervention;

- Diagnosing underlying mental illness; providing or making referrals for individual, family, and group psychotherapy;
- Educating hospital staff on patient psychosocial issues;
- Promoting communication and collaboration among healthcare team members;
- Coordinating patient discharge and continuity of care planning;
- Promoting patient navigation services; occupational profile 1 Social Workers in Hospitals & Medical Centers
 - Arranging for resources/funds to finance medications, durable medical equipment, and other needed services;
 - Ensuring communication and understanding about post-hospital care among patient, family, and healthcare team members;
 - Advocating for patient and family needs in different settings: inpatient, outpatient, home, and in the community;
 - Championing the health care rights of patients through advocacy at the policy level.

In Canada, the role of social workers might be slightly different(24):

- Assess the biopsychosocial and ethnocultural needs of the patient, family and support system.
- Assess community and other large system factors impacting on patient health and treatment.
- Provide psychosocial interventions that facilitate patient and family adaptation and well-being.
 - Facilitate family and team communication.
 - Advocate for required services and navigate complex social systems.
 - Provide crisis intervention and mediate conflict.
 - Locate and negotiate potential resources.
 - Educate patients and families on effective ways to mobilize existing resources.
 - Develop and implement appropriate discharge plans

The core functions of MSWs in Singapore (25) include:

- Biopsychosocial-spiritual assessment - assessing the strength and resilience of the patient, families, and social support systems to help the individual function within the community.

- Family education and mediation-educating the family on the physical and psychosocial needs of the members and ways they can access internal and external resources, as well as mediating familial conflicts

- Counseling for individuals, couples and families - counseling patients who suffer from poor mental health states (e.g., depression, anxiety), and coping and adjustment difficulties (e.g., due to loss of a limb through amputation, loss of hearing, or caring for family members suffering from dementia)

- Risk assessment - assessing the risk of self-harm (e.g., suicide) and to others (e.g., family violence, elder abuse, child abuse).

- Financial assessment and fund management - identifying and referring cases for financial assistance

- Discharge Planning -working together with medical, nursing and other allied health professionals, patients and their families to develop and implement the post-discharge care plan

- Information & Referral Services - linking patients and caregivers to community resources.

According to the circular number 43/2015/TT-BYT of Vietnamese Ministry of Health(13), the responsibility of social workers in the hospital is defined:

- Supporting and counseling to solve social work problems for patients and their family members in the course of medical examination and treatment (hereinafter referred collectively to as patients), including:

- + Providing information to patients

- + Providing psychological, social support

- + Providing emergency support for victims of violence, domestic violence, gender violence, accidents and disasters to ensure the safety of patients.

- + Providing information about their rights and resources.

- + Preparing for referral treatment and discharge planning.

+ Coordinating and guide organizations and volunteers with the need to implement and support the social work of hospitals.

- Providing information and health education
- Fundraising
- Support healthcare providers
- Education
- Training for volunteers
- Organizing charitable activities, social work of the hospital in the community

Although there are some differences of medical social worker roles in various countries, in general, there is some crucial component such as psychology support, social support, information and collaborating with healthcare team as a member.

2.2. Reviews of relevant research

2.2.1. Study on social work perception

A study of two researchers at Columbia University on 591 direct practice social workers in Israel indicate that an array of perceived social work service outcomes are significantly associated with perceptions of social work power(30). Another study which uses quantitative method established in Saudi hospital show that the working experiences are one of the crucial factors was seen as limiting the social workers' professional potential. (31).

A study about Public attitudes and knowledge about social workers in Israel done by Maya Kagan (2015) has found that that side by side with fairly high recognition of general areas related to the social work profession, there was an absolute lack of comprehension in regard to the roles performed by social workers. Attitudes toward social workers were ambivalent. Although on most parameters examined they received the lowest rankings of all professional fields with which they were compared, a fairly high percentage of respondents rejected critical and biased statements about social workers and defined them as people whose work is based on values, social ideology, and professional ethics, and also believed that it is necessary to increase the number of social workers in Israel and to improve their employment terms and conditions. For

sociodemographic, they use sex, ethnic origin, marital status, and religiosity and it showed that gender, economic status can affect the attitude. It measured the knowledge of people about social work by asking them to choose several roles of medical social workers that they know. A measure of respondents' attitudes toward social workers was designed by calculating the mean of all items in this part, with a higher score indicating a more positive attitude toward some statement such as "Social work is a profession more suited to women", "SWs are given too much authority", "SWs don't really care about their clients. They are only doing their job", "It is necessary to increase the number of SWs," "Social work is an a prestigious profession," etc. The social workers were compared to other professions such as psychologists, psychiatrists, and nurses. (32)

2.2.2. Study of social work perception among healthcare providers:

In 1995, M. Davies and J. Connolly in their exploratory study named "The social worker's role in the hospital: seen through the eyes of other healthcare professionals", with a qualitative method, pointed out that the social worker's functions are recognized as including statutory responsibilities in child protection and mental health, and there are some secondary roles that often reflect a social worker's interest or sphere of expertise. The social worker's primary role, however, is deemed to be that of discharge planning. Doctors and nurses on surgical and orthopedic wards reported that they wanted social workers to deal with social problems, especially as they affect young people, and 'practical (rather than nursing) problems.' The social workers are expected to arrange for an assessment of any patient likely to be in need of service following return home or who is likely to require full-time residential care. They saw the social workers as a key agent within the healthcare framework and acknowledged that the social care role and the social worker's link with the community were crucial components of good hospital practice. Nurses referred to the social workers as 'our bridge to the community.' Nurses reported that financial matters make them feel dependent upon social workers. Social workers are expected to sort out patients' financial problems, sometimes paying for transport to clinics, giving advice about benefits and social security, or providing more strong guidance if subsidies are required

in order to make residential accommodation feasible. Some social workers were seen as key members of the multi-disciplinary team, attending ward rounds and called in for case conferences but it still had some limitation. Although it is recognized that social workers can often usefully chat with patients and liaise with their families, but the doctors and nurses were not willing to let social workers join to the counseling task with practitioners.(33)

The perception of social work between various profession can be different. A study shows that the nurses have a better understanding of the role of social work than physicians. Psychosocial assessment, community services and referrals, and counseling are three services that the doctors focus when discussing about the roles of social workers while the nurse can list more services that social workers provide and see the social workers is the one who not only can provide instruction on care plans, follow-up, and support, but also the one who can fill other needed roles with the patient, such as with transportation and navigate the health care system.(34) This finding is supported by Martin Davies and Jo Connolly' study. There was a difference between disciplines about the perception of social work also was found in the study. Health care providers' consciousness manifestation in different ward setting is manifested heterogeneity. (33)

2.2.3. Study on collaborative healthcare team:

Working in an interprofessional team can be a challenge. And are some factors might influence the collaboration in an interprofessional team. In a qualitative study of Ambrose-Miller about the challenge of social workers in health care team, communication skill had pointed out related to the collaboration in the team. Effective communication was described as necessary for interprofessional collaboration whereby poor communication was considered a barrier to collaboration. Power inequities between doctors, nurses and social workers and dynamics also recognized as a barrier to collaboration. (18)

The attitude of each discipline is not the same. A study was determined the attitudes of internal medicine residents, advanced practice nursing and masters-level social work students toward the value and efficiency of interdisciplinary teamwork and the physician's role on the team. Most students in each profession agreed that the interdisciplinary team approach benefits patients and is a productive use of time, but

the agreement of medical doctor students consistently rated lower nurses and social work students. Interprofessional differences were most significant for beliefs about the physician's role; doctor students highest agreed that a team's primary purpose was to assist physicians in achieving treatment goals for patients, the rate of social workers and nurses. More medical students than master social work students or nurse trainees agreed that physicians have the right to alter patient care plans developed by the team(35). The similar result also found in a study of Julie S. Abramson and Terry Mizrahi in 1996 that the doctors underestimated the value of social workers much more than the social worker did.(36).

The study of M. Davies and J. Connolly shows that some social workers were seen as key members of the multi-disciplinary team, attending ward round and called in for case conferences. However, the physicians and nurses did not expect social workers to provide full counseling for patients. Moreover, it also mentioned that the success of the team depends on the personalities of the people involved. (33)

Even though it is challenge, but the effective collaboration in the multi-professional team can improve the quality of care and treatment outcomes. In 2000, Lucia S. Sommers had presented a model which is based on the collaboration of physicians, nurses and social workers practice in primary care shows potential for reducing utilization and maintaining health status for seniors with chronic illnesses after doing a cohort study in America. During the period, the hospitalization rate of the control group increased, while the rate in the intervention group stayed at baseline. The proportion of intervention patients with readmissions decreased, while the rate in the control group increased. In the intervention group, mean office visits to all physicians fell by 1.5 visits compared with a 0.5-visit increase for the control group. The patients in the intervention group reported an increase in social activities compared with the control group's decrease. It is also present economic efficiency. (37) Another study support for this idea is a randomized trial experimental study conducted by Michael W. Rich applied a nurse-directed, multidisciplinary intervention on elderly care program. The intervention consisted of comprehensive education of the patient and family, a prescribed diet, social-service consultation and planning for an early discharge, a review of medications, and intensive follow-up. This study presented a positive result. The number of readmissions for heart failure was reduced in the treatment group more

than in control group. In the control group, 23 patients had more than one readmission, as compared with 90 patients in the treatment group. In a subgroup of 126 patients, quality-of-life scores at 90 days improved more from baseline for patients in the treatment group. In addition, the overall cost of care in the treatment group was reduced (38).

2.2.4. Challenge of medical social work implementation:

One of the challenges of implementation of medical social work in hospitals is dissatisfaction of health care providers to social workers. Through the exploratory study, Julie S. Abramson and Terry Mizrahi found out that the source of dissatisfaction is the lack of understanding a source of dissatisfaction by many physicians. It is required a continuous education for physicians about the range of social work skills including counseling patients and families and coordinating complex cases. (3) And the perception about what social worker can do on interdisciplinary teams in a healthcare setting should be clarified (18, 39). Through that, they can improve the contributions of social work and the benefits of a more collaborative model. (3)

The other challenge of having social workers in the healthcare setting is the pressed schedules of physicians. An exploratory qualitative study conducted by Bronwyn Keefe and colleagues in 2009 with the aim is to identify the perspective of primary care physicians and nurses, the challenges encountered in provision of health care to older adults and to identify potential roles, challenges, and benefits of integrating social workers into primary care teams shows that even though the physician recognized the benefits of having a social worker on their team, they still concern that they have to spend more time to communicate with social worker due to their hectic schedule. They prefer to refer the case to social workers and move to next steps more than discuss with social workers about every case. (34) Before that, Netting and Williams found the same result (40). The limited time of physician can be a consequence of a number of patients and their workload every day.

Another factor can affect the implementation of social work in the hospitals is the difficulty in finding a physical location in the clinic for the social workers if the social worker does not work full-time in the hospital (34) or if their office is located in other building. (40)

Hindrances in the establishment of collaborative care models in primary care are mostly attributed to physicians compared to nurses(34). It is reported that the doctor has more power in interprofessional teams and power inequities where the doctors are in central, can affect social work's voice and contributions. (18, 41-43)

2.3. Ho Chi Minh City Oncology Hospital:

The Ho Chi Minh City Oncology Hospital was founded in 1985, based on the combination of three units: (1) Ho Chi Minh City Cancer Hospital (2) Vietnam Cancer Institute and (3) Oncology Department of Binh Dan Hospital and rapidly became one of two major cancer centers in Vietnam. The hospital is responsible for cancer care in the south of Vietnam: focusing on radiation therapy (4 linacs, 01 cobalt machines, and 03 HDR after loading units), surgery (12 operating rooms, most kinds of surgery can be done) and chemotherapy. (44)



Figure 2: Oncology Hospital in Ho Chi Minh City(45)

The five main missions of this hospital are:

- Providing oncology treatment for patients in the South of Vietnam. This is one of the two biggest oncology centers in Vietnam

- Prevention: The hospital provides prevention services for healthy people and communities in the South of Vietnam through health education programs.

- Mentoring: The physicians in this hospital take a responsibility to be a technical mentor for other physicians in provincial hospitals or lower level medical institution in Ho Chi Minh city to improve their specialty.

- Research: The hospital aims to study oncology epidemiology to improve Vietnam's primary health care and study on advance scientific implementation in treatment in tertiary and quaternary health care.

- Training: The hospital provides training programs for medical students in undergraduate and postgraduate levels as well as healthcare providers in lower level hospitals

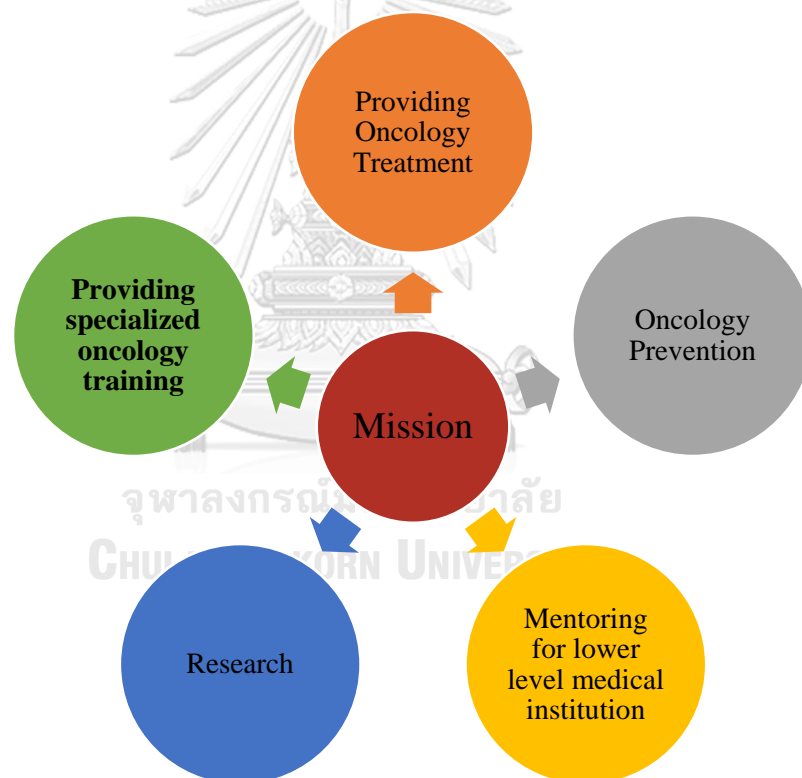


Figure 3: Mission of Oncology Hospital in Cho Chi Minh city(45)

Social work unit of the hospital was established in 2015, based on the development of charity office. Currently, there are 5 social workers and a network with more than 50 collaborators but the hospital has no clearly job description for this title.

CHAPTER II

RESEARCH METHODOLOGY

3.1. Research design

This research using cross-sectional methods designs. A cross-sectional survey method was used to identify knowledge, attitude, and behavior regarding medical social work among medical professionals in hospitals in Ho Chi Minh City, Vietnam. The demographic characteristics of respondents are also examined in this study.

3.2. Research instruments

Based on the literature review and previous study, a structured questionnaire had been developed. The questionnaire includes four parts: social-economic and demographic characteristic, knowledge, attitude, and behavior. The various type of question was used depend on each part. In social-economic and demographic characteristic part, the questions are mainly open and close format questions. The behavior and attitude parts include just only Likert's question while in the knowledge part, there are three types of questions: dichotomous question, bipolar question, and multiple-choice questions.

Table 1: Questionnaire design and measurement

Part	Type of question	Number of question		Total score	Cut-off point
		Positive	Negative		
Socio-economic & demographic characteristic	Open & close format questions	12		35	None
Knowledge	Dichotomous question	2			Bloom's criteria

	Bipolar question	4	2		
	Multiple choice question		1		
Attitude	Likert's question	1	4	20	Mean± Standard deviation
Behavior	Likert's question		8	32	

Except for the questions in the first part, all question was scored to define the level of participants' s knowledge, attitude, and behavior. The scoring method is based on counting the contents of the questionnaire.

3.2.1. Socio-demographic characteristic

This part of the questionnaire consists of questions on the demographic profile of the sample medical professionals with includes: Age, gender, income, education level, occupation, working hours, numbers of patients, social work training, duration of experience, department, and duration of working in Oncology Hospital in Ho Chi Minh city.

3.2.1.1. General and economic characteristics

- Age is referred to self-reported by participants with an exact number.
- Gender of the participants, which is divided into three groups: male, female and others (LGBT or gender identity disorder), was self-reported by themselves
- Income is measured by the level of satisfaction of respondents
- Education level was reported as a highest educational certificate that the respondents have received, and it is categorized as a certificate, diploma, bachelor degree, master degree and others

3.2.1.2. Occupational characteristics

- Occupation, classified into technician, nurse, physiotherapist, pharmacist, and physician, was self-reported by respondents regarding their occupation status
- The average of daily working hours: was self-reported by respondents with the estimated average working time per day.
- Numbers of patients per day was self-reported by respondents with the estimated average patients received the provider's services per day.
- Duration of experience prefers to self-reported
- Department was confirmed by the interviewers through the list of staffs

3.2.1.3. Characteristic related social work

- Social work training participation was checked whether the participants had attended any training or workshop about social work (including include outside or in-house training)
- Interaction with social worker refers to the frequency of interaction between health care providers and social workers in a hospital setting.

3.2.2. Knowledge of social work

This part of the questionnaires comprises the basic knowledge about social work in general and healthcare social work in particular such as social work definition, approaches, the roles of the social worker in a hospital, the difference between social work and charity, hospital policy regarding medical social work, etc. The knowledge is scored.

There are four questions are used to measure the level of knowledge of respondents with various scoring approaches:

- In the dichotomous question (no. 14), just one correct answer was counted as one score, more than one is not counted.
- In the bipolar question (no. 11), there are four positive contents and two negative contents. In this question, knowledge is measured based on a 5-point Likert

scale. However, the scoring for knowledge ranges from 0-4 and can be allocated as follow:

Table 2: The score for scale in knowledge

Participant's score	Positive content	Negative content
1	0	4
2	1	3
3	2	2
4	3	1
5	4	0

The positive contents which are those highly consistent to medical social work definition ranges from 0 to 4, representing the least to most preferences. Relatively, the negative contents which are not really consistent to the definition (ex: charity activities, care giver...) ranges from 4 to 0 indicates the level of agreement from the highest to lowest. The total score for this question is 24.

- In multiple choice question (no.12 and no.13), each correct answers were counted as one score. The total score is 12

The score is ranged from 0-39 and classified into three levels as follow by Benjamin Bloom's criteria

Poor level (<60%): <22 scores

Moderate level (60-80%): 22-28 scores

Good level (>80%): >28 scores

3.2.3. Attitude toward social work

This part of questionnaire aims to determine the attitudes of the participant toward social work such as the benefit of social services to patient outcomes, the need of social

support of patients, the equality of medical social worker compared with others in multi-discipline team, social worker's competence. Table 3.2 shows the number of items included in the attitude part.

Table 3: Number of items included in the attitude part of the scale

	Positive statement	Negative statement
Social work services benefits	2	0
Social worker's competence	0	2
Collaboration perspective	1	1

From table 3, it can be seen that to measure the attitude of health provider; there are five statements included in the scale. It is measured by Liker scale (of 5) which offer a range of answer options from strongly agree to strongly disagree. The score was calculated in table 4

Table 4: The score for scale in attitude

Participant's score	Positive statement	Negative statement
1	0	4
2	1	3
3	2	2
4	3	1
5	4	0

The score for each sentence ranged from 0-4. On the positive statements, the score really will proportional to the level selected on the Likert scale. If the respondent selects the lowest level of 1, then the score is 0 points. The score will add 1 to the increment.

If the degree of full agreement - level 5 is chosen, the score is 4. The negative statement is the opposite; the score is inversely proportional to the level of agreement. The total score for this part is 20

The cut-off point of attitude was median. Individual's answers were summed up and calculated its median deviation. The level of attitude was classified as follows.

Negative attitude: Score < Median

Positive attitude: Score > Median

3.2.4. Behavior regarding medical social work

Behavior regarding medical social work focuses on the behavior of medical staff in collaborating with social work and behavior on seeking service or transferring patients. This part also uses a Likert scale to score the regularity of medical staff behavior. The behavior level was scored as the table 5 follow:

Table 5: The score for scale in behavior

Participant's score	Frequency score of participant activities
1	0
2	1
3	2
4	3
5	4

The highest score for this part is 32. The standard point of behavior also uses median. The level of behavior was classified as follows.

Inappropriate behavior: Score < Median

Appropriate behavior: Score > Median

3.3. Study area

This study was conducted in Oncology Hospital in Ho Chi Minh City. This hospital has two campuses, one is located in Binh Thanh District, and the other one is in District 9th, Ho Chi Minh City, Vietnam



Figure 4: Study area location-1(46)

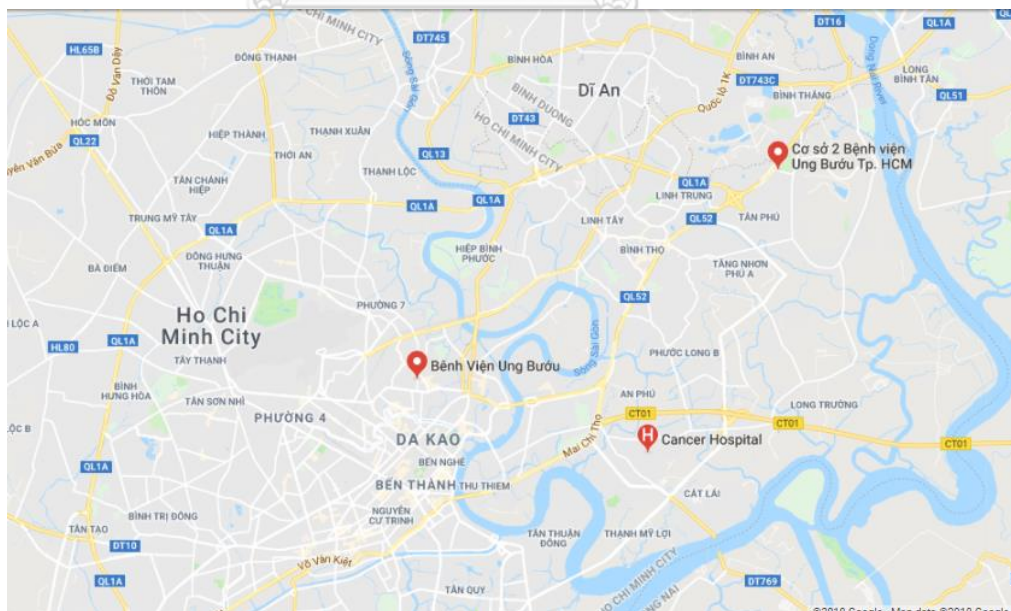


Figure 5: Study area location-2(46)

3.4. Study population

As the definition, this study includes all participants who are health care professionals (physicians, nurses, pharmacist, medical technicians,...) aged 20-60, in both genders and have worked in the hospital for more than one year

3.5. Sample size

The sample size is calculated by using the Slovin's (47) or Yamane's formula (48):

$$\begin{aligned}n &= N / (1 + Ne^2) \\ &= 1170 / (1 + (1170 (0.05)^2)) \\ &= 298\end{aligned}$$

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Figure 6: Sample size calculation

n: sample size

N: population size = 1170

e: error tolerance = 0.05

3.6. Sampling method

The sampling method for quantitative data in this study is a **simple random sampling technique**. First, the total sample size was calculated based on the total number of medical staff in the hospital. Then, after assessing the list of staff, the participant was identified by randomly selected through DCODE software.

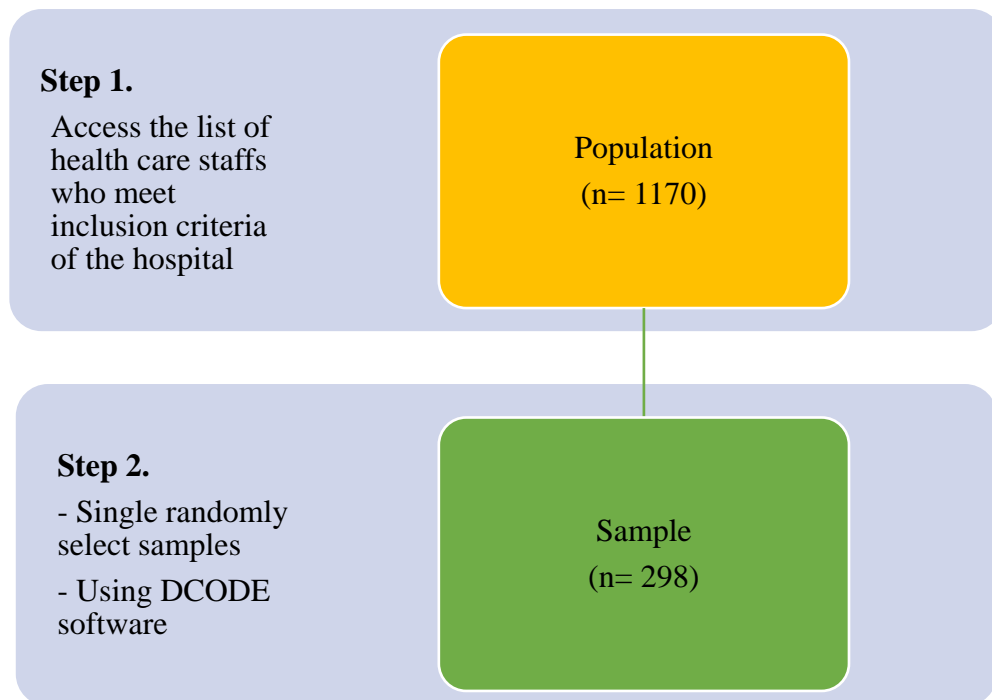


Figure 7: Sampling method

3.7. Inclusion and Exclusion criteria

3.7.1. Inclusion criteria

Medical staffs who are

- Age between 20-60 years at the time of the survey
- Being a full-time medical staff of hospitals
- More than 1-year experience

3.7.2. Exclusion criteria

- Who cannot speak Vietnamese
- Who is not voluntarily to participate in the study.
- Who is on leave (annual leave, maternal leave, sick leave...)

3.8. Reliability

Internal consistency: In this test, homogeneity (internal consistency) was assessed using Cronbach Alpha which is 0.88. An acceptable reliability score is one that is 0.7 and higher (49).

3.9. Validity

3.9.1. Face validity and content validity of the instrument:

The instrument 's validity was validated by five experts two international social work professors, a Vietnamese social work professor, a Vietnamese Public Health expert, an international public health expert, a medical doctor who is also a medical professor) to achieve the validity of the conceptual framework, guideline, and questionnaire.

Table 6: List of experts

Expert	Title	Institution
Edward Cohen, Ph.D	Professor of Social Work Special Adviser, Lurie	School of Social Work College of Education San Jose State University
Peggy McFarland, Ph.D., LCSW	Professor of Social Work	<i>Elizabethtown College, Pennsylvania, United States</i>
Do Hanh Nga, Ph.D.	Associate Professor of Psychology	Faculty of Social Work University of Social Sciences and Humanities (USSH) - Vietnam National University – Ho Chi Minh City (VNU-HCMC)

Surasak Taneepanichskul, M.D Professor of Public Health Sciences, Chulalongkorn University

MPH. Vy Tuong Vu Coordinator Vietnam HIV Addiction Technology Transfer Center – Medical University Ho Chi Minh City

Firstly, the pre-pilot questionnaire was developed according to literature review before sending to the three experts. Then, the experts reviewed and gave the suggestion on changing the contents, questions, and types of scale in the questionnaire. After a discussion, the second version was formed and submitted to all the experts again.

Secondly, the experts' opinion yielded a high congruence by "Indexes of Item-Objective Congruence for Multidimensional Items"(IOC) (50) value which is 0.9. After those steps, It was modified in order to fit the study design and setting.

$$IOC = \frac{\sum}{N}$$

Whereas, IOC: means the congruence between the scales objectives and the items in the scale

\sum : means the total scores of the agreement of judges in each item.

N: means the total number of judges

Table 7: The index of Item Objectives Congruence (IOC) of each item

Item	N	$\sum R$	IOC	Level of Agreement
1	5	5	1.0	Accepted
2	5	5	1.0	Accepted
3	5	4	0.8	Accepted
4	5	5	1.0	Accepted
5	5	4	0.8	Accepted
6	5	5	1.0	Accepted
7	5	3	0.6	Accepted
8	5	4	0.8	Accepted

9	5	4	0.8	Accepted
10	5	4	0.8	Accepted
11	5	4	0.8	Accepted
12	5	4	0.8	Accepted
13	5	4	0.8	Accepted
14	5	5	1.0	Accepted
15	5	4	0.8	Accepted
16	5	5	1.0	Accepted
17	5	5	1.0	Accepted
18	5	5	1.0	Accepted
19	5	4	0.8	Accepted
20	5	5	1.0	Accepted
21	5	3	0.6	Accepted
22	5	3	0.6	Accepted
23	5	5	1.0	Accepted
24	5	5	1.0	Accepted
25	5	5	1.0	Accepted
26	5	5	1.0	Accepted
27	5	5	1.0	Accepted
28	5	5	1.0	Accepted
29	5	5	1.0	Accepted
Total score			0.9	

According to table 7, there is none item was excluded from the pre-pilot questionnaire.

3.9.2. Translation and adaptation of instruments:

A researcher will translate the questionnaire from English into the primary language of the target culture which is Vietnamese. This first translation version emphasizes conceptual rather than literal translations, as well as the need to use natural and acceptable language for the broadest audience. Then, it was translated back into the original language by an independent translator whose mother tongue is English. The translator is fluently in Vietnamese and has no knowledge on these contents.

3.10. Data collection

In this study, a method of data collection was utilized. The sample size was calculated. The list of medical staff was used to randomly select after excluding the units which do not meet inclusion criteria. Data collection was done by the researcher

and two research assistants who have considerable experience related to social work and familiar with hospital system through face to face interview.

Training was provided in pursuance of decreasing bias. The research assistants have to understand the objective of the study and every content and question in the questionnaire. Then, before doing fieldwork, they have to practice to inform and explain to a participant the instructions of the questionnaire, the study purpose, confidentiality of information, some ethical consideration and the right to withdraw when they are involuntary or uncomfortable to the participant.

The interview schedule was arranged by the medical staffs due to their tight schedules, to ensure that they have enough time and comfortable to answer the questionnaire. The questionnaire collection will take around 10-15 minutes. The data was inputted by Epicolect5 software.

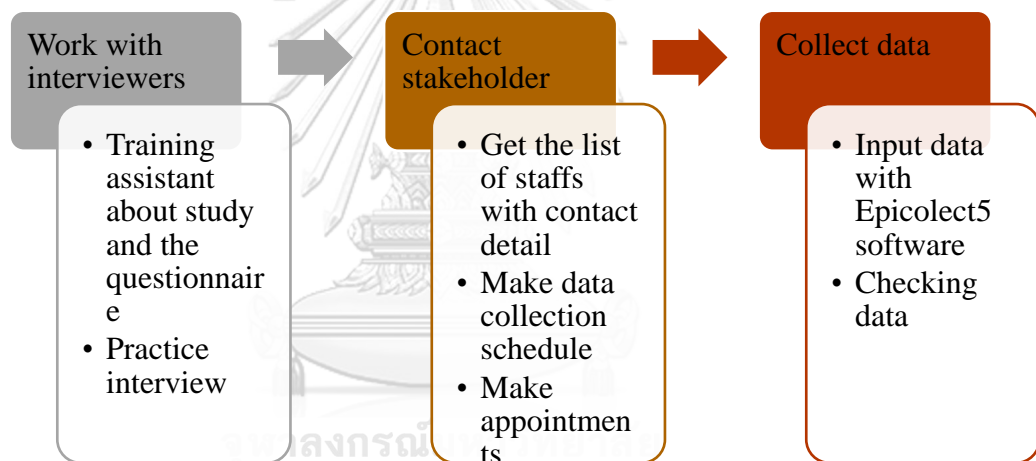


Figure 8:: Data collection process

3.11. Data analysis

After collected, all data was entered, cleaned, coded and analyzed by using SPSS program, windows version 22.

- To analyze the general characteristics, knowledge on social work, attitude towards social work and social workers as well as behavior regarding medical social work of the respondents, descriptive statistics such as percentage, mean standard deviation, median, and range was used
- The T-test, One-way ANOVA, correlation test was used to determine the relationship and association between general characteristic, knowledge,

attitude, and behavior regarding medical social work. A statistical significance level is set at $\alpha = 5\%$.

- The KA&B was scored before using multiple regression to find which factor influences the knowledge, attitude, and behavior of medical team.

3.12. Ethical consideration

This study was submitted and approved by the ethical committee of the University of Social Sciences and Humanities, Ho Chi Minh City, Vietnam. The research objective was explained to the participants before they accept to join the study. The participants are free to decide to sign in the consent form, refuse or stop the interview anytime. All data and information were used only for this study and ensured confidentiality. In order to protect the identity and information of each participant, the appropriate interview location was selected by the participant; Also, all information is entered and retrieved using the Epicolect5 application. This application allows only the researcher and the instructor to gain access to the data source, while others can only import data, including research assistants. Identity information of the participant was encoded on the questionnaire code with the first three letters are the initials of the hospital, the next two letters are the acronym of the department and finally the serial number of the participant which is shown in the employee list.

CHAPTER IV

RESEARCH RESULTS

The result of this study was presented in this chapter. The data from randomly selected full-time medical staffs in Ho Chi Minh Oncology hospital. There are a total of 289 participants was included in the current study. The level of knowledge, attitude and behavior variables was treated as continuous data. The dependent variable which are social-demographic characteristic, occupation characteristic, and characteristic of interaction with social work. The information about demographics, scores of knowledge, attitude and behavior are described as number, percentage for categorical variables; mean and standard deviation for continuous variables. Then the relationship between knowledge, attitude, behavior and participants' characteristics was checked by using bivariate analysis, T-test and One-way ANOVA. Finally, the factor associated with knowledge, attitude and behavior were identified by using multiple linear regression.

There are seven components comprised in this result chapter:

- Descriptive section:

4.1 Participant's characteristic information

4.2 Level of knowledge, attitude, and behavior regarding medical social work.

- Analytical section:

4.3 The relationship between participants' characteristics and knowledge score by using T-test and One-way ANOVA

4.4 The relationship between participants' characteristics and attitude score by using T-test and One-way ANOVA

4.5 The relationship between participants' characteristics and behavior score by using T-test and One-way ANOVA

4.6 Identifying factors associated with knowledge, attitude, and behavior regarding medical social work by using multiple linear regression.

4.1. Participant's characteristic information

The demographic information in Table 8 indicates that the health care professionals' mean age at interview was 33.71 years (SD 8.74, range 23–57); 43.6% of the healthcare staffs are in early adulthood, 47% middle adulthood and just 7.4% are in late adulthood. More than two-thirds of the participants were identified as female. Regarding economic background, 35.6 % of participants endorsed they satisfied (sufficient, 35.6% and more than sufficient, 3.6%) with their income which is counted not only their salary in the oncology hospital but also in other part-time jobs, while 49.7% indicated the salary was just barely sufficient for their life and 11.4% expressed it was insufficient. Among the sample, one hundred twenty-two (40.9%) hold bachelor degree; 30 (10.1%) reported that they had a postgraduate degree

Table 8: Socio-demographic and other characteristics of participants

General characteristics	Mean	SD	Frequency,	%
I. Socio-demographic & economic				
<u>Age at interview (years)</u>	33.71	8.47		
Early adulthood (20-34)			186	62.4
Middle life (35-50)			90	30.2
Mature adulthood (51-60)			22	7.4
<u>Gender</u>				
Male			90	30.2
Female			208	69.8
<u>Income</u>				
Insufficient			34	11.4
Barely sufficient			148	49.7
Sufficient			106	35.6
More than sufficient			10	3.4
<u>Education level</u>				
Vocational certificate			126	42.3
Associate degree			20	6.7
Bachelor degree			122	40.9
Postgraduate degree			30	10.1

II. Occupational characteristic

Department

Clinical	206	69.1
Paraclinical	92	30.9

Occupation

Medical Technician	16	5.4
Nurse	176	59.1
Pharmacist	20	6.7
Physician	84	28.2
Other	2	0.7

Experience (month) 116.5 95.1

Five years or less	112	37.6
From 5 to 10 years	110	36.9
More than ten years	76	25.5

Working hours per day 8.7 1.5

8 hours or less	206	69.1
More than 8 hours	92	30.9

Numbers of patients per day 53.6 81.6

Less than 20	112	37.6
From 20 to 50	110	36.9
More than 50	76	25.5

III. Characteristic related social work

Social work training

No	216	72.5
Yes	82	27.5

Interaction with social workers

No	159	53.4
Yes	139	46.6

Interaction frequency

Never	161	54
Occasionally	85	28.5

Rarely	24	8.1
Sometimes	20	6.7
Frequently	8	2.7

SD: standard deviation

In term of occupation characteristic, the sample was predominantly (69.1%) working in clinical departments, and 30.9% belonged to paraclinical departments. Of these participants, the physician takes 28.2%; more than a half (59.1%) is the nurse, and the rest were other occupations (medical technician, 5.4%; pharmacist, 6.7% and midwife, 0.7%). The average duration of working every day was 8.7 hours (SD 1.5). In particular, most of the health staffs (69.1%) just had to work 8 hours per day or less while there was 30.9% working more than 8 hours per day, some of them even worked 15 hours per day. The average number of patients per day is around 54 (SD 81.6), and there is a considerable difference between the number of patients per day. For instance, there were 37.6% medical staffs working with less than 20 patients per day on average; about 36.9% worked with around 20 to 50 patients per day, and 25.5% had to provide services for more than 50 patients per day. For some staffs who are working in paraclinical departments, they have no chance to interact with patients, but for some medical employees working in the clinical units, especially in medical examination department, there are some healthcare professionals have to communicate for around 300 patients per day. Among the responders, there was 37.6% had not more than 5-year experience; 25.5 % had worked in the health sector for more than ten years; the rest which took 36.9% had been employed from 5 years to 10 years.

Approximately equal proportions of the medical staffs had interacted with social workers in their working environment (54%) and had never met or working with the social workers (46%). In those, just only 2.7% of them frequently interacted with social workers in the hospital, 6.7% met social workers sometimes, and 36.6% reported that they just interfaced social workers rarely or occasionally. Among the participants, around one-third (27.5%) said that they had attended at least one training providing them the understanding about social work in general while others had not (72.5%).

4.2. Level of knowledge, attitude, and behavior regarding medical social work

Table 9 presents the results on knowledge of the medical staffs about medical social work. In order to measure the knowledge, four questions had been used. Moreover, the answers were scored. The maximum score for this part is 36. The average score of knowledge was 18 (SD 3.79). Among 298 participants who reported their knowledge regarding medical social work, 79.7 percent reported the poor level of knowledge, 19.5 percent reported the moderate level of knowledge, and just only two people who take 0.7% indicated right level.

Table 9: Contribution of knowledge, attitude, and behavior regarding medical social work

	Mean	± SD	Frequency,	%
Knowledge level	18.58	3.93		
Poor (<60% correct response)			238	79.90
Moderate (60 - 80% correct response)			58	19.50
Good (> 80% correct response)			2	0.70
Range (9-29)				
Attitude level	11.89	3.86		
Negative attitude			144	48.32
Positive attitude			154	51.68
Range (0-20)				
Behavior level	6.52	7.93		
Inappropriate behavior			178	59.73
Appropriate behavior			120	40.27
Range (0-28)				

SD: standard deviation

For the question about social work methods or approaches, more than quarters (77.9%) participants thought social workers work with communities, while only one-third know that they also work with groups and just about 38% thought that the clients of social workers could be individuals. Besides, 32.8% of health worker have thought that social work and charity are the same.

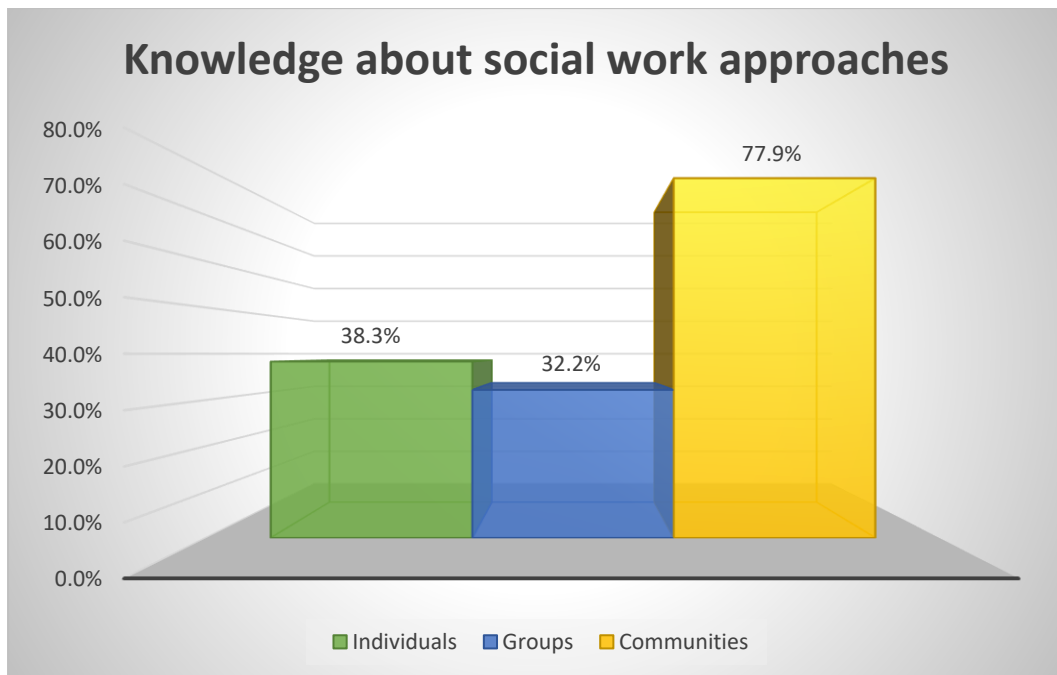


Figure 9: Perception about social work approaches

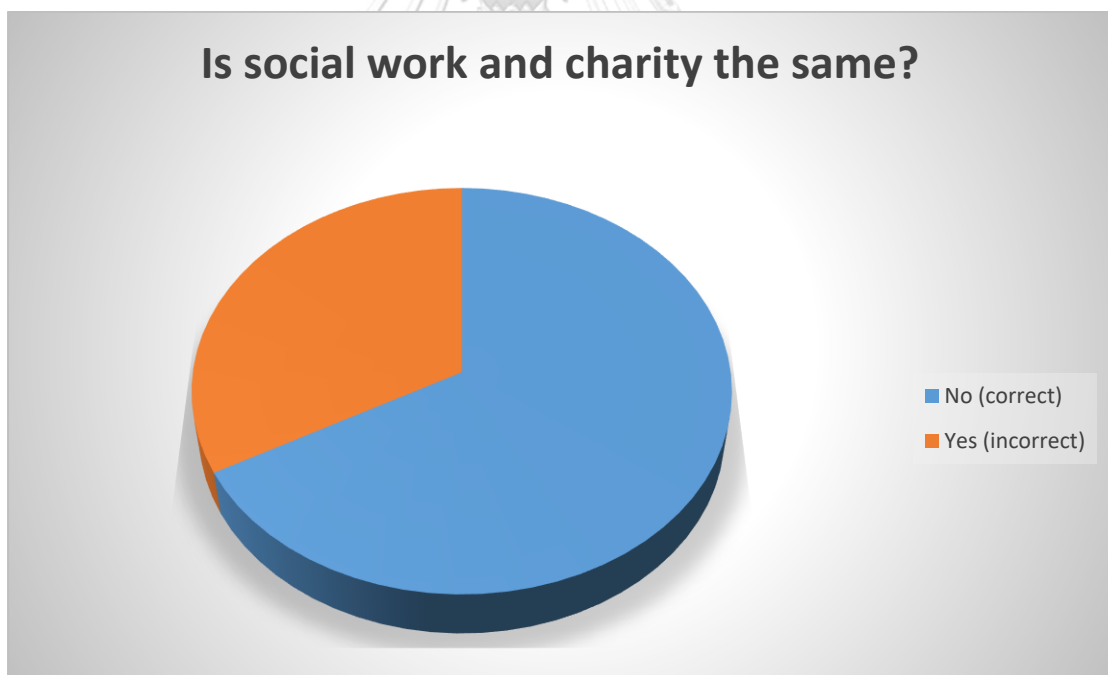


Figure 10: Is social work and charity the same?

In terms of defining the role of social workers in hospital, at the time conducting data collection, The majority of (79,6%) medical staffs think charity work is a role of social workers, an approximately same proportion (72.1%) of participants thought that

social workers provide customer services, followed by “Psychosocial Assessment/ Diagnoses/Planning/Intervention” (56.6%), “Organizing labor union activities (59.2%), “Patient/Family Education” (52.4%), “Providing Instruction” (49.7%), “Lead support group for specific diseases” (49.7%), “Patient and Family Counseling” (38.8%) and “Resource Brokering/Referral/Development” (32.3%). Less than 30% of participants had recognized the others roles

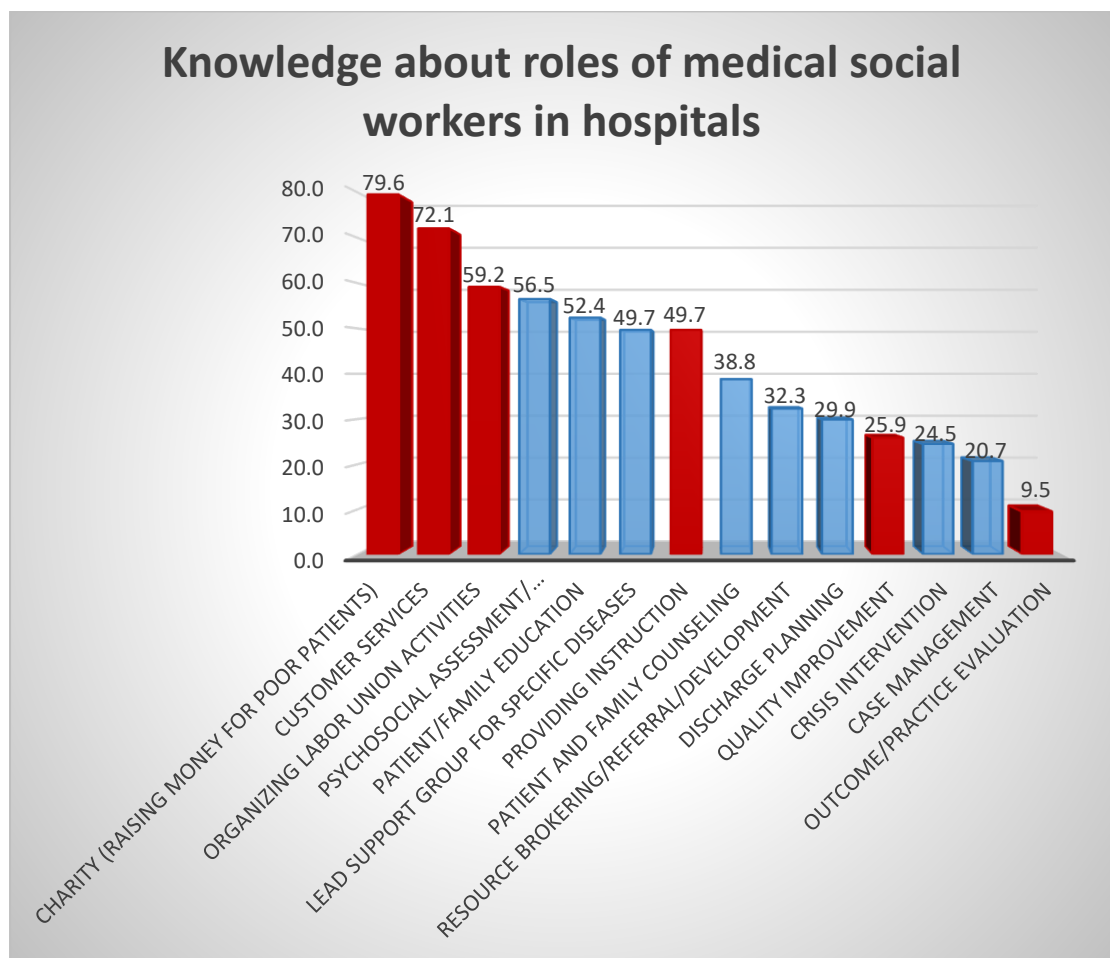


Figure 11: Perception about roles of medical social workers in hospitals

The attitude level is score by the sum of the score from positive and negative statement related to the competency of medical social workers, the benefit of social work and the collaboration with a social worker. It will also be categorized, by using median value as a cut-off point, into two level: negative attitude and positive attitude. There was not much difference between both attitude groups. The average attitude score for health care workers was 11.89 (SD 3.86, range 0-20). Among those, medical staffs

who are in negative level was 144 (48.32%), those who have positive level was 154 (51.68%).

Regarding behavior, the level cannot be classified by using mean, and SD due to the mean value is less than SD because the number of participants had score value equal to 0 (never interact with social workers) is too high. So it was categorized into two group: inappropriate behavior and appropriate behavior; with the cut-off point is median. The result shows that the average behavior score of responders was 6.52 (SD 7.93; range 0-28). According to this categorize method, there were three-fifths of participants had appropriate behavior toward medical social work, those had inappropriate behavior took two-fifth of the population.

4.3. The relationship between participants' characteristics and knowledge score by using T-test and One-way ANOVA

For answering the question whether there is any difference in the level of knowledge, attitude and behavior towards medical social work between the different groups of medical staffs, the mean scores of each aspect were compared. The T-Test was used for the dichotomous independent variables, and One-way ANOVA was used for other categorical variables.

Table 10 illustrates the relationship between socio-demographic and other characteristic and score of knowledge. Regarding social demographic characteristics, there are no statistical differences in knowledge between groups of gender, income level, education level or age. It also found that the average knowledge score of the participants who have attended social work training or and have not attended; or between health care workers who have interacted with social workers and who have not interacted were not significantly different. However, for the frequency of interaction, the study found that the group of participants who usually had the interaction with medical social workers has the highest score (21), which was different with other groups ($p = 0.03$). The average scores of other groups are approximately equal, around 18 except frequently-group.

Table 10: The mean differences, SD values and results of t-test for knowledge score of each group

Selected characteristics	Mean value	SD	P-value
<u>Age at interview (years)^b</u>			0.77
Early adulthood (20-34)	18.22	3.865	
Middle life (35-50)	19.36	4.062	
Mature adulthood (51-60)	18.55	3.555	
<u>Gender^a</u>			0.14
Male	17.96	2.98	
Female	18.86	4.25	
<u>Income^b</u>			0.79
Insufficient	18.00	3.38	
Barely sufficient	18.77	4.10	
Sufficient	18.49	3.95	
More than sufficient	18.80	2.94	
<u>Education level^b</u>			0.45
Vocational certificate	18.49	4.34	
Associate degree	19.10	3.23	
Bachelor degree	18.38	3.58	
Postgraduate degree	19.47	3.88	
<u>Department^a</u>			0.13
Clinical	18.73	3.84	
Paraclinical	18.26	4.12	
<u>Occupation^b</u>			0.01*
Medical Technician	17.25	4.43	
Nurse	19.00	3.80	
Pharmacist	18.37	3.93	
Physician	16.90	4.06	
Other			
<u>Experience^b</u>			0.03*
Five years or less	17.94	3.04	

From 5 to 10 years	18.18	4.41	
More than ten years	19.49	4.09	
<u>Working hour per day^a</u>			0.09
8 hours or less	18.30	4.03	
More than 8 hours	19.22	3.62	
<u>Numbers of patients per day^b</u>			0.06
Less than 20	18.84	4.07	
From 20 to 50	18.00	4.16	
More than 50	19.05	3.26	
<u>Social work training^a</u>			0.17
No	18.07	3.68	
Yes	18.78	4.01	
<u>Interaction with social workers^a</u>	18.58	3.93	0.39
No	18.21	3.32	
Yes	18.97	4.43	
<u>Interaction frequency^b</u>			<0.01**
Never	18.86	4.38	
Occasionally	17.83	3.43	
Sometimes	18.33	3.60	
Usually	21.00	3.49	
Frequently	16.75	2.31	

a: T-test; b: One-way ANOVA; *: statistically significant at the 0.05 level; **: statistically significant at the 0.01 level; ***: statistically significant at p value <0.001 ; SD: standard deviation

In term of occupation characteristic, according to the table, the statistical difference between the level of social work knowledge among difference occupation groups (p-value=0.011) and period of experience (p-value=0.03). The nurses had the highest average score of knowledge (19) while the physicians' average score was lowest (16.19) when compared with other professions which got around 17 to 18 score. Next, from the data of medical staffs' experience, we can conclude that the higher level of experience they were, the higher average knowledge score they got. As an

illustration, the group of participants who had been working in the hospital more than ten years had the mean score around 19.5, followed by those was in 5-year to 10- year experience group (18.18) and the lowest score was counted on the least experience time group (17.94)

4.4.The relationship between participants' characteristics and attitude score by using T-test and One-way ANOVA

Next in table 11., for the attitude, the mean score was significantly different between age stages of participants (p-value <0.001). Among those, the medical staffs at early adulthood stage have the mean score (12.57) higher than other age groups (10.98 in middle adulthood and 9.09 in late adulthood). The average attitude score of male is 1.56 point higher than female (p-value<0.01). There was a significant difference in mean attitude score between education levels. Those informed that vocational certificate is the highest degree had a lowest mean score (10.7). Moreover, those participants have the highest education level had the second lowest mean score (11.93) while the second lowest education level group had the highest mean score (14).

Table 11: The mean differences, SD values and results of t-test for attitude score of each group

Selected characteristics	Mean value	SD	P-value
<u>Age at interview (years)^b</u>			<0.001***
Early adulthood (20-34)	12.52	3.906	
Middle life (35-50)	11.27	3.747	
Mature adulthood (51-60)	9.09	1.875	
<u>Gender^a</u>			<0.01**
Male	12.98	4.09	
Female	11.41	3.67	
<u>Income^b</u>			0.71
Insufficient	11.76	3.96	
Barely sufficient	11.95	3.78	
Sufficient	11.74	4.08	
More than sufficient	13.00	2.21	
<u>Education level^b</u>			<0.001***

Vocational certificate	10.70	3.30	
Associate degree	14.00	3.11	
Bachelor degree	12.75	4.09	
Postgraduate degree	11.93	4.14	
<u>Department^a</u>			0.06
Clinical	12.16	3.85	
Paraclinical	11.28	3.83	
<u>Occupation^b</u>			0.01*
Medical Technician	11.75	2.05	
Nurse	11.73	3.77	
Pharmacist	12.79	4.13	
Physician	9.50	3.56	
Other			
<u>Experience^b</u>			0.01*
Five years or less	12.80	4.04	
From 5 to 10 years	11.64	3.69	
More than ten years	11.25	3.70	
<u>Working hour per day^a</u>			0.04*
8 hours or less	11.57	3.75	
More than 8 hours	12.59	4.04	
<u>Numbers of patients per day^b</u>			0.93
Less than 20	11.84	3.48	
From 20 to 50	11.84	4.07	
More than 50	12.03	4.11	
<u>Social work training^a</u>			0.25
No	11.44	3.87	
Yes	12.06	3.85	
<u>Interaction with social workers^a</u>			<0.001***
No	11.49	4.05	
Yes	12.28	3.63	
<u>Interaction frequency^b</u>			0.29

Never	11.92	3.98
Occasionally	12.36	3.37
Rarely	11.90	3.80
Sometimes	9.90	4.89
Frequently	13.00	1.31

a: T-test; b: One-way ANOVA; *: statistically significant at the 0.05 level; **: statistically significant at the 0.01 level; ***: statistically significant at p value <0.001 ; SD: standard deviation

Similar to knowledge score, a significant difference was found between the average scores of different occupations (p-value <0.05). The average score of pharmacists (11.75) is higher than physicians 3.29, nurses 1.1 and medical technician 1 point. Among the various experience groups, those had the lowest experience had the highest attitude mean score (12.8) which was significantly different with other groups with the mean score around 11. The healthcare professionals who had different average working time also had different average attitude score. For an instant, those working 8 hours or less per day had a lower mean score, which was 11.57, than those working more than 8 hours per day.

There was no statistical difference between the attitude level of health care professionals classified by income level, department, number of patient per day or interaction history with social work.

4.5. The relationship between participants' characteristics and behavior score by using T-test and One-way ANOVA

When checking the behavior of medical staffs, the study found that participants working in clinical units had the score significantly higher than participants working in paraclinical units (p-value=0.05). There was no difference between the different groups of age, gender, experience or working hour. (Table 12)

Table 12: The mean differences, SD values and results of t-test for behavior score of each group

Selected characteristics	Mean value	SD	P-value
<u>Age at interview (years)^b</u>			0.26

	Early adulthood (20-34)	6.47	7.28	
	Middle life (35-50)	5.99	8.42	
	Mature adulthood (51-60)	9.09	10.63	
<u>Gender^a</u>				0.75
	Male	6.5	7.94	
	Female	6.52	7.94	
<u>Income^b</u>				0.41
	Insufficient	5.35	6.92	
	Barely sufficient	6.7	8.11	
	Sufficient	6.92	8.01	
	More than sufficient	3.6	7.59	
<u>Education level^b</u>				0.02*
	Vocational certificate	8.38	8.81	
	Associate degree	3.15	5.15	
	Bachelor degree	5.68	7.28	
	Postgraduate degree	4.33	6.24	
<u>Department^a</u>				<0.001***
	Clinical	7.4	8.19	
	Paraclinical	4.54	6.95	
<u>Occupation^b</u>				0.04*
	Medical Technician	5.06	7.69	
	Nurse	7.64	8.46	
	Pharmacist	5.37	7.03	
	Physician	2.7	4.52	
	Other			
<u>Experience^b</u>				0.60
	Five years or less	6.81	7.90	
	From 5 to 10 years	6.06	7.17	
	More than ten years	6.62	8.55	
<u>Working hour per day^a</u>				0.26
	8 hours or less	6.79	7.95	

More than 8 hours	5.91	7.87	
<u>Numbers of patients per day^b</u>			0.01*
Less than 20	4.96	7.15	
From 20 to 50	7.92	8.14	
More than 50	6.79	8.39	
<u>Social work training^a</u>			0.08
No	5.10	7.08	
Yes	7.06	8.18	
<u>Interaction with social workers^a</u>			<0.001***
Yes	12.95	6.43	
No	0.00	0.00	
<u>Interaction frequency^b</u>			0.00**
Never	0	0	
Occasionally	9.72	6.91	
Rarely	9.93	8.62	
Sometimes	8.70	9.66	
Frequently	13.5	10.6	

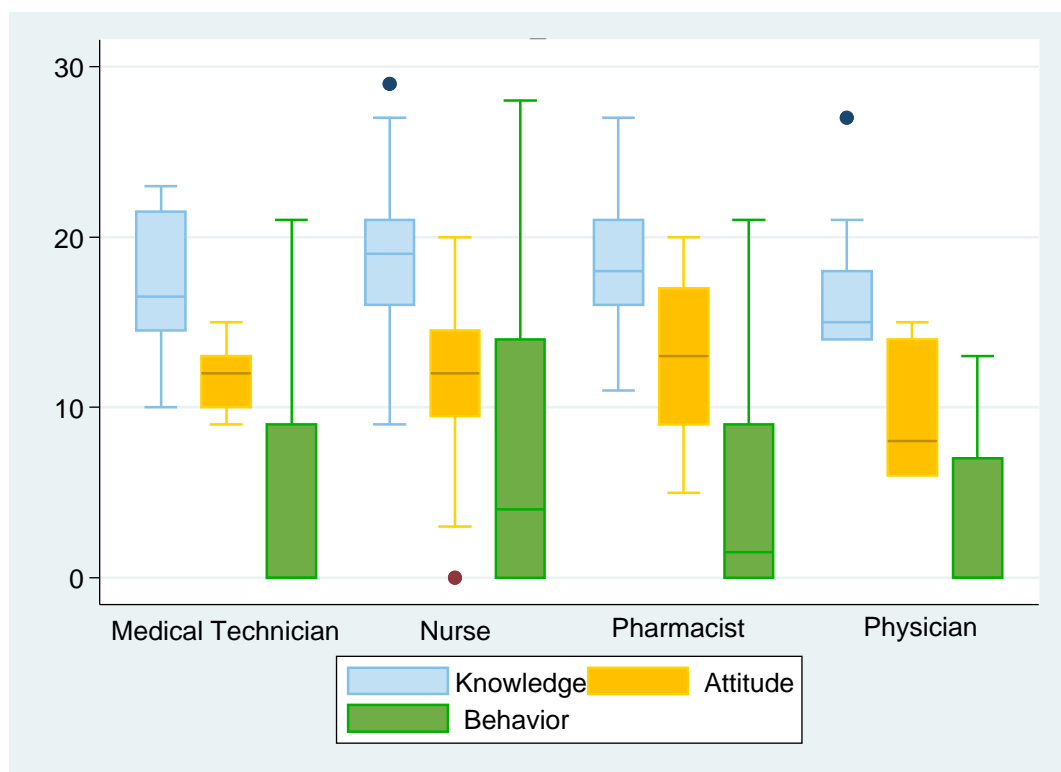
a: T-test; b: One-way ANOVA; *: statistically significant at the 0.05 level; **: statistically significant at the 0.01 level; ***: statistically significant at p value <0.001 ; SD: standard deviation

Additionally, the lowest education level group had the highest average behavior score (8.38) which significantly higher than other levels included the highest level which had the lowest score (4.33). In a like manner of the attitude, the physicians had the lowest behavior score which was just 2.7 while nurses had the highest score which was two times higher (p-value<0.05).

While the number of patients did not show the difference among groups in attitude or knowledge scores, it demonstrated the significantly different average score in behavior. The medical employees who just had to serve less than 20 patients per day reported the lower behavior score (4.96) than the employees who have to work with more than that number of patients.

Participants who indicated that they had interacted with social work had the mean score was 12.95. Who had not interacted with social workers, has no score. The average score of medical staff frequently interact with social work was highest (13.5; SD 10.6)

There was no statistically significant difference between the participants which have different experiences of training about social work or the income level on the score of knowledge, attitude, and behavior.



4.6. Identifying factors associated with knowledge, attitude and behavior regarding medical social work by using multiple linear regression.

The effects of multiple independent variables on every single dependent variable were demonstrated by employing multiple linear regression due to data were continuous

For checking which factor associated with the level of knowledge, attitude and behavior towards medical social work, the simple linear regression, and multiple linear regression were used. The dependent variable was knowledge, attitude and behavior score. In the multiple regression model, all the variables which show the correlation or related to the level of KAP are all included; and those variables had the p-value in the simple linear regression less than 0.2 are also added.

Table 13: Bivariate and multivariate linear regression analysis: association of variables with knowledge score as dependent variable

Variable	Bivariate (n=298)		Multivariate (n=298)	
	β (95% CI)	P-value	β (95% CI)	P-value
Age at interview	0.04(-0.01 to 0.1)	0.11		
Gender	0.9(-0.07 to 1.87)	0.07	0.85(-0.14 to 1.85)	0.09
Income	0.09 (-0.53 to 0.72)	0.77		
Education level	0.11(-0.30 to 0.52)	0.6		
Department	-0.47(-1.44 to 0.5)	0.34		
Occupation	-0.45(-1.1 to 0.19)	0.17	-0.09(-0.78 to 0.60)	0.79
Experience	0.01(0.00 to 0.01)	0.04*	0.01(0.0 to 0.01)	0.03*
Working hours	0.08(-0.22 to 0.39)	0.6		
Numbers of patients	0(-0.01 to 0)	0.13	0(-0.01 to 0)	0.15
Social work training	0.7(-0.3 to 1.71)	0.17	0.79(-0.14 to 1.85)	0.13
Interaction with social workers	-0.23(-1.13 to 0.67)	0.62		
Interaction frequency	0.14(-0.25 to 0.53)	0.48		

*Significant at $p < 0.05$; *** Significant at $p < 0.001$; $R^2 = 0.033$; Adjusted $R^2 = 0.016$; SE= 3.9 จุฬาลงกรณ์มหาวิทยาลัย

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Regarding knowledge, the various simple linear regression was run and showed that experience of the participants is the only factor which associated with the knowledge score (β 0.01; 95% CI 0.00 to 0.01; $p = 0.04$). In the multivariate regression analysis when the gender, occupation, social work training, and "number of patients" were added, the experience of the participant was still the only factor significantly associated (β 0.01; 95% CI 0.00 to 0.01; $p = 0.03$).

Table 14: Bivariate and multivariate linear regression analysis: association of variables with attitude score as dependent variable

Variable	Bivariate (n=298)		Multivariate (n=298)	
	β (95% CI)	P-value	β (95% CI)	P-value
Age at interview	-0.11(-.16 to -0.06)	<0.001***	-0.08(-0.18 to 0.01)	0.10
Gender	-1.5(-2.5 to -0.62)	<0.001***	-1.39(-2.34 to -0.45)	<0.001***
Income	0.07(-0.55 to -0.69)	0.83		
Education level	0.72(0.32 to 1.11)	<0.001***	0.47(0.08 to 0.86)	0.02*
Department	-0.87(-1.8 to 0.08)	0.07	-0.61(-1.5 to 0.29)	0.18
Occupation	-0.11(-0.75 to 0.53)	0.74		
Experience	-0.01(-0.14 to -0.005)	<0.001***	0 (-0.01 to -0.01)	0.58
Working hours	0.37(0.07 to 0.66)	0.02*	0.42(0.14 to 0.71)	0.01*
Numbers of patients	0 (-0.06 to 0.005)	0.97		
Social work training	0.62 (-0.37 to 1.6)	0.22		
Interaction with social workers	-0.28 (-1.16 to 0.6)	0.53		
Interaction frequency	0.02 (-0.36 to 0.41)	0.9		

*Significant at $p < 0.05$; *** Significant at $p < 0.001$; $R^2 = 0.033$; Adjusted $R^2 = 0.016$; SE= 3.9

In the multivariate regression, gender (β -1.39; 95% CI -2.34 to -0.45; $p = 0.00$), education level (β 0.47, 95% CI 0.08 to 0.86; $p = 0.02$) and number of working hour (β 0.42; 95% CI 0.14 to 0.71; $p = 0.01$) were statistically significant with attitude score. The associated was found in the simple linear regression between attitude score and age of participants (β -0.08; 95% CI -0.18 to 0.01; $p = 0.1$) and experience (β 0; 95% CI -0.01

to -0.01; $p=0.58$) which both became statistically non-significant in multiple linear regression model after adjusting for potential confounders.

Table 15: Bivariate and multivariate linear regression analysis: association of variables with behavior score as dependent variable

Variable	Bivariate (n=298)		Multivariate (n=298)	
	β (95% CI)	P-value	β (95% CI)	P-value
Age at interview	0.03(-0.74 to 0.14)	0.54		
Gender	0.02(-1.95 to 1.99)	0.98		
Income	0.15(-1.11 to 1.42)	0.81		
Education level	-1.31(-2.12 to -0.5)	<0.001***	-0.82(-1.32 to -0.33)	<0.001***
Department	-2.85(-4.78 to -0.93)	<0.001***	-0.62(-2.75 to 0.51)	0.28
Occupation	-1.61(-2.91 to -0.31)	0.02*	-0.27(-1.11 to 0.57)	0.53
Experience	0(-0.12 to 0.007)	0.65		
Working hours	-0.17(-0.79 to 0.44)	0.58		
Numbers of patients	0(-0.008 to 0.01)	0.58		
Social work training	1.96(-0.05 to 3.97)	0.06	0.92(-0.26 to 2.1)	0.13
Interaction with social workers	-2.08(-3.88 to 0.2)	0.02*	-12.48(-12.51 to 11.45)	<0.001***
Interaction frequency	1.37 (0.60 to 2.14)	<0.001***	1.32 (0.55 to 2.09)	0.01*

*Significant at $p<0.05$; *** Significant at $p<0.001$; $R^2=0.695$; Adjusted $R^2=0.688$; SE=4.413

Similarly, in the regression analysis for factor affected behavior score. There were also two variables which significant in bivariate analysis and became not statistically significant in the multivariate analysis which was department (β -0.62; 95% CI -2.75 to 0.51; $p=0.28$) and occupation (β -0.27; 95% CI -1.11 to 0.57; $p=0.53$). The interaction frequency was positively and statistically significant associated with behavior score (β 1.32; 95% CI 0.55 to 2.09; $p=0.01$) while education level (β 1.32; 95% CI 0.55 to 2.09; $p=0.01$) and interaction with social workers (β 1.32; 95% CI 0.55 to 2.09; $p=0.01$) were negative statistical significant associated with behavior score.

CHAPTER V

DISCUSSION AND RECOMMENDATION

This study aims to evaluate the level of knowledge, attitude, and behavior regarding medical social work among health care professionals in Ho Chi Minh Oncology hospital, Vietnam. Based on the author's knowledge, this is the first quantitative study on KAP towards medical social work worldwide and the first study about this topic in Vietnam. The discussion part is combined the several sections as followed:

- 5.1. Result summary
- 5.2. Level of knowledge, attitude, and behavior regarding medical social work
- 5.3. The relationship between participants' characteristics and knowledge, attitude and behavior score.
- 5.4. Study limitations
- 5.5. Policy implications
- 5.6 Recommendations

5.1.Result summary

The results of the study on knowledge, attitude and behavior regarding medical social work among health care professionals in Ho Chi Minh Oncology Hospital could be concluded that approximately 80% of healthcare staffs in the oncology hospital had poor level of knowledge (<60% correct response); nearly 20% had moderate knowledge (60 - 80% correct response), and the proportion of good knowledge was less than 1%. Almost 78% of respondents answered social workers could work with communities, around 32% of participants chose groups and more than 38% of respondents chose individuals. One-third of the respondent described social work and charity are indistinguishable. Top 3 ranked roles of social workers in hospital selected by the medical staffs were raising money for indigent patients (79.6%), customer services (72.1%) and organizing labor union activities (59.2%). There were 79.3% respondents

did not think that case management is one of the roles of medical social workers, similarly with crisis intervention (75.5%).

There were almost a half of participants had a negative attitude (48.32%) with the average score was 11.89/ 20 (the highest possible score). The healthcare staffs who had inappropriate behavior score was 59.73%, and 40.27% had appropriate behavior with the median score was 6.52/32 (the highest possible score).

The knowledge scores and behavior scores were divergent between groups classified by interaction frequency with medical social workers ($p < 0.01$) while there was an inequality level of attitude and behavior between those who had interacted with social workers and who had not ($p < 0.01$). The different experience groups had different average scores of knowledge ($p = 0.03$) and attitude ($p = 0.01$). The attitude and behavior mean scores were disparate among various education level ($p < 0.001$ for attitude and $p = 0.02$ for behavior). Attitude mean scores were unequal when compare staffs working less than 8 hours per days with staffs working more than 8 hours per day ($p = 0.04$). It is found that the average behavior scores of clinical staffs and paraclinical staffs were significantly different ($p < 0.001$). The difference also was found in staffs who had different numbers of patient per day ($p = 0.01$). Physician has the lowest scores for all knowledge, attitude, and behavior when compared with other occupation groups.

Multiple linear regression analysis indicated gender ($\beta -1.39$; $p = 0.00$), education level ($\beta 0.47$; $p = 0.02$) and number of working hour ($\beta 0.42$; $p = 0.01$) were all the factors which were statistically significant with attitude score; interaction frequency ($\beta 1.32$; $p = 0.01$), education level ($\beta 1.32$; $p = 0.01$) and interaction with social workers ($\beta 1.32$; $p = 0.01$) were statistically significant with behavior score while just only experience factor was associated with knowledge score.

5.2. Level of knowledge, attitude, and behavior regarding medical social work

The level of knowledge towards medical social work among healthcare staffs, in general, was low. The knowledge regarding medical social work of medical staffs was not comprehensive and thorough. The majority of respondent just indicated the approach of social work was communities while one of the principal roles of social

works in hospitals is doing case management which links to individuals or supporting self-help groups which need social group works skills.

The misunderstanding or vague awareness about the difference between social work and charity activities might lead to the underestimate social work as a profession. Social work might be developed by charity activists and still have a connection with charity as one of the activities which can be the resource for social work clients, but they are not the same. In order to practice social work, the social workers have to study and achieve some fundamental competencies or even get a license which is not necessary for charity work. When medical staff had that idea, they might be underestimated the roles of medical social workers as well. Moreover, linking social work with charity might give more burden on social workers when they could not and was not be trained to fundraise money for indigent patients.

The top 3 ranked roles of social workers from the perspective of physicians, nurses and other staffs which were charity (79.6%), customer services (72.1%) and organizing labor union activities (59.2%) are actually not in the professional role list of social workers in many countries over the world(25, 26, 28, 51). Additionally, the counseling role of social workers is not recognized by more than 60% of healthcare professionals. It was not similar to the findings of Martin Davies. The exploratory investigation found that nurses and doctors did not expect social workers to provide the full counseling for patients. While in a study on the perception of medical staff about the role of social workers in hospital pointed out that the primary role was “discharge planning,” in this study, just only 30% health care professional know about this role, which ranked at level 10. Furthermore, many healthcare staffs did not acknowledge the common social work role in crisis intervention and case management which are the role of social workers in many other majors. It also differs from the study was conducted in Australia by Davis (52). Even though healthcare workers had different perspectives with social workers on their roles; what they can do in hospitals (35, 53, 54); or they did not acknowledge some common roles of social work (17, 55), it seems like there was a gap between the recognition perspective of medical staffs in the oncology hospital and global standard about roles of social workers in hospitals. Even though the role of social workers in hospitals can be not the same between countries, but it should not be too much different with international standard. The misunderstanding and lack of

awareness about medical social work in general and on the roles in particular not only can be a constraint for practicing social work in hospitals and interdisciplinary collaboration(36, 56) but also can create an unnecessary expectation on social workers. Lack of knowledge was one of the top reasons may lead to the negative experience of collaboration in healthcare listed by social workers. (36)

The low-level of knowledge is understandable because medical social work was still a new profession in health care system as it was just officially introduced in 2015. Even in Australia, although medical social work has been developed since the 1930s (57), in the year of 1973, around 40 years later, a limited understanding on roles and areas of social worker also was still found in the healthcare setting. (58)

Among health care professionals, there was almost a half of them had no contact with medical social workers. The lack of opportunity to interact with social workers can give a rise to low-level knowledge as it is found that interaction played a part in lack of knowledge in the study of interprofessional experiences in a hospital setting of Williams and a study of general lack of knowledge of Gentner (59, 60). If the medical staffs could interact or even communicate with social workers more, they can acquire more knowledge of roles, skills, and practice of medical social workers. (59) However, the opportunity of interaction could not create by either social workers or healthcare employees. The hospital should implement a policy corridor to provoke more chance of interaction or good interdisciplinary teamwork.

The low-level knowledge might also be the consequence of a lack of education about medical social work due to 72.5% respondents informed that they have never attended any training related to social work before. An education program also necessary

There were nearly a half of respondents had a negative attitude towards medical social work. It might be related to a lack of knowledge about medical social work.

Although there was around 40% of medical staffs had appropriate behavior by using the median as a cut-off point. However, when comparing the current median score: 6.52 of the behavior with the highest possible score which is 32, it can be seen that the median score of behavior quite low. It is just equal one-fourth of the maximum score (28) and one-fifth of the potential maximum score. The low median score can be

explained by the fact that there was more than a half of participant had never interacted with social workers, so they did not have any behavior regarding medical social work.

A social work education program should be implemented in the hospital to improve the knowledge about medical social work. An excellent collaboration between medical team and social worker can be enhanced through better understanding about each other's roles and areas(59). Affecting to knowledge can lead to the changes in attitude and behavior.

5.3.The relationship between participants' characteristics and knowledge, attitude and behavior score.

Regarding knowledge, attitude and behaviors score, in various occupation groups, nurse was found as a group which had highest knowledge score (21) ($p=0.01$) That means they had the best knowledge compared with other groups. In some qualitative study before, nurses had a better understanding of social workers; they also could describe more about the job of social workers in hospitals than doctors (33, 34). This study not only confirms those result from previous qualitative studies but also extend that the knowledge of nurses was better than other occupations in the hospital as well.

The staffs who had more than 10-years experience had a highest mean score and the staffs who had less than five years had least mean score. That is to say, the more experience they had, the more knowledge they acquired. This finding is predictable because the experience is one of the factors which can affect people knowledge in general on many majors. Later on, in this study, the experience was found as the only (61)factor which is associated with the knowledge of respondents (β 0.01; 95% CI 0.00 to 0.01; $p=0.04$)

The group which usually had interaction with medical social workers had a higher score (21) compared with other groups (16-18). It is consistent with the idea of Williams that the one way to improve knowledge is to have chances to interact with social workers (59). So, the healthcare staffs who had more opportunities to connect, to talk, listen and work with social workers might understand more what medical social work is and what they can do in hospitals.

The average mean score of attitude was a significant difference between gender (p -value <0.01). This was relatively consistent with the study on public perception about social work of Maya Kagan showed that gender could affect people attitude toward medical social work(62).

In term of experience level, the group with have highest knowledge level (more than 10-years experience) was have the lowest attitude score. On the contrary, the group with have the lowest knowledge score have the highest attitude score. Furthermore, the highest education level groups which include who hold graduate degree had the second lowest attitude score (11.93; $p<0.001$). Even the medical staffs in that group had more experience, more knowledge about medical social work or higher education level, but, if they had a negative experience on collaborating with social workers before, they could have negative attitude also. (63)

In term of behavior, participants working in clinical units had the score significantly higher than participants working in paraclinical units (p -value=0.05). This finding is explainable. For the medical staff working in clinical units, they have more chance to interact with patients than those working in paraclinical units (generally in lab, CT scan room or radiation room). Then they understood more about social and psycho needs of patients and required more support from medical social workers. For the paraclinical staffs, even though they also interact with patients, but they are not the professionals who directly provide treatment, the patient might not share with them any information about psychosocial need. If any, their position might limit their behavior only in referral to social work unit or discuss with social workers rather than working or collaborating with them as a team, as well as seeking the consultation form social workers.

One of unexpected finding of this study is that, the behavior of participants, who those reported the lowest education level, was better than other education level groups. The highest education level group, which was supposed to have good behavior on collaborating with social workers, had the lowest behavior score. There are none of the previous study considered the educational level of medical staffs and their behavior towards medical social work. It is required further qualitative studies to explain it.

Physicians also were found as an occupation group had the lowest behavior score. It might be related to their hectic schedule. There no doubt that collaboration takes time,

at least more time than working independently(56). Some physician indicated that they want to refer patients with socio-psycho needs to social workers and then move to the next step rather than take time to discuss and consult with them(34).

The medical staffs who have an average number of patients less than 20 had lowest behavior score (4.96) while those had the average number of patients from 20-50 had the highest score (7.92). It might because those had fewer patients did not found the need for support from social workers. When the number of patients increased by more than 50, the mean score decreased to 6.79. The number of patients can affect the schedule of medical staffs on a working day. Doctors who usually have hectic schedule reported that time is one of aspect that they considered when collaborating with social workers. Even they reported that they need the support from social worker, but they prefer to refer patients to social workers rather than a long conversation (34). Lack of time was one of the obstacles of interdisciplinary collaboration according to Nandan (64)

Overall, the physician had a lower score on three aspects: knowledge, attitude, and behavior when compared with other occupation. This is a remarkable result. because the doctors usually work as a command of the multidiscipline treatment team. They have most of the power in the team and can give orders to other staffs as well as coordinate the collaboration within team members (41-43). If they have low KAP level related to medical social work, they might not want to collaborate with social workers, and it will affect other staff too. So it requires an intervention to improve KAP of medical staffs in general and physician in particular

The participant who had never interacted with medical social work have no behavior regarding medical social work. The more frequent participants interacted with the medical social worker, the higher behavior score they got ($p\text{-value}<0.001$). In other words, the more they interface with the social worker, the more positive their behavior was. It is the hint that if medical staffs have more chance to interact with social workers, their behavior regarding medical social work might be better.

5.4. Factors associated with knowledge, attitude and behavior regarding medical social work

In multiple linear regression analysis, only experience had a significant positive association with knowledge score (β 0.01; $p=0.03$) indicating that health care staffs who had more experience were likely to have better knowledge. It is shown in the T-test analysis of this study that experience was related to score of knowledge (p -value =0.03). After adjusted confounding factors which were: occupation, number of patient, gender and social work training, experience also showed the significant association with knowledge. It can be predicted that the respondents had more experience also had more chance to understand more about social work; then their knowledge was improved. Further study about the factors that associated with knowledge regarding medical social work should be conducted in the future in order to contribute to the education program which can help to improve knowledge among healthcare professionals.

Gender was one of the factor significantly associated with attitude. It is similar to the finding on social work public perception (32). The t-test in this study also showed that the average attitude scores were different between both genders. Education level and number of working hour had a statistically significant positive regression with attitude score, indicating the higher education level they were, the higher attitude score they reached; and the more working hour medical staffs took, the more attitude score they got.

The number of working hour was one of the factor significantly associated with attitude about medical social work (β 0.42; 95% CI 0.14 to 0.71; $p=0.01$). There are none of studies on attitude regarding medical social work directly showed the relationship between working hour and the attitude of healthcare workers. However, several studies showed that the long working hour could affect working environment, cause stress, anxiety, depression level and lead more working error on medical staffs. (61, 65, 66). Those consequences might be influent their attitude on collaborating with social workers.

The income which was one of the factors affected public perception of social work in the study of Maya Kagan (62) was not significantly associated with the attitude in this study

Education level had the negative regression with behavior (β 1.32; $p=0.01$). That means the higher education level participants are in, the worse behavior they had. It also confirmed when comparing mean of all education level groups, where the average behavior score of group had higher education level was lowest, and the average behavior score of vocational training groups was highest. This finding is unexplainable in this study but might be expounded in other researches later.

Additionally, the interaction was also one of the factors associated with behavior of medical staffs (β 1.32; 95% CI 0.55 to 2.09; $p=0.01$) in this study, which means the more interaction with social workers, the better behavior they had. It also shows that different interaction history and frequency groups had different behavior score in the T-test. In this quantitative study, the frequency of the interaction was not investigated. However, other qualitative study mentioned that the quality of interaction also could affect the experience of collaboration in a multidisciplinary team. The study of Abramson also suggests that in the collaboration, the interaction skills is necessary. (63)

5.5. Study strength and limitations

The major strength of this study is this is the first study access all knowledge, attitude and behavior of health care professional towards medical social work. This study also found some new factor associated with medical staff's KAP. The face to face interview helped to ensure that the participants who had hectic schedule pay attention and enough time on the questions.

This study had some limitation. First, the data was collected by the researcher and two assistants, so it might cause some bias even though the assistants were trained. Second, some of the medical staffs did not have enough time to give their response carefully and around 5% of responses were collected by using questionnaires, not face to face interview because the researcher could not make appointments with respondents. In addition, due to the study design is the cross-sectional study, we cannot find out the causal factors of low level of knowledge, attitude and behavior. Furthermore, this study is conducted in just only one hospital, even though it was randomly chosen, the results cannot be generalized for all hospitals in Vietnam. Last, the face to face interview also give more limitation on the quality of answers on attitude and behavior than the self- administration questionnaire.

5.6. Policy Implication

This research might be useful for the Ministry of Health to understand the situation of applying their new policy in hospital. It also can be used by the medical social workers to know some challenges in their working environment, then decide to develop the effective social work education program for medical staff or adjust their approach in order to collaborate in multidiscipline treatment team. Policy implication and recommendation are presented below:

5.6.1. Recommendation from the results:

- Social work education is necessary to improve knowledge, attitude, and behavior of medical staffs about medical social worker. The program should focus more on physicians who had the lowest score of knowledge, attitude and behavior in this study. The factors should be considered in the development of education curriculum.
- The roles of social workers in hospital should be clarified more, supported by the precise regulation and directives not only in this hospital level but also in ministry level.
- The hospital should encourage social workers and medical staffs collaboration in the hospital not only in the charity activities but also in treatment work.

5.6.2. General recommendations:

- The oncology hospital should develop the primary medical social work education for all of healthcare professionals in order to improve awareness towards medical social work.
- Ministry of Health should provide the guidelines about social work practice and collaboration in hospital.
- The education for health care professionals can be applied before they start their medical career. That means medical students can learn about social work and how to work with social worker in university as a selective subject.
- Social workers should aware the factors associated with medical staffs knowledge, attitude and behavior on practice and collaboration

5.6.3. Further study:

- More qualitative should be conducted to understand why medical staffs had those negative attitude and inappropriate behavior of medical staff regarding social work; to explain why some medical staff had high education level and experience had low score of knowledge, attitude, and behavior.

- It is required more quantitative study to identify factor associated with knowledge and which aspects or knowledge are essential on the social work education program for healthcare professionals.

- Factors affect attitude and behavior is another issue should be addressed.

5.7. Conclusion:

There are two objectives in this study which are investigating the level of knowledge, attitude and behavior regarding medical social work among healthcare professionals and identifying the factor related to the knowledge, attitude and behavior. The quantitative cross-sectional study conducted in Ho Chi Minh Oncology Hospital, among 298 healthcare professionals demonstrates a baseline data regarding knowledge, attitude and behavior towards medical social work.

For the first objective, the research finding shows that nearly 80% of participants had poor knowledge, almost a half (48,7%) had negative attitude and about three-fifths of respondents had inappropriate behavior. The study also pointed out that the perception of the roles of medical social workers in hospital of medical staffs in Vietnam was different compared with the definition of the role in global and there was some misunderstanding about medical social work. The level of knowledge, attitude and behavior should be improved through an education program and the role of medical social worker should be clarified in hospital setting to facilitate social work practice and multidisciplinary collaboration in treatment teams.

The second objective are accomplished by T-test and linear regression. The study highlighted that the knowledge scores were different between groups categorized by experience, occupation and interaction frequency; the difference was found among the groups classified by experience, education level, age, gender, occupation, working hour and interaction with social work; different groups labeled by education level, department, occupation, number of patient, interaction as well as interaction frequency

also had different average behavior scores. Surprisingly, physician had lowest knowledge, attitude and behavior score compared to other occupations. Clinical staffs had better behavior than paraclinical staffs. Experience was only factor associated with knowledge. Gender, education level and number of working hour were all the factors which were statistically significantly associated with attitude score. Whereas interaction frequency, education level and interaction with social workers were statistically significantly associated with behavior score. Those factors should be considered by the hospital managers in developing further education program and by social workers when collaborating or interacting with medical staffs. There is a need to increase awareness among physician.



REFERENCES

จุฬาลงกรณ์มหาวิทยาลัย
CHULALONGKORN UNIVERSITY

1. Callahan D. The WHO definition of 'health'. *Hastings Center Studies*. 1973:77-87.
2. Paul Bywaters LN, editor *Social Work and Health Policy Statement IFSW General Meeting*; 2008; Salvador de Bahia, Brazil
3. Abramson JS, Mizrahi T. Understanding collaboration between social workers and physicians: application of a typology. *Soc Work Health Care*. 2003;37(2):71-100.
4. Gehlert S, Browne TA. *Handbook of health social work*. 2nd ed. Hoboken, N.J.: John Wiley & Sons; 2012. xvii, 702 p. p.
5. Kearney NS, Caroline. *An Overview of the Development of Health-Related Social Work in Ireland 2005*.
6. Healy LM. *International social work : professional action in an interdependent world*. New York: Oxford University Press; 2001. xvi, 314 p. p.
7. Abdul Malik SFS. *Social Work Practice in Health Care with Special Reference to Pakistan*. *Pakistan Journal of Commerce and Social Sciences*. 2012;Vol. 6 (1):210-5.
8. Craig C ED, Whittington J. *Care Coordination Model: Better Care at Lower Cost for People with Multiple Health and Social Needs*. IHI Innovation Series white paper Cambridge, Massachusetts: Institute for Healthcare Improvement. 2011.
9. Rizzo VM, Rowe JM, Shier Kricke G, Krajci K, Golden R. *AIMS: A Care Coordination Model to Improve Patient Health Outcomes*. *Health Soc Work*. 2016;41(3):191-5.
10. Ngoc DH. *Quality of Social Workers in the Hospital*. *Social work in hospital conference*. Children's Hospital 1, Ho Chi Minh City 2012 [
11. Oanh NT. *Historical development and characteristics of social work in today's Vietnam*. *International Journal of Social Welfare*. 2002;11(1):84-91.
12. UNICEF. *A Study of the Human Resource and Training Needs for the Development of Social Work in Vietnam*. Ha Noi, Viet Nam; 2005.
13. Health VMo. *The circular provision regarding the role and organization of social work in hospitals*. . Ha Noi2015.
14. Patel V, Araya R, Bolton P. *Editorial: Treating depression in the developing world*. *Tropical Medicine & International Health*. 2004;9(5):539-41.
15. Niemi M, Thanh HT, Tuan T, Falkenberg T. *Mental health priorities in Vietnam: a mixed-methods analysis*. *BMC Health Services Research*. 2010;10:257-.
16. Health VMo. *Preliminary report on the implementation of Circular 43-2015*. *Evaluation conference on social work in hospitals*; Ha Noi2017. p. 5-10.
17. Davies M, Connolly J. *The social worker's role in the hospital: seen through the eyes of other healthcare professionals*. *Health & Social Care in the Community*. 1995;3(5):301-10.
18. Ambrose-Miller W, Ashcroft R. *Challenges Faced by Social Workers as Members of Interprofessional Collaborative Health Care Teams: Table 1*. *Health & Social Work*. 2016;41(2):101-9.
19. (CASW) CAoSW. *Social Work Scope of Practice*. Canada 2008.
20. (AASW) AAoSW. *Social Work Definition North Melbourne*2013.
21. Hopps JG, Lowe TB. *Social Work Profession: Overview*. Interactive Factory.
22. (IFSW) IFoSW, editor *Global Definition of the Social Work Profession*. IFSW General Meeting, International Association of Institutions of Social Work General Assembly; 2014.
23. Garvin CD. *The Common Base of Social Work Practice*, Harriet M. Bartlett. New York: National Association of Social Workers, Inc., 1970. 224 Pages. \$4.00 Softbound. *Journal of Education for Social Work*. 1971;7(2):66-71.
24. (OASW) OAoSW. *Social Work In Hospital-Based Health Care*. Toronto, Ontario, Canada2016.
25. Singapore NSwCF-MoH. *Understanding the roles and competencies of medical social workers*. Singapore2015.

26. Workers. NAOs. Social Workers in Hospitals & Medical Centers occupational profile 2011.
27. Ritter JA, Vakalahi, H. F. O., & Kiernan-Stern, M. 101 careers in social work. New York: New York; 2009.
28. Workers AAOs. Scope of Social Work Practice Social Work in Health North Melbourne: Australian Association of Social Workers National Office; 2016.
29. NASW. Social Workers in Hospitals & Medical Centers. Washington, 2011.
30. Guterman N, Bargal D. Social Workers' Perceptions of Their Power and Service Outcomes 1996. 1-20 p.
31. Yalli N, Albrithen A. The perceptions of the personal and professional factors influencing social workers in Saudi hospitals: a qualitative analysis. Soc Work Health Care. 2011;50(10):845-62.
32. Kagan M. Public attitudes and knowledge about social workers in Israel. Journal of Social Work. 2015;16(3):322-43.
33. Davies M, Connolly J. The social worker's role in the hospital: seen through the eyes of other healthcare professionals. Health & Social Care in the Community. 2007;3(5):301-10.
34. Keefe B, Geron SM, Enguidanos S. Integrating social workers into primary care: Physician and nurse perceptions of roles, benefits, and challenges. Social Work in Health Care. 2009;48(6):579-96.
35. Leipzig RM, Hyer K, Ek K, Wallenstein S, Vezina ML, Fairchild S, et al. Attitudes Toward Working on Interdisciplinary Healthcare Teams: A Comparison by Discipline. Journal of the American Geriatrics Society. 2002;50(6):1141-8.
36. Abramson J, Mizrahi T. When Social Workers and Physicians Collaborate: Positive and Negative Interdisciplinary Experiences 1996. 270-81 p.
37. Sommers L, I. Marton K, C. Barbaccia J, Randolph J. Physician, Nurse, and Social Worker Collaboration in Primary Care for Chronically Ill Seniors 2000. 1825-33 p.
38. Rich MW, Beckham V, Wittenberg C, Leven CL, Freedland KE, Carney RM. A Multidisciplinary Intervention to Prevent the Readmission of Elderly Patients with Congestive Heart Failure. New England Journal of Medicine. 1995;333(18):1190-5.
39. Netting FE, Williams FG. Expanding the Boundaries of Primary Care for Elderly People. Health & Social Work. 2000;25(4):233-42.
40. Netting FE, Williams FG. Case Manager-Physician Collaboration: Implications for Professional Identity, Roles, and Relationships. Health & Social Work. 1996;21(3):216-24.
41. Lynch S. Health system factors affecting communication with pediatricians: Gendered work culture in primary care. Social work in public health. 2011;26(7):672-94.
42. Nugus P, Greenfield D, Travaglia J, Westbrook J, Braithwaite J. How and where clinicians exercise power: interprofessional relations in health care. Social science & medicine. 2010;71(5):898-909.
43. Whitehead C. The doctor dilemma in interprofessional education and care: how and why will physicians collaborate? Medical education. 2007;41(10):1010-6.
44. city OHHCM. Introduction of Oncology Hospital 2017 [Available from: http://benhvienungbuou.vn/New_HomePage.aspx].
45. Oncology Hospital in Ho Chi Minh city Website 2017 [Available from: http://benhvienungbuou.vn/New_HomePage.aspx].
46. Map G, cartographer Oncology Map 2017.
47. Slovin E. Slovin's formula for sampling technique. Retrieved on February. 1960;13:2013.
48. Yamane T. Statistics: An introductory analysis. 1973.

49. Tavakol M, Dennick R. Making sense of Cronbach's alpha. *International journal of medical education*. 2011;2:53.
50. Turner RC, Carlson L. Indexes of Item-Objective Congruence for Multidimensional Items. *International Journal of Testing*. 2003;3(2):163-71.
51. Workers NAOs. *Social Workers in Hospitals & Medical Centers*. Washington, 2011.
52. Davis C, Baldry E, Milosevic B, Walsh A. Defining the Role of the Hospital Social Worker in Australia 2004. 346-58 p.
53. Cowles LA, Lefcowitz MJ. Interdisciplinary expectations of the medical social worker in the hospital setting. *Health & Social Work*. 1992;17(1):57-65.
54. Abramson JS, Mizrahi T. Understanding collaboration between social workers and physicians: Application of a typology. *Social Work in Health Care*. 2003;37(2):71-100.
55. Mizrahi T, Abramson JS. Collaboration between social workers and physicians: Perspectives on a shared case. *Social Work in Health Care*. 2000;31(3):1-24.
56. Ambrose-Miller W, Ashcroft R. Challenges faced by social workers as members of interprofessional collaborative health care teams. *Health & social work*. 2016;41(2):101-9.
57. Lawrence RJ. *Professional social work in Australia*: ANU Press; 2016.
58. Lloyd G, Borland M, Thwaites M, Waddicor P. An interdisciplinary workshop. *The Journal of the Royal College of General Practitioners*. 1973;23(132):463.
59. Williams CC, Bracht NF, Williams RA, Evans RL. Social work and nursing in hospital settings: A study of interprofessional experiences. *Social work in health care*. 1978;3(3):311-22.
60. Gentner D, Collins A. Studies of inference from lack of knowledge. *Memory & Cognition*. 1981;9(4):434-43.
61. Silva Borges FNd, Fischer FM. Twelve-hour night shifts of healthcare workers: a risk to the patients? *Chronobiology international*. 2003;20(2):351-60.
62. Kagan M. Public attitudes and knowledge about social workers in Israel. *Journal of Social Work*. 2016;16(3):322-43.
63. Abramson JS, Mizrahi T. When social workers and physicians collaborate: Positive and negative interdisciplinary experiences. *Social Work*. 1996;41(3):270-81.
64. Nandan M. Commitment of social services staff to interdisciplinary care plan teams: An exploration. *Social Work Research*. 1997;21(4):249-59.
65. Ilhan MN, Durukan E, Aras E, Türkçüoğlu S, Aygün R. Long working hours increase the risk of sharp and needlestick injury in nurses: the need for new policy implication. *Journal of advanced nursing*. 2006;56(5):563-8.
66. Buyukhatipoglu H, Kirhan I, Dag OF, Turan MN, Vural M, Taskin A, et al. Oxidative stress increased in healthcare workers working 24-hour on-call shifts. *The American journal of the medical sciences*. 2010;340(6):462-7.

APPENDIX

Appendix I: Consent form

I am a graduate student in the College of Public Health Science, Chulalongkorn University. I am conducting a research study to collect data on the knowledge, attitude, and behavior of health care providers regarding medical social work.

I am inviting your participation, which will involve voluntary participation in the research, a one-time survey that will take approximately 20 minutes to complete. You have the right not to answer any question, and to stop participation at any time.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. Participation is limited to adults, ages 20 or older. Your responses to the survey will be used to inform policy on population health and integrated healthcare programming and adoption best practices. There are no foreseeable risks or discomforts to your participation.

Efforts will be made to limit the use and disclosure of your personal information to those who have a need to review and check the authenticity of this information. We cannot promise complete secrecy. The results of this study may be used in reports, presentations, or publications but your name will not be used. There is no way that the study result can be linked to your identification.

If you have any questions concerning the research study, please contact the research team. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can reach me through my phone number: +84903598548 (Vietnam) or +66902233915 (Thailand); email: truongnguyenxuanquynh@gmail.com. Please let me know if you wish to be part of the study.

By signing below, you agree to be part of the study.

Printed Name:

Signature:

Date:

Appendix II: Questionnaire – Pre-pilot version

The questionnaire is divided into 4 parts. Please answer each of the questions below. Be assured that your answers will be kept confidential. There is no way we can link your name with your answer on the questionnaires. **Please answer by TICKING (✓) or writing in the given spaces.**

Date: (dd/mm):/...../2018

ID:

.....

Which department do you work?**Part I: Socio-demographic factors**

1. Age:.....years
2. Sex: ¹ Male ² Female
3. Your income: Insufficient Barely enough Neutral
 Enough More than sufficient
4. How long you work in medical sector:
.....
5. Education level:
 Certificate Diploma Bachelor's Degree Master Degree
 Other (specify)
6. You are currently working as:
 Technician Nurse Physiotherapist Pharmacist Physician
7. Have you ever attend the training about social work Yes No
8. How many hours are you working per day
9. How many patients on average you meet per day:

Part II: Knowledge about social work

On those question below, you can choose more than one answer.

1. Which one below is related to the definition of medical social work
 - A profession
 - Focuses on the relationship between disease and social maladjustment
 - Providing psychoeducation and counseling
 - Charity
 - Caregiver
 - Providing post-discharge support services

2. Social worker work with: Individual Group Community

3. In the list below, which are the roles of social worker in hospital
 - Psychosocial Assessment/ Diagnoses/Planning/Intervention
 - Financial Assessment/Planning/Intervention
 - Case Facilitation
 - Patient and Family Counseling
 - Instruction – reception
 - Crisis Intervention
 - Quality Improvement
 - Resource Brokering/Referral/Development
 - Discharge Planning
 - Organizing labor union activities
 - Customer caring
 - System Integration
 - Outcome/Practice Evaluation
 - Working with disease peer support group
 - Patient/Family Education
 - Charity

4. Social work and Charity is the same? Yes No

Part III: Attitude regarding medical social work

Please mention according to you on a scale of 1 to 5, the extent to which you agree or disagree.

1: Strongly disagree 2: Disagree 3: Somewhat disagree

4: Neither agree or disagree 5: Somewhat agree 6: Agree 7: Strongly agree

No	Statement	Score						
1	Patients need social support	1	2	3	4	5	6	7
2	Social work can help to increase	1	2	3	4	5	6	7
3	Social workers have enough knowledge	1	2	3	4	5	6	7
4	Social workers have enough skill to	1	2	3	4	5	6	7
5	Social workers don't have to follow the	1	2	3	4	5	6	7
6	Social workers should work in the	1	2	3	4	5	6	7
7	What social worker should not focus on	1	2	3	4	5	6	7

Part IV. Behavior

Please mention according to you on a scale of 1 to 5, the extent the frequency of your behavior

1: Never 2: Rarely 3: Occasionally 4: Sometimes 5:

Frequently

6: Usually, in about 90% of the chances I could have. 7: Every time

No.	Statement	Score						
1	Discuss with social worker about patient	1	2	3	4	5	6	7
2	Discuss with social worker about patient	1	2	3	4	5	6	7
3	Discuss with social worker about patient	1	2	3	4	5	6	7
4	Working with social workers as a team	1	2	3	4	5	6	7
5	Referring your patients to social workers	1	2	3	4	5	6	7
6	Seeking social services from social	1	2	3	4	5	6	7
7	Seeking consultation from social	1	2	3	4	5	6	7

Appendix III: Questionnaire – Final version

The questionnaire is divided into 4 parts. Please answer each of the questions below. Be assured that your answers will be kept confidential. There is no way we can link your name with your answer on the questionnaires. **Please answer by TICKING (✓) or writing in the given spaces.**

Date: (dd/mm):/...../2018

ID:

Part I: Socio-demographic factors

1. Age: years
2. Sex: ¹ Male ² Female Others
3. Your income: Insufficient Barely enough
 Enough More than sufficient
4. How long have you worked in medical sector? ... month year.
5. Education level: Certificate Diploma Bachelor's Degree Master Degree
 Other (specify)
6. You are currently working as:
 Technician Nurse Physiotherapist Pharmacist Physician
 Other (specify)
- In which department?
7. Have you ever attended training about social work? Yes No Other
8. Do you currently interact with the social worker in your work setting? Yes No
How frequently is it?
1: Never 2: Rarely 3: Occasionally 4: Sometimes 5: Frequently
10. How many hours are you working per day on average:
11. How many patients on average you meet per day:

Part II: Knowledge about social work

On those question below, you can choose more than one answer.

12. Which of the following is/are related to the definition of social work, in your opinion?

1: Not at all related to social work

5: Very related to social work

<i>Statement</i>	<i>Score</i>				
	1	2	3	4	5
A profession	1	2	3	4	5
Focuses on the relationship between disease and social maladjustment	1	2	3	4	5
Providing psychoeducation and counseling	1	2	3	4	5
Charity activity	1	2	3	4	5
Caregiver	1	2	3	4	5
Providing post-discharge support services	1	2	3	4	5

13. Social worker work with: Individual Group

Community

14. In the list below, which are the roles of social worker in hospital

- Psychosocial Assessment/ Diagnoses/Planning/Intervention
- Financial Assessment/Planning/Intervention
- Case Management
- Patient and Family Counseling
- Providing Instruction
- Crisis Intervention
- Quality Improvement
- Resource Brokering/Referral/Development
- Discharge Planning
- Organizing labor union activities
- Customer services
- Outcome/Practice Evaluation
- Lead support group for specific diseases
- Patient/Family Education
- Charity (raising money for poor patients)

15. Social work and Charity is the same? Yes No

Part III: Attitude regarding medical social work

Please mention according to you on a scale of 1 to 5, the extent to which you agree or disagree.

1: Strongly disagree 2: Disagree 3: Uncertain 4: Agree 5: Strongly agree

	<i>Statement</i>	<i>Score</i>				
		1	2	3	4	5
16	Social work can help to improve treatment	1	2	3	4	5
17	Social workers don't have enough knowledge to	1	2	3	4	5
18	Social workers don't have enough skill to work	1	2	3	4	5
19	Doctors and nurses should make all decision for	1	2	3	4	5
20	What social worker should not focus on is	1	2	3	4	5

Part IV. Behavior

Please mention according to you on a scale of 1 to 5, the extent the frequency of your behavior

1: Never 2: Rarely 3: Sometimes 4: Frequently

5: Usually, in about 90% of the chances I could have.

No.	Statement	Score				
		1	2	3	4	5
21	Discuss with social worker about patient social	1	2	3	4	5
22	Discuss with social worker about patient	1	2	3	4	5
23	Discuss with social worker about patient	1	2	3	4	5
24	Working with social workers as a team	1	2	3	4	5
25	Referring your patients to social workers	1	2	3	4	5
26	Seeking social services from social workers	1	2	3	4	5
27	Seeking consultation with social workers	1	2	3	4	5

Thank you

Appendix IV: IOC Validity test result

Q	E.1	E.2	E.3	E.4	E.5	N	ΣR	IOC	Level of
1	1	1	1	1	1	5	5	1.0	Accepted
2	1	1	1	1	1	5	5	1.0	Accepted
3	1	1	1	1	0	5	4	0.8	Accepted
4	1	1	1	1	1	5	5	1.0	Accepted
5	0	1	1	1	1	5	4	0.8	Accepted
6	1	1	1	1	1	5	5	1.0	Accepted
7	0	1	1	0	1	5	3	0.6	Accepted
8	1	1	1	0	1	5	4	0.8	Accepted
9	1	1	1	0	1	5	4	0.8	Accepted
10	1	1	1	0	1	5	4	0.8	Accepted
11	0	1	1	1	1	5	4	0.8	Accepted
12	1	1	1	0	1	5	4	0.8	Accepted
13	1	1	1	0	1	5	4	0.8	Accepted
14	1	1	1	1	1	5	5	1.0	Accepted
15	0	1	1	1	1	5	4	0.8	Accepted
16	1	1	1	1	1	5	5	1.0	Accepted
17	1	1	1	1	1	5	5	1.0	Accepted
18	1	1	1	1	1	5	5	1.0	Accepted
19	1	1	0	1	1	5	4	0.8	Accepted
20	1	1	1	1	1	5	5	1.0	Accepted
21	0	1	0	1	1	5	3	0.6	Accepted
22	0	1	0	1	1	5	3	0.6	Accepted
23	1	1	1	1	1	5	5	1.0	Accepted
24	1	1	1	1	1	5	5	1.0	Accepted
25	1	1	1	1	1	5	5	1.0	Accepted
26	1	1	1	1	1	5	5	1.0	Accepted
27	1	1	1	1	1	5	5	1.0	Accepted
28	1	1	1	1	1	5	5	1.0	Accepted
29	1	1	1	1	1	5	5	1.0	Accepted
Total score								0.89	

Note:

- E.1: Prof. Edward Cohen, Ph.D
- E.2: Prof. Peggy McFarland, Ph.D., LCSW
- E.3: Prof. Surasak Taneepanichskul, M.D
- E.4: Prof. Do Hanh Nga, Ph.D
- E.5: MPH. Vy Tuong Vu

Appendix V: Experts 's contact

Expert	Title	Institution	Contact
Edward Cohen, Ph.D	Professor of Social Work Special Adviser, Lurie	School of Social Work College of Education San Jose State University	1 Washington Square #0124 San Jose, CA 95192- 0124, USA 510-847-6407 (mobile)
Peggy McFarland, Ph.D., LCSW	Professor of Social Work	Professor of Social Work	1 Alpha Dr, Elizabethtown, PA 17022, USA 717-361-1319 (mobile) mcfarml@etown.edu
Do Hanh Nga, Ph.D.	Associate Professor of Psychology	Faculty of Social Work University of Social Sciences and	10-12 Dinh Tien Hoang Str., Dist. 1, Ho Chi Minh City, Vietnam +84908120519 (mobile) dohanhnga@gmail.com
Surasak Taneepanichskul, M.D	Professor of Public Health	College of Public Health Sciences, Chulalongkorn University	Institute Building 2-3, Soi Chulalongkorn 62, Phyathai Rd, Pathumwan, Bangkok 10330, Thailand
MPH. Vy Tuong Vu	Coordinator	Vietnam HIV Addiction Technology Transfer Center – Medical	217 Hong Bang, Ward 11, District 5, Ho Chi Minh City, Vietnam +84908 577 767(mobile)

Appendix VI :Schedule of Activities

List of activities	Time (Month)						
	Dec	Jan	Feb	Mar	Apr	May	Jun
Literature review							
Tool development							
Design Questionnaire							
Translating questionnaire							
Design input data file							
Preliminary Sampling Plan							
Ethical approval							
Data collection							
Contac to stakeholders							
Training for data collectors							
Fieldwork (data collection)							
Data analysis							
Data correction							
Data management							
Data analysis							
Thesis procedure							
Report writing							
Submit for the final defense							
Thesis exam							
Revising thesis report							
Submit the final product							

Appendix VII: Budget

No.	Objective	Units	No. units	Time	Day	Cost/ time	Total (Bath)
1	Cost of printing questionnaires	Paper	2000	1	1	2	4000
2	Translation cost	Version	2	1	1	4000	8000
3	Trip to Vietnam	Person	1	2	4	2500	10000
4	Trip to hospitals	Person	3	2	10	200	12000
5	Training cost	Section	1	1	2	2000	4000
6	Pay for interviewers	Person	2	200	1	50	20000
7	Data collection cost		1	400	1	100	4000
8	Ethical approval application in Vietnam	Procedure	1	1	1	5000	5000
9	Making the thesis books	Book	5	1	1	1000	5000
Total							72,000

VITA

Name: Quynh Xuan Nguyen Truong

Date of birth: 07-01-1990.

Phone: +660902233915/ +84903598548

Email: truongnguyenxuanquynh@gmail.com

Education background: Bachelor of Social work (2012) - University of Social Science and Humanities- Vietnam National University, Ho Chi Minh City

Relevant Courses: Scientific Methods in Social work; Psychology; Sociology; Case Management; Community Development; Computer Science; ...

Working Experience:

- Lecturer Assistant, International Cooperation Coordinator (1/2015 – now)
- Counselling Department- Social work Faculty- University of Social Science and Humanities- Vietnam National University in Ho Chi Minh City
- Guest Lecturer (6/2016 – 7/2017) - Nhan Dao Vocational Institute
- Lecturer (3/2014 – 11/2014)) - Citysmart International School- Tungsing Group
- Project Coordinator (2/2013 – 11/2013) - Chance to Grow Germany (NGO)



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