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Burnout, Self-efficacy, and Resilience in Haitian Nurses: A Cross-sectional Study

by

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the requirements for the degree
Doctor of Philosophy in NURSING

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Each person whose signature appears below certifies that this dissertation in his/her opinion is adequate, in scope and quality, as a dissertation for the degree Doctor of Philosophy.

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ABBREVIATIONS

M	Mean
SD	Standard Deviation
Mdn	Median
MBI-HSS-MP	Maslach-Burnout Inventory Health Service Survey for Medical Professionals
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
ANF	American Nurse Foundation
U.S.	United States
RNs	Registered Nurses
MBI	Maslach Burnout Inventory
N	Number
MSPP	Ministère de la Santé Publique et de la Population
LVN	Licensed Vocational Nurses
USD	United States Dollar
NGOs	Non-Governmental Organizations
CIA	Central Intelligence Agency
AIDS	Acquired Immune Deficiency Virus
GDP	Gross Domestic Product
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
GSE	General Self-Efficacy

mNWI-R	modified Nursing Work Environment
CD-RISC	Connor-Davidson Resilience Scale
BO	Burnout Scale
EE	Emotional Exhaustion Subscale
DP	Depersonalization Subscale
LPA	Low Personal Accomplishment Subscale
PA	Personal Accomplishment
EBSCO	Academic Search Premier
CINAHL	Cumulative Index to Nursing and Allied Health Literature
MEDLINES Online	Medical Literature Analysis and Retrieval System Online
GNI	Gross National Income
DSM-5	Diagnostic Statistical Manual of Mental Disorders
ICD-11	International Classification of Diseases 11th Revision
QD-85	New Version Entry Code for Burn-Out
p-value	Probability of obtaining results at least as extreme as the observed results of a statistical hypothesis test, assuming that the null hypothesis is correct
OR	Odds Ratio
CI	Confidence Interval
NAM	National Academy of Medicine
TJC	The Joint Commission
NCQA	National Committee for Quality Assurance
AMAP	American Medical Accreditation Program

AAHC/URAC	American Accreditation Healthcare Commission/Utilization Review Accreditation Commission
HAH	Hospital Adventiste d'Haiti
CT	Tomography Scan
HNDSA	Hopital Notre Dame Société Anonyme
n.d.	No Date
X- ray	X-radiation referred to Röntgen Radiation
CMB	Centre Médical Béraca
OB-GYN	Obstetrics and Gynecology
IRB	Institutional Review Board
r	Correlation Coefficient
CFA	Confirmatory Factor Analysis
WHO	World Health Organization
α	Alpha
SPSS	Statistical Package for the Social Sciences
IBM	International Business Machines Corporation
MLR	Multiple Linear Regression

ABSTRACT OF THE DISSERTATION

Burnout, Self-efficacy, and Resilience in Haitian nurses: A Cross-sectional Study

by

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Though nursing burnout is a global problem, research on nurse burnout in Haiti is scarce. Haitian nurses operate in a resource-poor work environment in the context of multiple personal and social challenges. This study assessed burnout (emotional exhaustion, depersonalization, and personal accomplishment) and identified its influencing factors among a sample of Haitian nurses. A cross-sectional survey in French and Haitian Creole was conducted in five Haitian hospitals using forward and back translated scales measuring burnout (i.e., emotional exhaustion, depersonalization, personal accomplishment), self-efficacy, nursing work environment, resilience, and demographic factors. Haitian nurses (N = 179) self-reported moderate emotional exhaustion (M = 21, SD = 11.18), and a high level of personal achievement (Mdn = 41.0, range = 33). The influencing factors of burnout were their dissatisfaction with their salary, lack of autonomy, and insufficient staff. The nurses indicated a high level of self-efficacy and resilience, and an overall moderately positive perception of their work environment which likely mitigated a higher level of burnout. This study examined burnout among Haitian nurses, a novel and important contribution to the literature. These nurses may benefit from interventions to protect them from further emotional exhaustion and build on their strengths, thus reducing the risk of burnout syndrome. However, it is noteworthy that burnout symptoms were lower than expected

given the low resource, difficult socio-politico-economic environment. It seems these nurses have adapted, to some degree, to manage their critical conditions and may inspire hope among nurses in similar contexts. This study adds to the currently limited literature on burnout syndrome and perceptions of Haitian nurses pertaining to burnout, self-efficiency, and resilience. Furthermore, the Haitian Creole version of the Maslach-Burnout Inventory Health Service Survey for Medical Professionals (MBI-HSS-MP) is available online for future studies at https://www.mindgarden.com. The caring mission of the nurses remains an important aspect of the profession aligning well with the Watson's Caritas processes.

CHAPTER ONE

Introduction

Nurses are responsible for caring for others, across the spectrum of life. They work in a very stressful occupation, making it important for them to live a balanced life—spiritually, emotionally, mentally, physically, and socially. With its challenges and stresses, members of the nursing profession are at a high risk of burnout (Permarupan et al., 2020; Wang et al., 2015). When nurses are overwhelmed and feel unable to cope with increasing internal and external work stressors, they may develop burnout (Dzau, 2018; Kuhn, 2016). Burnout is a gradual process which can affect anyone, no matter their occupation (Smith et al., 2019). Burnout can have detrimental effects on an individual's quality of life both in and out of work. Studies reported that burnout among nurses result from chronic overwork, job dissatisfaction, and poor working environment such as inadequate staffing and resources (Dyrbye et al., 2017; Pisanti et al., 2016; Woodhead et al., 2016).

Common signs of burnout include emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach et al., 1986). On a personal level, burnout can cause mental and physical impairment, as well as substance abuse and family conflicts (Maslach, 1993; Melnyk et al., 2018; Sugawara et al., 2017). Moreover, when nurses feel less effective and autonomous, the quality of patient care can be negatively affected, resulting in higher infection rates and decreased patient satisfaction (Al Sabei et al., 2019; Cimiotti, 2012; Cimiotti et al., 2012; Dyrbye et al., 2017; Galletta et al., 2016). There is a cause-effect relationship linking nurses' anxiety (Khamisa et al., 2015), demotivation (Wang et al., 2015), inadequate standards of patient care, lack of attention

to patient safety, and intent to quit their job (Labrague et al., 2017; Nantsupawat et al., 2016).

Consequently, nurse burnout is associated with a reduction in job commitment, work dissatisfaction, absenteeism, and job abandonment (Davidson et al., 2019; Dutra et al., 2018; Dyrbye et al., 2017; Fida et al., 2018; Havaei et al., 2016; Nantsupawat et al., 2017; Palazoğlu & Koç, 2019; Rizzo, 2018). In 2017, the results of a nurse burnout survey of 600 American nurses showed that 52% intended to quit their job. Reasons given by the nurses included feeling overworked (27%), dissatisfied with their job (16%), and burdened with excessive paperwork (15%) (Sutherlannd, 2017). Job turnover caused by burnout costs millions of dollars for many organizations in yearly recruitment, employee retention, and training (Tuma, 2017). As organizational costs rise, productivity may decline (Shoorideh et al., 2015). This turnover inflates the shortage of nurses around the globe.

Low-income nations, such as Haiti, face many challenges in healthcare delivery due to socio-economic instability, inadequate government oversight over healthcare, inefficient and insufficient healthcare facilities, and diminished managerial control (Marie et al., 2017; Ngoasong & Groves, 2016; Roberts et al., 2021; Scott et al., 2018). The challenges faced by the nurses working in these countries include heavy workloads, personnel shortages, as well as pay inequity, lack of oversight by nursing management, unsafe work environments, and inadequate resources (Caporiccio et al., 2019; Hashimoto et al., 2020; Scott et al., 2018). These issues put the general public at tremendous risk of receiving substandard care.

Haiti's unpredictable but frequent natural disasters and their sequelae add to this problem of poor healthcare (Hashimoto et al., 2020). These added burdens outstrip the resources of both nurses and the healthcare system in which they work. Investigating the influencing factors of nurse burnout in a low-resource nation such as Haiti may contribute to our understanding of the syndrome, and aid in the development of interventions to help nurses deal with the stresses of their chosen profession. Thus, the aim of this study is to assess burnout (emotional exhaustion, depersonalization, and personal accomplishment) and identify influencing factors that contribute to burnout in the Haitian nurse population. Assessing nurse burnout syndrome in Haiti will add to the limited research knowledge on this topic.

Chapter one will discuss the rationale for this study. Thus, this introductory chapter will provide: (a) an overview of nursing and the importance of nurses' well-being; (b) an overview of nurse burnout; (c) an overview of nursing life in Haiti; and (d) an overview of factors impacting Haitian nursing. Lastly, the study aims, research questions, and theoretic framework will be presented, along with arguments for the significance of the study.

Overview of Nursing and Importance of Nurses' Well-Being

The nursing profession, since its debut, has proven to be an essential part of the healthcare system. The roles of nurses include education, advocacy, research, shaping health policy, and promoting a safe environment (International Council of Nurses, 2002). Nurses have a unique function: to care for people, whether well or ill; to assess health

status outcomes; and to assist patients in the recovery of their health, or to a dignified end-of-life (Henderson, 1964).

Nurses ought to think and work on their wellness in order to effectively carry their function as a caregiver. Although "wellness" refers to physical health, "well-being" is a more global and holistic perspective (Grabbe et al., 2020). The Centers for Disease Control and Prevention (CDC) defined well-being as fulfillment, an experience of positive functioning and emotions with satisfaction with one's life, and the absence of negative emotions (Centers for Disease Control and Prevention, 2018). Although it is difficult to be entirely free from negative emotions, it is possible that the CDC means an absence of negative feelings when well-being or life satisfaction is present. A healthy nurse can balance his/her spiritual, emotional, intellectual, personal, social, and professional well-being.

Nevertheless, nursing is a rewarding profession, but also a stressful and demanding one (Montanari et al., 2019). A more recent example of its demanding dimension for caring is revealed in the case of intensive care units during the pandemic of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in 2019-2020. During these days, nurses provided 86% of patient care when in contrast, physicians provided only 13% (Choi, 2020). This report sheds light somewhat on nurses' vital role in patient care and the importance for healthcare organizations in developing programs to assure nurses' well-being.

On May 29th, 2020, recognizing the impact of stress on nurses during the pandemic, the American Nurses Foundation (ANF) launched a national well-being initiative (American Nurses Foundation, 2020), based on a holistic model, and offering

tools on their website (www.nursingworld.org) to support nurses' mental health and build resilience. They advised for nurses to connect with their peers through conversations, and to journal about their experiences; Happy App can connect the nurses 24/7 when confronted with death, anxiety, fear, and isolations during the pandemic to professional counselors; self-care assessment tool for nurses to address their symptoms and to report their mental health needs to professionals as needed; hotlines and provider resources are available on the website.

The American Nurses Association, one of the professional nursing organizations in the U.S. encourages nurses to take control of their well-being and advocate not only for their patients and effective health policies, but also for themselves (Tomajan, 2012). In 2018, there were approximately 3.6 million registered nurses (RNs) in the U.S. (Ball, 2018). If each one of them took time to care for themselves and one family member, that would surely make quite a difference in their health and well-being. However, because it may be difficult for nurses to practice well-being because of their work demand, the job stressors may lead them to burnout.

Overview of Nurse Burnout

Burnout results from a plethora of symptoms from job-related stress, classified as an occupational phenomenon that could lead an individual to seek professional help (World Health Organization, 2019b). These plethora of symptoms include feelings of emotional exhaustion, feelings negativity towards one's profession, and decreased professional productivity (World Health Organization, 2019b). Luckily, interventions have been effective in reducing or ameliorating burnout.

Nurse burnout has been studied in many countries including Columbia, Spain, Brazil, the United Kingdom, Italy, the United States, Portugal, Israel, Poland, China, Turkey, Saudi Arabia, Greece, Iran, and Germany. Findings from a meta-analysis of 24 studies from diverse countries revealed that the prevalence of burnout is over 63%. These studies all used the Maslach Burnout Inventory (MBI) in their research and total of (N = 6,092) nurses participated in these studies (Molina-Praena et al., 2018). Whereas 31% of the nurses reported experiencing emotional exhaustion (95% CI [19, 43]), approximately 24% (95% CI [10, 41]) reported high depersonalization, and 38% (95% CI [25, 52]) experienced low personal accomplishment (Molina-Praena et al., 2018). The factors which contributed to burnout were professional experience, marital status, and psychological factors (Molina-Praena et al., 2018).

Recent studies show that approximately one-third of U.S. nurses suffer burnout (Dyrbye et al., 2019; Reith, 2018). A systematic review conducted in 2019 revealed high burnout levels among (N = 10,992) nurses in the developing Middle East for the most part. The low-income nations covered from the 53 studies were Palestine, Iran, Turkey, Saudi Arabia, Egypt, Israel, and Jordan (Chemali et al., 2019). Here we see that nurse burnout is prevalent in many nations but up-to-now has not been researched in the Haitian nurse's community.

Warning Signs and Symptoms of Burnout

It is crucial to recognize the signs and symptoms of burnout before they become overwhelming (Smith et al., 2019). Nurses would do well to know the signs and symptoms of burnout to try to mitigate the effects as quickly as possible. Individuals

often react differently to stressors and may present with different symptoms, and it may be challenging to recognize the warning signs in oneself or for a co-worker. Symptoms of burnout are physical, psychological, and behavioral.

Symptoms of Burnout

Physical symptoms include feeling tired and drained most of the time, anxiety, frequent headaches or muscle pain, lowered immunity, frequent illnesses, changes in appetite, gastrointestinal disturbances, chest pain, dizziness, and insomnia or decrease in sleep (Smith et al., 2019). Psychological symptoms include feelings of failure and self-doubt, helplessness, defeat, frustration, detachment, loneliness, loss of motivation, pessimism, cynicism, moral distress, decreased job satisfaction, a dwindling sense of accomplishment, and feeling trapped (Mayo Clinic Staff, 2018; Smith et al., 2019).

Behavioral symptoms include withdrawing from responsibilities, poor judgment, substance abuse, frustration, social isolation, procrastinating, inefficiency, compulsive eating, absenteeism, excessive tardiness, and leaving work early (Mayo Clinic Staff, 2018; Smith et al., 2019). These symptoms develop over time and are insidious. Nurses need to be mindful and pay attention as soon as symptoms develop.

Interventions for Burnout

The burnout phenomenon is associated with decreased patient satisfaction, a negative impact to the nurses' well-being, and maybe costly to organizations (Bodenheimer & Sinsky, 2014). Therefore, healthcare leaders are responsible for finding ways to enhance the well-being of the nurses and decrease the consequences of burnout

on patients' outcomes and the organizations, such as the high turnover rate. The Institute of Hospital Improvement of the United States evolved the healthcare model of practice from the Triple Aim to a Quadruple Aim (Bodenheimer & Sinsky, 2014). The Triple Aim recommends for population health, patient experience, and cost reduction. The Quadruple Aim adds the promotion of healthcare service providers' well-being (Bodenheimer & Sinsky, 2014). Thus, nurse leaders may build strategies such as resilience to help the nurses cope with burnout syndrome (Wei et al., 2018). These following strategies can foster resilience and decrease the risk of burnout. They are mindfulness exercise, practice of altruism, facilitating social network, promoting positive thinking, uplifting nurse's growth, and utilize nurse's strength (Gauthier et al., 2015; Montanari et al., 2019; Wei et al., 2019).

A mindfulness pilot intervention to reduce stress and burnout assessed nurses in an inpatient medical unit. Comparing the pre-survey (N = 52) and six weeks of post-intervention (N = 33) resulted in a small increase during the six-week intervention of perceived stress. However, 75% of participants thought the intervention is very effective in reducing work stress. Besides, emotional exhaustion and depersonalization's mean scores decreased, showing improvement. Furthermore, there was an increase in the mean scores of personal accomplishment. Nearly 75% of participants thought the intervention effectively reduced work stress, and 84.9% were interested in continuing similar interventions (Montanari et al., 2019). Once symptoms are perceived, organizations, managers, and nurses need to be proactive and develop a strategic plan such as the example listed above to avoid the negative consequences of burnout. Since nursing embraces caring and compassion as its foundation, nurses must be aware that their work

may lead to burnout and strive for healthy living (Montanari et al., 2019; Waddill-Goad, 2019).

Overview of Nursing in Haiti

As noted earlier, nurse burnout may affect nurses regardless of geography; therefore, it is worthwhile to discuss some of the Haitian known nurses' unique characteristics. Nurses provide the majority of healthcare in Haiti, a country that carries a heavy disease burden due to a long history of poverty, socio-economic disparities, and natural disasters (Caporiccio et al., 2019; Louis & Moloney, 2018; Roberts et al., 2021). Facing with so many challenges, nurses in Haiti may be particularly prone to burnout. Thus, this study's aim is to assess the Haitian nurse burnout phenomenon, identify the influencing factors, and the knowledge gained may inform future interventions to address burnout among these nurses. The following sections will focus on the known elements of nursing education, life, and salary in order to better understand some of these nurses' unique characteristics.

Education

The Haitian Ministry of Health and Population (Ministere de la Sante Publique et de la Population in French [MSPP]) regulates nursing schools in Haiti. In Haiti, a nurse is an individual who has completed basic nursing education and is authorized by the MSPP, the regulatory body, to practice nursing in Haiti. Basic nursing education is a formally recognized 3-year diploma program in the public sector. Private nursing schools provide a baccalaureate degree after a 4-year program. Clinical instruction is provided by

physicians, who prepare nurses to be generalists (Partners in Health, 2016). As a generalist, a nurse may engage in the full range of nursing practice, including healthcare education, as well as supervision and training of healthcare auxiliaries, which are equivalent to Licensed Vocational Nurses (LVN) in the U.S. (Caporiccio et al., 2019). Graduates from the diploma and baccalaureate programs must pass a national exam from the MSPP to obtain their licenses to work (Valcourt, 2014).

Haitian Nursing Life

Under the direction of the Ministry of Health and Population, nurses qualified as generalists may work as sole healthcare providers in remote areas where no doctors are available, and deliver babies in the absence of an obstetrician of a midwife (Roberts et al., 2021). Nurses may also diagnose, treat, and prescribe medications, and advise transfer to a higher level of care in complicated cases (Hashimoto et al., 2020). It is necessary for nurses to deal with acute and chronic illnesses due to Haitians' healthcare issues, lack of education, lack of preventive measures and the means to manage their chronic health problems (Clark, 2015). Approximately 70% of the healthcare force in Haiti is made up of registered nurses and auxiliaries (Ministere de la Sante Publique et de la Population, 2011). About 80% of medical personnel are assigned to urban areas (Ministere de la Sante Publique et de la Population, 2017), with approximately 50-60% of nurses working in the capital and other big cities with better job possibilities, leaving many rural areas with none or limited healthcare providers (Hashimoto et al., 2020). These rural areas may not have enough equipment to provide effective patient care, and nurses must travel on poor roads to reach patients.

Haiti's nursing shortage is critical. There are about 1,400 qualified nurses reported in Haiti, or about 2.4 nurses per 10,000 patients (Caporiccio et al., 2019; Garfield & Berryman, 2012). The shortage of qualified nurses is not only due to high staff turnover but also because of low salaries, causing nurses to emigrate to better-paid settings such as the U.S. (Clark, 2015; Floyd & Brunk, 2016; Partners in Health, 2016). The problem of nurse immigration as experienced by Haiti is similar to other low-income nations, which are also losing staff to high-income nations (Scott et al., 2018). In return, it can add to the remaining staff's already-heavy workload, increasing their patient-to-nurse ratio, further contributing to nurse burnout (Dutra et al., 2018; Reith, 2018).

A group of Haitian nurses (N=17) interviewed in two faith-based hospitals in Haiti reported psychological symptoms of exhaustion, powerlessness, emotional pain, lack of autonomy, and feeling trapped between the desire to advance professionally and the lack of opportunity (Roberts et al., 2021). These symptoms have been reported as signs of burnout (Smith et al., 2019). Environmental stressors reported were long shifts, long walk/commute, poor road conditions, low salary, irregular schedules, and lack of respect from other healthcare providers (Hashimoto et al., 2020; Roberts et al., 2021). However, rather than reporting burnout, these nurses expressed perseverance and pride in their profession, indicating overall resilience. However, when facing extreme stressors over time, their attitude may change; the context of a generally difficult environment seems to act as a catalyst for possible nurse burnout (Roberts et al., 2021). Although this qualitative study did not report actual nurse burnout, the nurses did report some of the symptoms of burnout. This study will seek to assess the issue of burnout among Haitian nurses.

Salary

Nurses report that their salaries are insufficient to meet their needs (Partners in Health, 2016; Roberts et al., 2021). Nursing salaries in Haiti range from a minimum of approximately USD 300-400 per month if employed by governmental and private hospitals compared to USD 545 per month when employed in temporary non-governmental organizations (NGOs) (Partners in Health, 2016). Salaries across all employment sectors in general are estimated to be approximately USD 153.97 per month to USD 2,714.50 per month; a physician salary may start at USD 1,200 (Salary Explorer, 2020). Although nursing salary is low, it is similar to the other professionals with a comparable college education in Haiti such as a banker, an accountant or a teacher. With the high cost of living in Haiti, their salaries are not enough to satisfy their needs, particularly in family where only one person is working. These nurses need a job despite their perception of the low salary compared to Haiti's living cost; therefore, they continue to thrive the best they can.

Factors Impacting Haitian Nursing

The factors impacting the Haitian nurses' experience presented in the following sections are their historical factors, their healthcare system factors, and the impact of their social determinants of health. Haiti's population as of July 2020 is 11,067,777 million inhabitants mixed with few Europeans, Indians, and mostly African descents. According to the World Population, 2020, Haiti is listed as a low-income nation and the poorest in the Western Hemisphere. Haitian nurses' contextual challenges may offer some understanding of the factors associated with the risk of burnout.

Historical Factors

From its inception in 1492, Haiti has been a country burdened with challenges. The original native people, called the Taino, succumbed to Spanish colonial power, who plundered their natural resources and decimated the Taino with diseases for which they had no natural immunity. With its indigenous people gone, the Spanish imported African slaves to work the plantation and the mines. In 1660, French colonists dominated the island and brought more slaves until they won their independence in 1804. In the 216 years since Haiti gained independence, the state of poverty for the masses has continued to worsen (De Cauna, 1997). In its current environment, plagued with political upheaval, and inadequate socio-economic system, the citizens live in a precarious state for the most part. Moreover, natural disasters, common diseases associated with the lack of potable water, malnutrition, and lack of resources limit Haiti's ability to invest in its healthcare system. Socioeconomic instability is the setting for healthcare in Haiti and thus presents healthcare workers with a variety of challenges. The issue of how to assist nurses in developing coping skills and maintaining their positive nursing contribution is an ultimate goal for this researcher; and this study is the first step in providing foundational knowledge to test interventions and achieve this eventual goal.

Healthcare System Factors

Although they bear the majority of the workload, nurses often do not take part in healthcare policies. Yes, they have the authorization to diagnose, treat, and prescribe medications in case of minor cases in some rural areas in accordance with the Ministry of health and of population because of the shortage of physicians; but in certain case this

situation can be dangerous. For example, the nurse prescribers in North West Region of Cameroon confronted some difficult working conditions, with less than standardized training, and certain patients who lack trust in the nurses prescribing (Ngoasong & Groves, 2016). The Haitian Ministry of Health and Population is responsible for the management of the national health system. Haiti suffers from declining birth rates, higher infant mortality rates, lower life expectancy, higher death rates, and subsequent lower population growth due to these factors (The World Factbook, 2017).

There has been a steady decline in the birth rate of just under 50% (46.338) from 1950 to 2020 (Macrotrends, 1950-2020). Plus, higher infant mortality rates estimated in 2020 at 42.6 deaths per 1,000 live births, which placed Haiti at the highest infant mortality rate in Central America and the Caribbean (CIA, 2020; IndexMundi, 2019). This decline in the birth rate and the high infant mortality may be triggered by preventable illnesses such as respiratory and intestinal diseases, as well as lack of vaccination.

Vaccination surveillance and administration programs started to show progress since 2015 through the efforts of the Haitian Ministry of Health and Population and its partners. As of 2020, the vaccination rate in Haiti is improving (Lee et al., 2020); however, for these programs to continue, additional funds will be needed (Tohme et al., 2017). Nurses are the vaccination providers in Haiti, with some traveling to rural areas and visiting homes to encourage and educate the population about the importance of vaccination.

Life expectancy for the general Haitian population is approximately 65.3 years (CIA, 2020), whereas worldwide life expectancy is 72 years (World Bank Data, 2019a).

Higher death rates caused by excess mortality due to Acquired Immune Deficiency Virus (AIDS) in the past years had caused a decline in the growth of the population (CIA, 2020).

Financial Factors

Haiti spends USD 83.00 per capita on healthcare annually, more than some other low-income countries, which average USD 41.00. However, Haiti's per capita health expenditure is about 70 percent less than that spent in high-income countries which average USD 2,937 (CIA, 2020). The total health expenditure allocated to Haiti's healthcare budget in recent years dropped from 16.6% per capita in 2004 to 3.9% in 2019 complicating an already stressed healthcare system (Hashimoto et al., 2020). Haiti spends more on treatment than preventive measures, and donors to Haitian health hope to see more emphasis placed on prevention (Hashimoto et al., 2020).

Haiti is considered a low-income nation and in 2017 was ranked 181 among other countries with a gross domestic product (GDP) per capita of USD 1,814 (The World Factbook, 2020). The GDP per capita is the economy of a country divided by its population and represents the country's standard of living and how much its citizens benefit from their economy (www.thebalance.com...GDP). The majority of Haitians (approximately 6 million) live below the poverty line of USD 2.41 per day (World Bank Data, 2020). Haiti's unemployment rate is close to 17% in 2020 (Trading Economics, 2020). As of July 2020, the constant inflation of the U.S. dollar equivalent to 25.70% have affected the exchange rate between the U.S. dollar and the Haitian Gourde (1 U.S. dollar to 65.93 Haitian Gourdes). As of July 4th 2021, the inflation rose to 38.40% with

an exchange rate between the U.S. dollar and the Haitian Gourde to 1 U.S. dollar is equivalent to 90.71 Haitian Gourdes causing hardship for citizens (Trading Economics, 2021).

The country's state of poverty greatly affects the healthcare system, and in turn, the effects of a struggling healthcare system negatively impacts the lives of Haitians and the well-being of the nurses who care for them. Haitian's Ministry of Health and Population depends significantly on international grants from private humanitarians, charitable, and non-governmental organizations (Hashimoto et al., 2020). Therefore, Haiti's healthcare system has obstacles that hinder its development, such as financial instability, improper allocation of funds, and ineffective management (Hashimoto et al., 2020).

Direct Payment System

Most Haitians do not have health insurance; hence, they follow the direct payment system, meaning that patients pay for all their services out of pocket. Healthcare can be costly for patients, and nearly half of the population cannot afford regular healthcare (The World Factbook, 2020). Patients must pay the doctor's office and hospital fees, and purchase supplies and medications in advance (CIA, 2020). Hospital visits may cost 500 Gourdes, equivalent to USD ~ 8.50, depending on the exchange rate (E. Georges, personal communication, May 20, 2020). The cost of medicines and medical supplies may amount to USD ~20.00 for an acute illness, while 59% of Haitians live on less than USD 2.50 a day (World Bank Data, 2020). In some faith-based hospitals, patients who cannot pay at the time of service will be billed for later payment (Roberts et al., 2021).

However, it is common for a patient to die of a treatable skin infection or other acute disease because they could not afford treatment. For example, a 35-year-old male with an abscess on his thigh was sent home because he lacked money for treatment; after a few days he developed gangrene, and by the time he returned to the hospital the infection had progressed too far and he died with septicemia (E. Georges, personal communication, February 14, 2018). Nurses in Haiti have many similar stories, but the literature about providing care in the Haitian context is scarce.

Medical Facilities Infrastructure

Haiti has a limited number of medical facilities and beds per patient in both urban and rural areas. In 2020, the CIA reported that there are 1.3 hospital beds per 1,000 Haitian people, 40% less than the U.S. ratio, and 0.25 physicians per 1000 population, which is 10 percent of the U.S. average. At times, there are medical facilities without beds (Hashimoto et al., 2020; Kaplan et al., 2015). Some facilities lack adequate supplies, medicines, reliable electricity, access to the Internet, and adequate sanitation (Hashimoto et al., 2020). Ambulance service is a rare commodity in Haiti (Hashimoto et al., 2020).

It is estimated that roughly 80% of medical personnel work in the capital and other large cities where 70% of the country's population live (Ministere de la Sante Publique et de la Population, 2017). This leaves about 20% of medical personnel for the rural areas. About 49% who live in the urban areas have low utilization of healthcare due to financial barriers, and 37% of rural dwellers report that geographic distance is one of the barriers of access to care (Kaplan et al., 2015). Only 23% of Haitians have access to

quality primary care, and of these, approximately 46% live in urban areas and 5% in rural sectors (Gage et al., 2017). For some rural patients, it may take three or more hours to walk to a health service center due to inaccessible roads or flooding; many cannot afford a moto-taxi ride, which may cost a day's wages (Kaplan et al., 2015). In rural areas, many turn to alternative medicine, natural remedies from healers or shamans in their communities that may be more expensive and non-curative, but at least are readily accessible (Hashimoto et al., 2020). The quality of this care remains unknown, and services are not regulated by the Haitian Ministry of Health and Population.

Other obstacles to service utilization are poor facility and service delivery with limited resources in most rural areas (Gage et al., 2017; Kemp et al., 2018). Most rural medical centers have a paneled solar refrigerator, though medical staff will often use their cell phone flashlights in lieu of electricity during surgery or childbirth at night. The hospitals that have generators must pay a high price for fuel, therefore sometimes they stay without energy. Treatments and test supplies for malaria, human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), and tuberculosis are free of charge from a Global Fund administered by the Haitian Ministry of Health and Population except when the Global Fund is low in supplies; then the hospital administrators must purchase their medical supplies and medicines other licensed distributors and for the most part they cannot afford to pay (Hashimoto et al., 2020).

The Haitian healthcare system is extremely complex, significantly, and negatively affecting its people and its care providers (De Bortoli Cassiani & Grajales, 2017; Gallagher, 2019; Irarrazaval, 2018; Walsh, 2017). Nurses encounter many patients who are sick and unable to pay for proper care, or who live in a remote area without a clinic or

hospital. Nurses interviewed in a qualitative study reported feeling powerless when their patients could not afford the medications prescribed by physicians (Roberts et al., 2021). This problematic healthcare system further burdens and stresses the nurses.

The Impact of Social Determinants of Health

As previously noted, social determinants of health are the conditions that affect mortality, morbidity, and the quality of life of individuals and communities. Social determinants of health include history, cultural norms, the settings in which people work and play, wealth, adequate food, access to clean water, reliable transportation, adequate housing, and fair salary (Blacker et al., 2020). Hence, social determinants may provide background information to inform this study.

Haitian nurses are working in a challenging healthcare system, fulfilling crucial roles in caring for patients. Besides the external stressors caused by the social context and convoluted healthcare system, nurses must face the challenges unique to Haiti and deal with the environmental disease sequelae following the natural disasters, which occur regularly. Because of its location in the Caribbean, Haiti is prone to repetitive flooding, hurricanes, storms, and earthquakes. In January 2010, an earthquake killed nearly 300,000 Haitians leaving 1.5 million homeless (The World Factbook, 2017). Infant mortality rose to 85.6% after the 2010 earthquake, but in 2020 down to 42.6% per 1,000 live births, and it is still higher than other countries in the same Western Hemisphere (Statista, 2009-2019). In October 2016, Hurricane Matthew caused immense housing losses, agriculture damage, and loss of livestock. The hurricane affected roughly 2.1 million people (World Bank Data, 2017).

Infant mortality rates rose after these natural disasters due to malnutrition from agricultural losses, poor sanitation, inadequate potable water sources due to flooding, and vector-borne diseases. The diseases associated with inadequate potable water include diarrheal disease and parasitic infection. The vector-borne diseases include dengue fever, malaria, Hepatitis A and E, and typhoid fever (CIA, 2020). These are some of the preventable diseases that the Haitian healthcare system continues to tackle. Lack of sanitation often exists in the communities, causing infection, exposure to parasites, and bacterial diseases, putting children at particular risk (CIA, 2020).

Nurses have a role in educating families about good handwashing and advocate for improving drinking water sources and increasing spending on sanitation projects. However, nurses must care for patients with chronic and acute diseases in an insufficient work environment for inadequate salaries while facing personal, social, and economic challenges. The impact of these complex challenges may place the nurses at risk for burnout syndrome, hence assessing burnout among Haitian nurses and further elucidate factors influencing this nursing population is paramount.

Purpose of the Study

The objective of the proposed study is to assess burnout (emotional exhaustion, depersonalization, and personal accomplishment) and identify influencing factors in the Haitian nurse population. The knowledge gained may inform future interventions to address burnout among these nurses.

Research Questions

1) To what degree do nurses in Haiti experience burnout as manifested by emotional exhaustion, depersonalization, and personal accomplishment?
2) How do demographics, self-efficacy, work environment, and resilience influence the levels of burnout in Haitian nurses?

Quantitative Research

The aim of quantitative descriptive cross-sectional correlational research is to generate objective knowledge, which is measurable and comparable. While burnout is a well-known phenomenon, literature on burnout among nurses in Haiti is lacking. Scales measuring burnout and related constructs have been developed and used widely in various populations (Campbell-Sills & Stein, 2007; Maslach et al., 1996; Palmer, 2014b; Schwarzer & Jerusalem, 1995). Therefore, a quantitative research design which makes use of tools that have been used among similar populations will allow comparing and contrasting of results. By using a quantitative method to explore burnout among Haitian nurses navigating multiple challenges, we hope to gain a deeper understanding of burnout syndrome in this context.

Theoretical Consideration

To guide this study assessing burnout among the Haitian nurses, the theory of Human Science/Human Caring (Watson, 2009) was selected. This theory was chosen because caring is at the core of the nursing profession. Watson first published her theory of Human Science/Human Caring in 1979, revised it in 1985 (Watson, 1988), and

broadened and advanced it some years later (Watson, 2005, 2008). As she continued to develop her theory, she added 10 Caritas Processes©, representing the essential components of nursing practice. These processes became the core concept of the Human Science/Human Caring theory. Caritas is a Latin word meaning "to love, cherish and give special attention to" (Dictionary Merriam Webster's Collegiate, 2018). Watson emphasized that Caritas was based on the nursing discipline which entails human caring, commitment, and a passion for human affairs (Watson, 2016).

The principal assumption connected to the Caritas Processes is the ability of nurses to be present authentically while with patients, by listening attentively to their stories with kindness and compassion, and responding sincerely to their needs (Watson, 2016). Thus, the Caritas Processes give nurses a renewed sense of their purpose and reminds them that nursing is truly a science of caring. According to Watson, when nurses abide by these Caritas Processes, they are able to intentionally care for others and maintain a meaningful relationship with them. The Caritas Processes interrelate with one another and remind nurses to take care of themselves as well. Watson advocates for mindfulness programs to enhance the well-being of nurses and to strengthen their caring purpose. The Caritas Processes may be used as interventions to assist nurses in breaking the danger of the burnout syndrome. Table 1 displays the 10 Caritas Processes.

Table 1. The Ten Caritas Processes©

1. Sustaining humanistic-altruistic values by the practice of loving-kindness, compassion, and equanimity with self/others.
2. Being authentically present, enabling faith/hope/belief system; honoring subjective inner lifeworld of self/others.
3. Being sensitive to self and others by cultivating own spiritual practices, beyond ego-self to transpersonal presence.
4. Developing and sustaining loving, trusting-caring relationships.
5. Allowing for the expression of positive and negative feelings; authentically listening to another person's story.
6. Creatively problem-solving, 'solution-seeking' through caring process; full use of self and artistry of caring-healing practices via use of all ways of knowing/being/doing/becoming.
7. Engaging in transpersonal teaching and learning within context of caring relationship; staying within other's frame of reference; shift toward coaching model for expanded health/wellness.
8. Creating a healing environment at all levels; subtle environment for energetic authentic caring presence.
9. Reverentially assisting with basic needs as sacred acts, touching mind/body/ spirit of other; sustaining human dignity.
10. Opening to spiritual, mystery, unknowns; allowing for miracles (Watson, 2016).

Note. Reprinted from "Watson Caring Science Institute," by J. Watson, 2016. *Health Sciences Library Photograph Collection and Special Collections*, University of Colorado, Anschutz Medical Campus; Publications.

Human Science/Human Caring Theory fits well with the phenomenon under study as the theory provides ethical and moral foundations for nursing while also supporting a healthy environment and a state of well-being for the nurses and their patients. Watson's theory of caring will guide the study by using selected Caritas Processes to represent internal and external attributes that when present may act as nurse resources or may be threaten nurse wellbeing if lacking. Through this lens, nurses' resources or threats may be measured using validated scales to determine how these variables influence burnout, the dependent variable (Figure 1).

Five of Watson's Caritas Processes (#1, 2, 6, 8, 9), as noted in Figure 1, are conceptually aligned with the following validated scales: General Self-Efficacy (GSE) (Schwarzer & Jerusalem, 1995); modified Nursing Work Environment (mNWI-R) (Palmer, 2014b); and Resilience (CD-RISC) (Connor & Davidson, 2003). Specifically, Caritas Processes #8 & 9 pertain to relationships, environment, and communication, which align with the items in the Nursing Work Index-Revised scale. Caritas Process # 1, 2 & 6 pertain to consideration and treatment of self and others, as well as problem solving, which align with both the general Self-Efficacy Scale and the Resilience scale. Each scale will be used to evaluate the strength of the association to burnout, whether that influence is positive or negative, which will be discussed in detail in Chapter three.

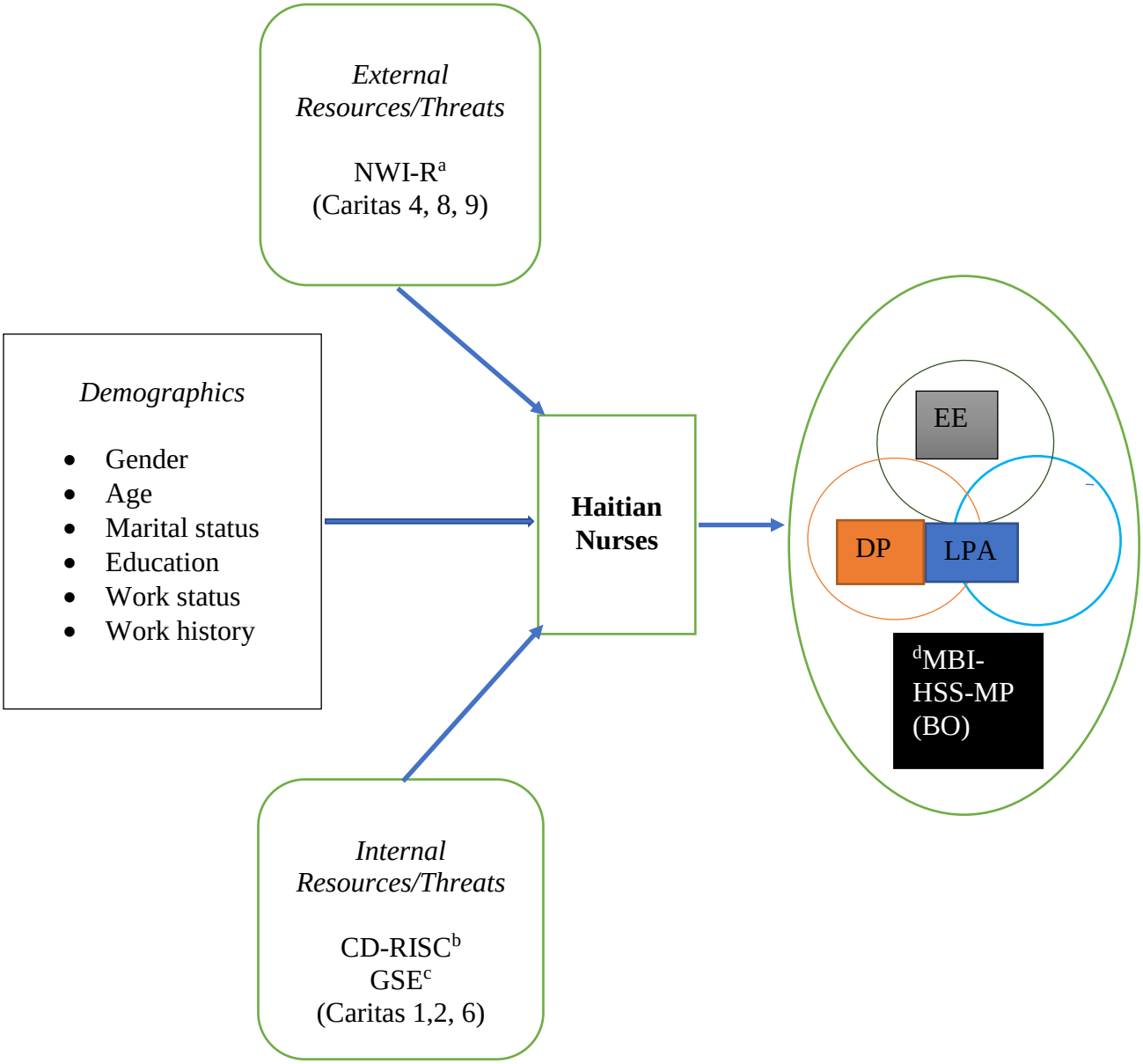

Figure 1. *Conceptual Framework based on Watson's Caritas and Haitian Nurses*

Note.
[a] mNWI-R: modified Nursing Work Practice Index Scale – Revised
[b]CD-RISC: Connor-Davidson Resilience Scale
[c]GSE: General Self-Efficacy Scale
[d]MBI-HSS-MP (BO): Maslach Burnout Inventory – Human Services Scale (Burnout Scale)
EE: Emotional exhaustion subscale
DP: Depersonalization subscale
LPA: Low personal accomplishment subscale

Haitian nurses are at the center of the conceptual model, influenced by factors such as demographics, as well as internal and external resources/threats. Some of these factors are non-modifiable like gender and age, while others are modifiable but may or may not be within the nurse's control. When positive factors outweigh negative factors, for instance when internal and external resources are sufficient and readily available, the nurse's work is supported, and he/she is presumably at less risk of burnout. However, when negative factors disrupt the balance, there may be an increased risk of nurse burnout. Burnout (BO), the dependent variable, is depicted in the figure as the large oval which will be measured with the Maslach Burnout Inventory-Human Services-Medical Personnel Scale (MBI-HSS-MP) (Maslach, 1996). Within the BO oval, three small circles represent subscales: emotional exhaustion (EE), depersonalization (DP), and low personal accomplishment (PA). While measured separately, each subscale represents an aspect of burnout, with some overlapping of concepts.

Significance of the Study

Because of the unique and challenging conditions in which Haitian nurses' practice, understanding burnout syndrome in this population is vital to ensuring both their effectiveness as health professionals and the care provided to their patients. This research will help fill this need. In addition to the nurses themselves, patients will also benefit from the findings of this proposed study. By exploring the role of burnout syndrome in nurses' work performance and the likelihood of leaving the profession, nurse managers and hospital administration will also benefit from this research. Lastly, this study will

contribute to researchers and policymakers' understanding of the effects of burnout on this population.

Significance to Health Education and Clinical Practice

Haitian nurses will benefit from increased awareness of nurse burnout in their settings and the possible factors influencing the burnout. Clinically, nurses can benefit from future interventions which enhance their well-being and lessen or prevent burnout in the work setting. Patients will benefit by receiving better care and improved outcomes from nurses who are not suffering from burnout. The results of this study could improve utilization of resources, inform recommendations for improving coping skills, and advocate for continuing education requirements and professional advancement opportunities. With enhanced patient outcomes as one of the study's stated goals, education modules for nurses will include improved critical thinking skills and strategies for effectively coping with stressors.

Significance for Policy/Leadership

Managers will benefit from new ways to improve the nurse's professional development through continuing education and offering tuition reimbursement or scholarship to nurses to further their education in advanced degree. Nurses, in return, who aspire to be in academia may be given the opportunity to do so. Nurses who desire a management position may attend workshops on leadership development. Leaders can promote a nursing education that follows the international standard of education in Haiti along with the Haitian Ministry of Health and Population and boost advanced nursing

degrees. With more highly developed degrees in nursing and more prepared nursing academicians, the nursing shortage may recede. Leaders can advocate for policy changes permitting nurses to be valued and to have a voice in decision-making regarding salary ranges, benefits, and resource management on the local and national levels.

Significance for Future Research

At best, this study's data will extend the currently limited literature on burnout syndrome and factors influencing it in the Haitian nurses' community. The information gained from our Haitian nurses' study may be useful to other low-income countries as well. Future research to test the participants' intervention is necessary to acknowledge the outcomes and expand the nursing scientific community's growth.

Conclusion

Burnout is a serious problem that affects nurses all over the world. Nurses are in a profession demanding their attention emotionally and physically. Because of their occupation, nurses are prone to burnout, and statistics showed that burnout is high among nurses worldwide. However, nurse burnout symptoms may be subtle and harmful to nurses' well-being and their entourage. Burnout per the World Health Organization is not a medical disease, but it is an occupational phenomenon that people need to be attentive to avoid harmful consequences. Burnout symptoms affect the nurses physically, emotionally, mentally, and spiritually. Burnout affects nurses in three dimensions: emotional exhaustion, depersonalization, and reduction in personal accomplishment. The effects could impact their familial, social, and professional lives if early symptoms are

left ignored or untreated. The consequences of burnout are job dissatisfaction, depression, anxiety, and intention to leave their job. According to the literature, many nurses quit their job leaving behind a void difficult to fill because of the ongoing nursing shortage. Therefore, patient dissatisfaction, adverse patient outcomes, and decreased patient safety are negative nurse burnout outcomes. To replace employees can be costly to organizations.

Numerous studies report the prevalence of burnout in low and high-income nations, but there is a dwarf in nurse burnout study in the Haitian community. Haitian nurses live and work in an unsafe environment, often overshadowed by natural disasters, socio-economic uncertainties, inadequate resources, and unfavorable healthcare infrastructure. They also face internal stressors such as job dissatisfaction, fatigue, and exhaustion, although some interviewees feel they have that nursing is a calling or a vocation. However, nurses make up most of the healthcare force in Haiti, and in many distant locales, they are the sole providers. With these challenges' compounding effects, it would be difficult for nurses not to be vulnerable to burnout.

Therefore, the need to develop a body of resource material to identify and appropriately address burnout in the Haitian nurse has become apparent. Our theoretical lens for investigating the burnout phenomena will be Watson's Caritas Processes. This quantitative study will use a survey to assess the concept of burnout in Haitian nurses. The researcher will determine the relationship between demographics, self-efficacy, work environment, and resilience with the dependent variable burnout. Hopefully, the findings obtained from this study will help improve Haitian nurses' work environment and

improve the care nurses provide in an environment in which nursing is often the cornerstone of the healthcare system.

CHAPTER TWO

Literature Review

The issue of employee burnout has been gaining interest among researchers in the fields of healthcare, education, and social work around the world for the past four decades (Maslach & Leiter, 2016). Factors such as increased workload and inadequate resources have contributed to burnout among workers in these fields. Identifying the problem has resulted in a growing body of evidence, particularly in the healthcare sector documenting root causes and addresses interventions (Heinemann & Heinemann, 2017). In the healthcare field, nurses have higher burnout (Adams et al., 2018; Bakhamis et al., 2019; Haryanto, 2018). The nature of nursing work requires nurses to use both their physical and emotional resources to deal with issues they are unable to solve; and these issues which adversely affect their work performance may lead to burnout. Hence, the purpose of this study is to assess burnout among Haitian nurses and explore potential influencing factors. Understanding the status of nurse burnout in the Haiti can guide future interventions and direct further research.

Consistent with quantitative methods, pertinent literature was reviewed to establish the recognized components of nurse burnout. Databases searched included Academic Search Premier (EBSCO host), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Embase via Elsevier, Google Scholar, Medical Literature Analysis and Retrieval System Online (MEDLINES Online) via PubMed, and PsycINFO via EBSCO host. The literature search focused on nurse burnout in low-income nations as per World Bank (2019) definition of having a gross national income (GNI) of USD 1,035 or less per capita per year; Haiti is among these low-income nations. Due to the limited

low-income burnout literature, the search was extended from January 2010 to 2020. Key search terms used included: burnout, burn-out, burn-out syndrome, burnout psychological, psychological burn-out, professional burnout, career burn-out, career burnout, occupational burn-out, occupational burnout, professional burn-out, and nurse burnout. All 32 low-income nations were integrated into the search (e.g., Haiti, Ethiopia, Rwanda, Uganda, Sierra Leone, Palestine, Iran, Israel). Among the thousands of articles available, a total of 400 articles were selected and reviewed based on prevalence of nurse burnout in available nations, using Maslach Burnout Inventory Scale/Human Services Survey, associations with other variables, burnout interventions, quantitative or mixed studies. Specifically, systematic reviews of the prevalence of nurse burnout, and seminal articles on the origin, definition, theoretical background, and concept of burnout were retrieved.

This review of literature led to the discovery that burnout has not been studied among Haitian nurses. To inform this study, however, the following literature will be reviewed. First, a brief review of burnout that involves its historical retrospective, definitions, and a description of the theoretical development of burnout will be offered. Next, evidence about nurse burnout, including its prevalence, causes, associated factors, and implications will be presented. Thereafter, a review of evidence documenting the association between nurse burnout and socio-economic factors will be synthesized. The chapter will conclude with a summary of this literature.

Brief Review of Burnout

Burnout is a psychological syndrome resulting from chronic exposure to overwhelmed stressors at work. In occupations such as nursing, the standard expectation is that the nurses place the patients' needs first, work long hours, and make patients and family members happy no matter what (Maslach & Leiter, 2016). Researchers in social science started to be interested in studying burnout in the past two decades. They noticed that many human service workers started to express feelings of being exhausted and uninterested in a job they previously enjoyed (Maslach & Leiter, 2016). When nurses face ongoing stressors that overwhelm their coping skills, they may have symptoms that gradually lead to burnout. This section will attempt to retrospectively give a brief history of burnout, define the concepts, and present a theoretical development of burnout.

Historical Perspective of Burnout

In 1974, the father of the term burnout psychotherapist Freudenberger, first described burnout as an exhaustion that manifests both emotionally and physically. Burnout consisted of a state of exhaustion derived from the workplace that demanded the use of too much strength, energy, and resources. The physical and behavioral symptoms identified included abdominal distress, headaches, feelings of anger, suspicion, unhappiness, overconfidence, all-powerful, cynicism, depressive symptoms, and misuse of tranquilizers (Freudenberger, 1974). Burnout was understood as a condition of exhaustion that someone feels because of the lack of success in their devotion to a cause, commitment to a job, or unexpected failure in a relationship (Freudenberger & Richelson, 1981).

Maslach (1981) built on the previous Freudenberger work suggested that burnout is a psychological syndrome, a reaction to long-term stress at work. The features of this psychological reaction include three facets: overwhelming emotional exhaustion, feelings of depersonalization from the job, and a sense of low personal accomplishment. The emotional exhaustion has been described as low level of energy, drained, worn-out and even incapacitated. The depersonalization was given the title of cynicism because the worker was described as short-tempered, with unacceptable approaches towards the clients such as loss compassion. The low or reduced personal accomplishment is characterized by decrease efficacy and productivity in one's job, low morale, and inability to cope with the challenges of the job (Maslach et al., 1986; Maslach & Leiter, 1997; Maslach & Leiter, 2016; Maslaeh & Jackson, 1981). Three-dimensional model was significant in a social framework in which individuals are in a stressful position (Maslach & Leiter, 2016).

Definitions

Burnout is not a recognized clinical diagnosis in the Diagnostic Statistical Manual of Mental Disorders (DSM-5) (2013). In the International Classification of Diseases 10th revision (ICD-10), 1990, burnout was defined as problems pertinent to difficulty managing life, which was described as a condition of critical exhaustion. In 2019, World Health Organization (WHO) declared burnout as an "occupational phenomenon", that resulted from work stress which has not been managed well. In the ICD 11th revision (ICD-11) (2019), burnout was recognized as a serious health problem; it was given the code QD-85 and refers to problems associated with employment or unemployment.

According to ICD-11, burnout is described as factors influencing health status. The ICD-11 proposed that:

> "Burnout is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: 1) feelings of energy depletion or exhaustion; 2) increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and 3) reduced professional efficacy. Burnout refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life," (Internationnal Classification of Diseases-11, 2019).

While this definition appears in ICD-11 (2019), it reflects the description given by Maslach in previous years as a psychological syndrome involving emotional exhaustion, depersonalization and a low sense of personal accomplishment occurring among professionals working in challenging situations. It seems that researchers have embraced this definition in order to assess the prevalence of burnout among many healthcare workers, particularly nurses, and to identify intervention programs to prevent the consequences of burnout. Although not considered a medical disease, it is an occupational phenomenon requiring management (World Health Organization, 2019a).

Theoretical Development of Burnout

After conducting several studies, Maslach and colleagues extended the unidimensional theory of Freudenberg (1974) – emotional and physical exhaustion--and added two other dimensions. These dimensions were depersonalization, which is the worker's responses toward the recipients; and low personal accomplishment, a response toward self, to develop the multidimensional burnout theory. In 1998, Maslach outlined the multidimensional theory of burnout, explaining that burnout is one person experiencing stress surrounded by complexed social interactions. These, in turn, depend

on the person's perception of others and self-perception (Maslach, 1998). Everyone's perception may be different. Someone may feel exhausted, powerless, unable to see the good in the job and others and quit. Someone else may be exhausted as well but has good coping mechanisms and is able to handle the complexed situations and keeps on working and remaining pleasant to the patients.

Emotional exhaustion refers to chronic fatigue arising from occupational stress. Emotionally depleted, workers cannot perform their jobs efficiently (Lheureux et al., 2017; Maslach, 1993; Maslach & Jackson, 1981). Emotional exhaustion is the stress aspect of burnout theory (Maslach, 1993). This stress is caused by wearing out of doing a routine demanding job, perhaps mixed with a dissatisfied environment, with lack of supplies and/or human resources. This job could have been previously very appealing. However, with time, the person seems drowning and unable to cope and complains of being exhausted emotionally almost every day. This person is on the verge of burnout and requires counseling and professional help right away. Hence, nurses who are emotionally exhausted with a demanding job may express these feelings. Feelings such as overwhelmed with the poor working environment such as low resources, long working hours, and acute patients requiring all their energy.

Depersonalization refers to the feelings of detachment from the caring of a care receiver, can be a student, prisoner, patient, or an handicapped child. They may have destructive feelings leading to negative impacts on the quality and effectiveness of care provided for the persons (Bakhamis et al., 2019). It can begin as a mechanism to cope with negative feelings. The nurse may see the patients not as people who need care, but as objects (Zimbardo & Ebbesen, 1970). This depersonalization is the interpersonal

component of the burnout theory (Maslach, 1993). Hence, the nurses going through depersonalization have lost the compassion and empathy that the patient's care requires.

Reduced personal accomplishment indicates a low sense of self-efficacy; workers lack a positive attitude towards work and feel like they have failed. Exhaustion and detachment decrease productivity. Hence, the worker feels lost and unable to make meaningful contributions at work. Thus, incompetence and decline in self-worth may lead to depression, and an inability to cope with work pressure. Reducing social support may intensify this state, and combined with reduced opportunities for professional development, may exacerbate the situation. A sense of personal accomplishment is the self-evaluation component of burnout (Maslach, 1993). Hence, nurses experiencing a reduced personal accomplishment may consider themselves of little self-worth and devaluate themselves while feeling denuded of coping skills.

Other theories discuss the concept of burnout as a mismatching between the workers' attribute vs their work attributes. Edwards (1996) discussed the theory of burnout as person-environment fit, which considers burnout to be the result of a disproportion between the worker's aptitudes and potentials, the workplace strains, and available resources. Factor misfits result in an individual feeling out of balance. This leads to psychological distress and strain, as well as somatic symptoms (Edwards, 1996; French et al., 1982). Another theory called the Effort-Reward Imbalance model considers burnout as the result of receiving very little recompense after working very hard to accomplish a job (Siegrist, 1996).

There is a consensus among the theorists that multiple mechanisms contribute to burnout syndrome (Edwards, 1996; French et al., 1982; Maslach, 1998; Siegrist, 1996).

These include an emotional exhaustion that can result from the worker's inability to cope with stress. It also includes a depersonalization that compromises the worker's interpersonal relationships with the care receivers. The inability to be self-efficient and proficient in one's job can lessen a worker's feelings of accomplishment; this may, in turn, cause more stress and contribute to burnout syndrome.

Evidence of Burnout among Nurses

The nursing profession is reported as the most stressful jobs among the healthcare professions (Salehi et al., 2014). The negative aspects of the nursing work stress can affect the nurses, patients, families and the healthcare system (Salehi et al., 2014). A systematic review of quantitative study from 1989 through 2014 reported that over 26% of emergency room nurses suffer burnout (Adriaenssens et al., 2015). These nurses came from countries such as Greece, Scotland, Iran, Spain, United States, United Kingdom, Ireland, Egypt, and The Netherlands. The determinants of the emergency nurse burnout were categorized as personality characteristics and job-related characteristics. The personality characteristics such as neuroticism, agreeableness, conscientiousness, extraversion, and openness called the Big Five of personality traits were found to be associated with burnout. Work related factors included exposure to traumatic events, and organizational factors were determinant of burnout associates with serious negative outcomes for patients, affects other healthcare professionals, workers' family members (Adriaenssens et al., 2015). Furthermore, burnout can cause increase healthcare costs due to higher turnover rates, absenteeism, and workforce shortage (Adriaenssens et al., 2015; Dyrbye et al., 2017). Studies from 2012 to 2018 reported a rate of 35-45% of American

nurses suffer from burnout syndrome (Aiken et al., 2012; Dyrbye et al., 2018; Dyrbye et al., 2017; Li et al., 2018; Pradas-Hernández et al., 2018). Estimated prevalence of nurse burnout in 2015 ranged between 10%-70%, and 30%-50% for nurse practitioners (Lyndon, 2015).

A study with Nigerian nurses (N = 270) using the Maslach Burnout Inventory Scale (MBI) found that 39.1% of the nurses experienced emotional exhaustion, 29.2% depersonalization and 40.0% reduced personal accomplishment (Lasebikan & Oyetunde, 2012). The causes of burnout in a study in Nigeria were inadequate number of nurses, working too many night shifts, poor salary, conflict between doctors and nurses (Lasebikan & Oyetunde, 2012).

Evidence suggests that burnout symptoms in nurses is high across specialties and both high and low-to-middle income countries. A systematic review of 113 studies and a meta-analysis of 61 studies among nurses (N = 45,539) in 49 countries across multiple specialties found an overall pooled prevalence of burnout symptoms among the nurses to be 11.23% (Woo et al., 2020). The Southeast Asia and Pacific region had the highest burnout symptoms prevalence rate (13.68%) while Middle East and North Africa region had the lowest (4.68%). Pediatric nurses in these studies had the highest prevalence of burnout among all specialties, while geriatric care nurses had the lowest (Woo et al., 2020).

Causes of Burnout among Nurses

Generally, burnout is a long-term result of multiple factors causing work-related stress. Smith, Segal & Robinson (2019) identified six different areas of "misfit" between

the person and the job that may cause burnout. These are workload, control, reward, community, fairness, and values. A workload misfit is an imbalance between the supply and demand for nurses; this can manifest in long shifts and overtime at work, or any exceeding of the nurse's physical resources. If this condition becomes chronic, nurses have little rest or relaxation time, contributing to a stressful environment (Smith et al., 2019).

Other factors that contribute to burnout include lack of control over one's work schedule, rigid organizational rules and policies, and low participation in decision-making (Smith et al., 2019). All of these factors can add to an employee feeling overwhelmed and without choices. A loss of intrinsic and extrinsic rewards, such as lack of recognition for a job well done, lack of benefits, incentives, and low salary, may cause the employee to lose motivation and pride in their work, adding to burnout (Smith et al., 2019).

Decreased social support from peers, administrators, family and friends, breakdowns in communication, and feelings of isolation may lead to burnout (Smith et al., 2019). Fairness between organizations and their employees is fundamental. Unfair organizational policies and unjust treatment of employees may decrease mutual respect between employees and administration. Furthermore, conflicts between a nurse’s personal values and the values of their employer may cause dissatisfaction, discontentment, and demotivation in the workplace, which ultimately will affect both the employee and the organization (Smith et al., 2019). These authors added that certain personality traits can also contribute to burnout, such as perfectionism, a pessimistic outlook, a desire to be in charge or a high-achieving personality.

Other researchers have noted similar causes of burnout among nurses, at the personal level a feeling of job dissatisfaction (Dyrbye et al., 2017). Job-related factors such as poor-nurse-physician relationships, and excess night shift can cause nurse burnout (Lasebikan & Oyetunde, 2012). Organizational factors that include inadequate staffing, excessive demands or workload and inadequate administrative support (Pisanti et al., 2016; Shin et al., 2018; Woodhead et al., 2016). The use of electronic health record has been characterized as impersonal as well as tedious or technically challenging can be an overwhelming stress for healthcare providers (Dyrbye et al., 2017; Harris et al., 2018).

Some of these causes of burnout are likely to present in Haiti also. However, there may be differences as well. For instance, not all hospitals use electronic health records in Haitian hospitals, but other elements unique to the context may contribute to burnout. Haitian nurses lack healthcare infrastructure, medical supplies, and resources; they live in socioeconomic inequalities and inadequate healthcare systems unknown to the high-income nations. However, factors such as lack of participation in decision making, lack of a reward system, low salary, poor working environment, may contribute to burnout in Haitian nurses. Therefore, it is important to assess the contributors of Haitian nurses' burnout.

Factors Associated with Nurses' Burnout

Both internal and external factors influence nurses' experiences of burnout. Factors repeatedly noted in the literature that may influence burnout include nurses' work environment (external), and internal factors such as self-efficacy, and resilience. Therefore, it is important to consider how these factors relate to burnout and may

increase the risk or protect nurses from burnout. Several factors such as work environment, self-efficacy, resilience, among other factors can influence burnout positively or negatively.

Work Environment

Studies suggest that job-related factors such as lack of organizational support and excessive workload can stimulate burnout (Maslach, 1996). The nurse work environment, as perceived by employees, includes the organization's traits, the work setting, structures and processes facilitating or hindering nurses' ability to offer the highest quality care possible (Swiger et al., 2017). Autonomy, nurse-patient ratio, shift work, nurse retention, income, workload, and interpersonal teamwork also influence nurse burnout (Dyrbye et al., 2017; Guo et al., 2018; McHugh et al., 2020; Nogueira et al., 2018; Welp et al., 2015, 2016).

For example, a study of 745 nurses found a correlation between emotional exhaustion, autonomy, organizational support, and control over the environment (Nogueira et al., 2018). Personal accomplishment co-varied with autonomy and organizational support. Autonomy and depersonalization were also moderately correlated (Nogueira et al., 2018). A longitudinal study found that nurses and physicians (N = 2,100) working in 55 intensive care units with emotional exhaustion had a lingering effect on interpersonal teamwork. When the clinicians are emotionally exhausted, they engage less in positive interpersonal teamwork, and eventually, patient safety is impacted (Welp et al., 2016). Conversely, another study showed that in a better working

environment, Thai nurses were significantly less dissatisfied with their work, had less burnout, and reduced intent to leave (Nantsupawat et al., 2017).

General Self-Efficacy

General self-efficacy (GSE) is an essential predictor of job-related burnout. As a psychological construct, GSE describes how someone performs new tasks and responds to stressful situations with self-confidence. It predicates a person's thinking, reactions, and behaviors (Schwarzer & Jerusalem, 1995). General self-efficacy assesses optimism and self-belief that someone has the assurance they can perform new or challenging tasks or cope with adversity (Jerusalem & Schwarzer, 1992).

In a cross-sectional survey of nurses (N = 860), the results showed that those with low General self-efficacy (GSE) seemed to have higher burnout when facing stress, (regardless of stress intensity). Whereas increased self-efficacy, decreased stressors, and the addition of moral support, diminished job-related burnout in nurses (Yao et al., 2018). Another study found self-efficacy to be a protective mechanism against nurse burnout due to incivility in the workplace, in a sample of 596 Canadian nurses. The authors suggest that organizations could use opportunities to strengthen the nurses' self-efficacy to prevent burnout, mental health issues, and turnover intentions (Fida et al., 2018). Similarly, Alidosti et al (2016), found an inverse correlation between GSE and burnout. GSE is closely tied to the concept of resiliency, which may also protect nurses against burnout.

Resilience

Resilience is the capacity to cope when facing the adverse effects of stress and the ability to bounce back after a catastrophic event (Connor & Davidson, 2003). Bouncing back after an adverse event denotes a return to one's initial state or to even a better emotional state. Resilience is in a sense, self-defense against burnout. Nurses with resiliency skills better manage their demanding roles, adapt to the circumstances, and maintain a sense of personal and professional fulfillment (Robertson et al., 2016). Rushton et al (2015), showed that resilience protected nurses on a high-intensity unit (N = 114) from emotional exhaustion and resulted in personal accomplishment. Conversely, a cross-sectional survey of 1,061 nurses from six separate hospitals in China reported that nurses who had only a moderate level of resilience showed higher burnout symptoms (Guo et al., 2018).

Numerous studies recommend personal and organizational interventions to increase nurses' resilience while reducing workload and workplace stressors to mitigate or prevent burnout (Guo et al., 2018; Jackson et al., 2018; Kutluturkan et al., 2016; Wei et al., 2019). Interventions designed to cultivate a higher level of resilience include mindfulness exercises, and engaging in meaningful, purposeful activities to engender social support and positivity, nurture growth and altruism, and support self-care (Wei et al., 2019).

Other Associated Factors

Upon review of the nurse burnout literature, some specialties appear to put nurses at higher risk, while certain structures appear protective. For instance, burnout is widespread among emergency room staff, with associated job turnover, and intention to leave the emergency room ($p < .05$). A high degree of physical violence in the emergency room is also significantly associated with burnout (OR = 2.017, 95% CI [1.121, 3.631], $p = .019$) (Hamdan, 2017), which clearly overlaps with nurses' work environment. On the other hand, Magnet-designated hospitals influence nurses' work environments by supporting the balance between excellence in care delivery and efficiency of service. Studies show that Magnet hospitals achieve increased job satisfaction, excellent patient outcomes, less patient mortality or failure to rescue, fewer infections, improved patient experiences, and decreased levels of nurse burnout (Adams et al., 2018; Haryanto, 2018).

Burnout is a critical threat to nurses, healthcare quality, and patient outcomes. Understanding factors that influence burnout and therefore the healthcare system in general is of utmost importance and will be measured in the proposed study. However, national healthcare expenditure availability and the type of healthcare system within that context, are also important to consider when evaluating burnout.

Implications of Nurse Burnout

Many factors contribute to nursing burnout, as listed before. These factors include personal, work, and related organizational factors. Personal-related factors are the inability to cope with stress at work with a lack of self-efficacy and resilience. The work-

related factors concern the nurse's environment, such as the schedule, the pay, and relationship with peers or doctors. The organizational-related factors include workload, resources, and support for the nurses. Depending on the causes and factors that lead to burnout, the implications or consequences will derive. This next section will cover the implications of nurse burnout personally and professionally for the nurses, then the implications of burnout as to patient safety and satisfaction, and finally, for the organization.

Impact of Burnout Effects on the Nurses Personally

The effects of nurse burnout impact nurse well-being, demeanor, relationships, and overall quality of life (Khamisa et al., 2015; Nantsupawat et al., 2017). Symptoms of burnout, such as mental and physical exhaustion, sleep deprivation, depression, and compassion fatigue cause nurses to disengage from their patients, which may in turn aggravate personal distress. Burnout can cause mental and physical impairment leading to substance abuse and family conflicts (Maslach, 1993; Melnyk et al., 2018; Sugawara et al., 2017). The negative impact of burnout on nurses' personal well-being and quality of life also affects patients, given the nature of the nurse – patient relationship.

Impact of Burnout Effects on the Nurses Professionally

The results of burnout can produce a reduction in the nurses' job commitment, and increase job dissatisfaction, absenteeism, intent to quit a specific employer or leave nursing altogether (Dutra et al., 2018; Dyrbye et al., 2017; Fida et al., 2018; Havaei et al., 2016; Lee et al., 2019; Nantsupawat et al., 2017; Palazoğlu & Koç, 2019). Nursing is a

transactional relationship between the individual receiving care and the person providing care. Thus, even though a nurse may have several patients in one shift, each patient is unique and requires the nurse's individualized attention when receiving care. Nurses have the complex task of meeting patients' needs and balancing their own well-being. When nurses succumb to burnout syndrome, their health is compromised, so they cannot care for patients as they did before.

Impact of Burnout Effects on Patient Safety and Satisfaction

The effects of burnout negatively impact patient safety and satisfaction (Adams et al., 2018; Cimiotti et al., 2012; Haryanto, 2018). When nurses cannot concentrate, they may be prone to medication errors, have a decreased ability to be in charge, and may have poor decision-making at work. Therefore, the consequences of burnout include delayed care, injury, and increased infection rates associated with high readmission rates. As the quality of care is affected patient satisfaction ratings are also decreased (Al Sabei et al., 2019; Dyrbye et al., 2017; Galletta et al., 2016; Nantsupawat et al., 2017; Welp et al., 2015). Notably, a previous study points out that high burnout levels correlate not only with higher rates of adverse patient outcomes, but increased mortality (Welp et al., 2015). Hence, when nurses experience a high degree of burnout, the implications for patients may be severe.

Professional and personal implications of burnout among nurses, as well as effects of burnout on patient safety and satisfaction are interrelated and overlapping. Findings from a survey of medical-surgical nurses (N = 4,372) and patients (N = 146,456) in 68 public hospitals showed 12% higher odds of 30-day mortality (OR = 1.12, 95% CI [1.01,

1.26]) for each additional patient per nurse (McHugh et al., 2020). The authors also reported an association of negative outcomes for nurses for each one patient increase per nurse ratio. There were15% higher odds of emotional exhaustion (*OR* = 1.15, 95% CI [1.07, 1.23]), and 14% higher odds of job dissatisfaction (*OR* = 1.14, 95%CI [1.02, 1.28]), as well as higher odds of concerns about quality of care (*OR* = 1.12, 95% CI [1.01, 1.25]) and patient safety (*OR* = 1.32, 95% CI [1.11, 1.57]) (McHugh et al., 2020).

Similarly, findings from a study of 210 hospitals in Pennsylvania, with (*N* = *10,*184) staff nurses reported that for each extra patient in a nurse-to-patient ratio, there was a 7.0% increased likelihood of dying of within one month of admission. Additionally, there was about a 7.0% increase in the failure-to-rescue odds (Aiken et al., 2002). In a follow-up study, increased quality of care and patient satisfaction were associated with improved work environments and low patient to nurse ratios in 12 European countries and the United States (Aiken et al., 2012). These powerful statistics can serve as an impetus for change in an organization.

Impact of Burnout on Organizations

Turnover due to nurse burnout is costly to healthcare organizations. In 2007, the turnover cost among registered nurses for advertising and recruiting for example was estimated at 1.2 to 1.3 times their annual salary (Jones, 2008). More recently, the National Academy of Medicine (NAM) reported that the turnover costs for each registered nurse who quit the profession ranges from one to one and one-third times a nurse's salary (National Academy of Medicine, 2017). Clearly, nurse burnout (manifested as job dissatisfaction, higher absenteeism, and turnover) has organizational

consequences such as higher costs and financial losses (Adriaenssens et al., 2015; Aiken et al., 2012; Poghosyan et al., 2009).

Again, we see that nurse burnout is a multifaceted phenomenon with overlapping implications that lead to negative consequences for individuals, patients, and organizations. Indeed, job-related stress leads to nurse burnout affecting the nurse personally and professionally, in addition to compromised quality of patient care, and costs US healthcare organizations billions of dollars annually (Magtibay et al., 2017). Recognizing the implications of burnout, the National Academy of Medicine (NAM) launched the Action Collaborative on Clinician Well-Being and Resilience in 2017. This collaborative action has three goals: 1) Promote the awareness of healthcare providers' stress, anxiety, burnout, depression, and suicide. 2) Expand understanding of healthcare challenges. 3) Expand evidence-based, multidisciplinary responses to improve patient care by caring for the caregiver (National Academy of Medicine, 2017). There is a need for similar projects to mitigate the threat of high levels of burnout among nurses and other healthcare workers in low-income countries.

Association between Burnout and Socio-Economic Factors

Burnout is a phenomenon known worldwide. According to the literature, anyone can have burnout unless they know the hidden dangers and prevent this syndrome. However, in the context of high-income and low-income nations, some socio-economic factors may trigger nurse burnout.

Burnout in the Context of High-Income Nations

High-income countries possess the latest technology to support high functioning healthcare systems (Gage et al., 2019). According to the World Bank, nations with a gross national income (GNI) per capita of USD 12,536 or more per year, are considered high-income (World Bank Data, 2019b). Some of these countries are Andorra, Australia, The Bahamas, Canada, Israel, Japan, South Korea, Poland, Spain, United Kingdom, United States. These healthcare organizations seem to have ample resources available to manage patient care, except in cases where the nurse-to-patient ratio is high. In general, policies, rules, and standards of care are in place to maintain the organization's accreditation. Some of the prominent accreditation agencies in the US are The Joint Commission (TJC), the National Committee for Quality Assurance (NCQA), the American Medical Accreditation Program (AMAP), the American Accreditation Healthcare Commission/Utilization Review Accreditation Commission (AAHC/URAC) intend to ensure the quality of care (Viswanathan & Salmon, 2000). Yet as previously noted, burnout is still prevalent in these countries.

In high-income nations, burnout is mostly associated with fatigue, job dissatisfaction, low quality of care, poor work environments, and inequality (Aiken et al., 2011; Dyrbye et al., 2019; Nantsupawat et al., 2011). Some studies indicate that personality, mental health, and nurses' personal lives or attributes might also be associated with burnout (Molavynejad et al., 2019; Pérez-Fuentes et al., 2019; Rezaei et al., 2018). Research on age of the nurse as a factor provide conflicting results. Some authors indicate that younger nurses are at greater risk of burnout (Chuang et al., 2016;

Esfahani et al., 2012; Woo et al., 2020) while others indicate that the nurses between 38-40 were at higher risk (Molina-Praena et al., 2018).

Other causes of nurse burnout identified in high-income nations are characteristics of organizational cultures and individual characteristics. Organizations that mandate overtime, tolerate a lack of break time, have a shortage of nurses (with ratios as high as 8:1 patients to nurse), and a culture perpetuating a lack of autonomy (Stimpfel et al., 2012; Van Bogaert et al., 2013). Moreover, nurses' individual characteristics causing burnout include fatigue, severe stress, conflictual role, dysfunctional relationships with superiors as well as peers, and emotional stress in clinical practice (Bakhamis et al., 2019; Lyndon, 2015).

Burnout in the Context of Low-Income Nations

Studies on nurses in low-income nations report similar results regarding factors associated with burnout. However, in addition to the commonalities with wealthy nations, nurses in these countries work in harsher conditions with inadequate infrastructures (Chemali et al., 2019; Marie, 2017; Ramalisa et al., 2018; Scott et al., 2018). Harsh conditions and inadequate healthcare infrastructures in low-income nations may create different influences on burnout.

Harsh condition manifested themselves in ill facilities that are not equipped properly for caring patients; nurses working with HIV patients without enough syringes, needles, gloves (Harrowing & Mill, 2010). Cameroonian nurses reported inadequate infrastructure of health in the nurse-prescribing habit because of the shortage of doctors. Patient's safety is at risk, and mistrust sets in because the patients don't trust the nurse

prescribers. Sometimes patients have no other choice (Ngoasong & Groves, 2016). Cameroonian nurses call their working environment a risky one and they are dissatisfied with the system. Haitian nurses in Roberts et al.'s study reported an unsafe work environment while taking the risks to come to work in a challenging political upheaval nation (Roberts et al., 2021). In Palestine, many nurses were living in tents, feeling unsafe with soldiers/guards surrounding them because they were war refugees (Marie et al., 2017).

Studies in different low-income nations report burnout among nurses due to a lack of material resources to assist with growing demands and patients' needs (Uwimana & Kerr, 2017). These lack of resources equivalent to diminished capacity of hospitals receiving the patients, and lack of beds to support them (Hashimoto et al., 2020; Scott et al., 2018). There was a report that only one ventilator was used in the operating room that keeps on passing from room to room between patients. There were not enough gloves or basic materials to care for patients; exposing staff and patients to infection (Scott et al., 2018). In a recent study by Dumit & Honein-AbouHaidar, (2019), working in conflict areas such as Lebanon during the Syrian crisis was associated with nurse burnout, fatigue, and depleted compassion, causing adverse health outcomes (Dumit & Honein-AbouHaidar, 2019). Among Midwives in Uganda (N = 224) reported burnout and secondary traumatic stress which were associated with education level, marital status, physical well-being, and non-involvement in midwifery activities (Muliira & Ssendikadiwa, 2016).

Finally, in a cross-sectional study among Ethiopian healthcare professionals (N = 403), predictors of burnout included job insecurity, a history of physical illness, and poor

relationships with managers (Biksegn et al., 2016). Burnout syndrome was manifested as a feeling of declined stamina, loss of essence, feeling of exhaustion impeding on the nurses' resilience in nurses in Uganda, Palestine, Cameroon, South Africa (Bakibinga et al., 2014; Harrowing & Mill, 2010; Marie et al., 2017; Ramalisa et al., 2018). These low-income nations have similarities to Haiti, but there is a lack of literature on burnout among Haitian nurses. Two blogs mentioning burnout among visiting physicians working in Haiti. These authors mentioned how the clinicians felt powerless and worn down by the oppression and poverty the patients face, and they wish that they could offer more to them. Patients face socioeconomic and infrastructure situations that actually harm the patients in ways that even medicines cannot help (Carroll, August 8, 2018; Jaeger, Oct 31, 2018). While burnout is a universal problem, contextual factors can uniquely influence burnout. Therefore, the exploration of nurse burnout in Haiti deems necessary.

Summary

While literature is abundant on nurse burnout in high-income nations, and sufficient evidence exists from low-income nations, research about nurse burnout in Haiti is scarce. Nurse burnout is a danger to the nurses' well-being and the quality of patient care, increasing organizations' financial expenditures, and jeopardizing healthcare systems. Nurse burnout is common worldwide. Although its root causes may differ from high-income nations to low-income nations, common factors include job overload, dissatisfaction, lack of support from management, inability to cope with chronic stressors at work and certain personality traits, and poor nurse work environment and low nurse-to-patient ratio to name a few. The proposed study chose some influential factors that can

protect nurses from burnout if present and, if not present, measure the degree of burnout in this sample of Haitian nurses.

Currently, little is known about nurse burnout in Haiti. The relevant research from similar countries underscores nurses' risk for burnout in tremendously challenging contexts with beleaguered healthcare systems. Considering the impact of nurse burnout, describing the problem, and identifying associated factors in this population, is warranted. Results can inform ways to improve patient outcomes, decrease costs related to high turnover, and contribute to the nurses' health and well-being, who are essential to the functioning of healthcare organizations.

CHAPTER THREE

Methodology

This chapter presents the methodology used for a non-experimental study of Haitian nurses. Specifically, this chapter will cover the study design (setting, sample, data collection and procedures), measurements, data management and analysis, strengths and limitations, and protection of human subjects. Validated scales were used to elicit participating Haitian nurses' responses to generate empirical indicators related to burnout. The researcher analyzed the data to answer the following research questions:

I) To what degree do nurses in Haiti experience burnout as manifested by emotional exhaustion, depersonalization, and reduced personal accomplishment?

II) How do demographic factors, self-efficacy, work environment, and resilience associated with burnout among Haitian nurses?

Study Design

The proposed study used a cross-sectional design, allowing analysis of the relationship between burnout, the dependent variable, and the independent variables (demographics, self-efficacy, work environment, resilience). This non-experimental research design did not manipulate exposure, compare groups or randomly assign participants (Burns, 2005; Walker, 2005).

Setting

This study took place in five hospitals in five separate towns of Haiti: Carrefour, Delmas, Petion-Ville, Les Cayes, and La Pointe. Carrefour is one of the largest municipalities in the Port-au-Prince area, with close to 442,000 adult inhabitants (World Population Review, 2020). Carrefour is a mixture of a rural and urban environment, and for the most part, the economy depends on agriculture. There are two hospitals in Carrefour: Hopital Adventist d'Haiti and Carrefour Maternite Hopital. Because these two hospitals require a fee for service, the inhabitants often visit the free clinics and the governmental hospitals in the neighboring towns and capital, Port-au-Prince, for care.

The Hopital Adventiste d'Haiti (HAH), one of the sites approved for this study, is a faith-based hospital crucially located to receive many trauma patients because of its critical position with its dense traffic causing motor vehicle accidents. It is a 70-bed facility serving the community since 1978. It expanded in 1981 to a full-scale, multi-specialty hospital, including internal medicine, pediatrics, obstetrics-gynecology, neonatal intensive care, general and orthopedic surgery. Ancillary services consist of a 24/7 pharmacy, and an imaging center with x-ray, ultrasound, and Computerized Tomography (CT) scan (Hopital Adventiste d'Haiti, n.d.). Additionally, outpatient clinics specializing in Human Immunodeficiency Virus (HIV), clubfoot, and immunizations provide important services to the community. After the devastating earthquake in 2010, Loma Linda University Medical Center sent medical and physical therapy staff to provide services, assist in surgery, and upgrade the hospital. The hospital now features a state-of-the-art operating theater, a remodeled emergency department, a clinical laboratory, and an upgraded pediatric unit is currently under construction (Adventist News Online,

2020). The hospital is also notable to offer spiritual care and healthy living classes to the patients. Approximately 50 nurses work at HAH.

The second site approved is the Hopital Universitaire de la Paix, located in Delmas, a commune in Port-au-Prince, capital of Haiti. The city's population was 395,280 in 2015 with a total area of 27.74 square kilometers and is urban (Institut Haïtien de Statistique et d'Informatique, 2015). Delmas is an industrial town and its economy relies upon the different businesses of the people. In 2010, a group of philanthropists, particularly from Canada, built the hospital to answer the healthcare needs of the population and provide medical professionals' training. It is a 20-bed hospital, equipped with a maternity ward, pediatric unit, two surgical theaters, radiology, laboratory, pharmacy and outpatient services (Medical Mission Exchange, n.d.). Many patients come from the community to the hospital on a daily basis through their outpatient services. There are approximately 60 nurses working there.

The third and the fourth sites belong to the Hopital Notre Dame S. A. (HNDSA) that has three centers situated in Les Cayes, Petion-Ville and Gonaives. They are opened 24/7 and offer a variety of medical services such as consultation, maternity, hospitalization, surgery, laboratory, X ray, dentistry, physiotherapy, urgency, and pharmacy (Hopital Notre Dame S. A., n.d.). The two sites participating in the study are Petion-Ville and Les Cayes.

Petion-Ville is a commune of Port-au-Prince, the capital and is situated on the northern hills of the mountain La Selle. It is primarily a touristic and residential area. Its population is estimated at 376,834 inhabitants in 2015 (Institut Haïtien de Statistique et

d'Informatique, 2015). Its area is 63.90 square miles. The hospital has about 14 nurses enrolled in the service of the patients and the number of patients vary daily from 10 to 30.

Les Cayes was the first medical center to open its doors in May 2016 to answer to the needs of the people. Les Cayes is situated at the south of Haiti about 196 km of the capital. Its population is estimated at 346,276 inhabitants in 2015 with an area of 873.49 square miles (Population, 2015). Les Cayes is the most important port for import and export in Haiti. Products such as coffee, sugar, bananas, and timbers make their most economy. It's also a touristic town with many hotels, restaurants, and sites to visit. Hopital Notre Dame, S. A. in Les Cayes offers the same service to all the patients as listed in the previous paragraph. They have about 14 nurses working there, and the number of patients serve vary daily.

The fifth site, the Centre Médical Béraca (CMB) is a faith-based hospital situated on the Northwest side of Haiti, a commune of Port-de-Paix arrondissement. Its population was 9,930 in 2015 and is considered the smallest municipality in the Northwest in terms of both population and square kilometers (17). CMB was founded in the 1940s and serves a population of more than 700,000 and treats approximately 200 patients a day.

CMB is the main medical center in northwest Haiti, offering internal medicine, surgery, obstetrics-gynecology, and pediatric services (Centre Medical Beraca, n.d.) Additionally, CMB offers diverse prevention and public health programs for the community. They have about 34 nurses and 36 auxiliaries among the 250 employees. CMB opened a maternity ward in 2018 because 75% of women in Northern Haiti lack prenatal care. Women from all over the region travel long distances through rivers, and over mountains to receive care. They have about 125 deliveries every month, and the

ward offers a safe place for families who otherwise do not have pre-and post-natal care. Their obstetrics and gynecology (OB-GYN) ward are the only center providing 24/7 obstetric care, with Cesarean-sections as needed. Their services include family planning, ultrasounds, breast and cervical cancer screenings (Centre Medical Beraca, n.d.). CMB's surgical theater began in the early 1970s with US surgeons visiting some weeks at a time, but in 1982 with full-time missionaries' help, they completed the theater. Their operating room is one of the very few providing regular surgical care in the northwest region. Their pediatrics' department provides both curative and preventative care to over 1000 children each month. They provide necessary vaccinations and care for children with acquired immunodeficiency syndrome (AIDS), pneumonia, malnutrition, diarrhea, sepsis, anemia, infectious diseases and more (Centre Medical Beraca, n.d.).

Sample

The participants for the study were a convenience sample of Haitian nurses recruited from the above study sites, on a voluntary basis. Participant inclusion criteria were the following: Haitian nurses (i.e., Licensed Vocational Nurse (Auxiliaire), Registered Nurses) working in the hospitals or hospital-operated clinics; ability to read and write French or Haitian Creole; and volunteer to participate. No demographic factors (e.g., gender, age) excluded a nurse from participating.

In this study using an unconditional power calculation method, a sample size of N= 176, plus 20% for attrition (N = 220) was needed to achieve 80% power when the significance level (alpha) .05 is used. This calculation was based on assumed multivariate normality, with a dropout-inflated enrollment estimated sample size of 220 with an

expected number of dropouts to be 44 using a multiple linear regression (Benton & Krishnamoorthy, 2003; Cohen, 1988; Gatsonis & Sampson, 1989; Krishnamoorthy & Xia, 2008). A final sample size of $N = 179$ was achieved.

Recruitment

The researcher sent flyers to the site liaison to be placed in hospital units of the approved sites for candidates' recruitment. The flyers provided information about the aim of the study aim, length of time for participation, location, eligibility, and researcher's contact information for any questions or concerns (Appendix A). Snowball sampling was also employed as a research recruitment strategy, where nurses recruited other nurse-participants working in some supporting sites.

Data Collection

Hospital nurse supervisors introduced the student researcher to the staff and identified the location for the survey administration in each hospital for the staff's convenience. The student researcher explained the survey procedures to the staff present and answered their questions. Candidates who choose to participate were handed the information sheet about the study (Appendix B), which indicates that completion of the anonymous survey would indicate their consent to participate. The survey was available in French and Haitian Creole, the two national languages of the participants, however one site requested exclusively the Haitian Creole version. The researcher, who is fluent in both languages, communicated with the participants when they had a question about the survey. Charge nurses or supervisors from each hospital assisted in answering

participants' questions and giving out the information sheet. The researcher trained the charge nurses/supervisors about the survey, and the importance of answering each question. The researcher collected the finished surveys while present, and charge nurses collected the rest of the surveys later, which were scanned and emailed to the researcher. The researcher secured all the completed surveys. Every participant received a token of appreciation equivalent to US $5.00 and a thank you card.

Protection of Human Subjects

The Institutional Review Board (IRB) approval # 5180098 was received from Loma Linda University after verifying the study protocol to protect human subjects. As per the declaration of Helsinki (World Medical Association, 2013a), the researcher followed the recommendations to protect the well-being of the study participants during their interactions and the use of the participants' information. These recommendations included placing the well-being of study participants over the welfare of researchers, the research institution (i.e., Loma Linda University), and society. Furthermore, the study conformed to the guiding principles articulated in the 1974 Belmont Report, issued by the United States National Commission for Protection of Human Subjects of Biomedical and Behavioral Research. These included respect for persons, reasonable risk-benefit criteria, and informing participants of all aspects of the study.

Participants had a study information sheet at their disposal with the researcher's phone number for questions or concerns. It was not necessary for participants to provide an informed consent document; the nurses' voluntary completion of the survey was considered their consent to participate (Appendix B).

No audio or video recordings were used in this study. The researcher offered the assurance that participation in the survey was voluntary, and that subjects could refuse to participate or withdraw at any time. Participants' decision whether to participate or cancel at any time did not affect their standing with the researcher or their employer. Participants retained all their rights by participating in this study. No coercion was employed to induce nurses to participate in the study. While participants were valued sources of information for the researcher, their participation may have yielded rewards for them as well, such as the satisfaction and insight that may come from expressing their perceptions to a third-party whose interest in them is non-threatening. Some nurses' insights shared with the researcher included their amazement at how the questions made them reflect on their profession and the care they provided to patients.

There were no questions in the survey about sensitive personal issues. Participants did not appear to feel uncomfortable due to the questions asked, and they did not express fear that their data would be seen by administrators, who could retaliate if their answers were not deemed favorable. Data will not be shared with administrators except in aggregate form. Thus, the researcher provided reassurance regarding the confidentiality of their participation in the anonymous survey. The participants did not express distress with the survey and their questions were answered appropriately

Measurements

The survey (Appendix C), translated in Haitian Creole and French, included a total of 60 items: 9 demographic questions and 51 items from four validated scales. The following standardized measures were included: Maslach Burnout Inventory Human

Services Scale for Medical Personnel (MBI-HSS (MP) with 22 items (Maslach & Jackson, 1981); General Self-Efficacy (GSE) with 10 items (Schwarzer & Jerusalem, 1995); modified Nursing Work Environment-Revised (modified NWI-R) with 9 items (Palmer, 2014a); and the Connor-Davidson Resilience Scale (CD-RISC-10) with 10 items (Campbell-Sills & Stein, 2007; Connor & Davidson, 2003).

A questionnaire containing the nine demographics of the proposed study, was translated into French and Haitian Creole. Then, the researcher pilot tested the questionnaire among Haitian nurses (n = 7) for cross-cultural equivalence and language affirmation two years prior to the actual survey administration, which yielded satisfactory results. The method used was as follows; the principal investigator and the researcher, with three experts in the target languages, used Brislin's approach (forward and back translations by committee) (Brislin, 1970). Two bilingual scientists translated the English survey from English to French. Another bilingualist translated from French to Haitian Creole. Trilingual scientists back translated from French to English, from Haitian Creole to French, and from Haitian Creole to English. With Haitian culture expertise, two investigators methodically reviewed the survey and determined the instruments' cross-cultural equivalency. The convenience sample of Haitian nurses who piloted the questionnaire, evaluated it for readability, comprehensibility, and cultural contextualization, which they viewed favorably.

Demographics

Participants' gender, marital status, nursing degree, occupational title, setting, and additional job are nominal variables. Participants' age, years of experience, and hours

worked per week are continuous variables. These are common levels of measurement noted for demographics in similar studies and have been selected as salient variables for this study based on the literature.

Burnout Measurement

Burnout may result from intensified occupational work stress over a long period. When burnout occurs, the functional and efficiency levels of the worker is reduced, adversely affecting work performance. The Maslach Burnout Inventory Human Services Scale for Medical Personnel (MBI-HSS [MP]) is a well-known instrument measuring burnout and was developed by Maslach and Jackson in 1981. It includes 22 items and is a psychological assessment of job-related feelings among medical personnel in human services and is appropriate for nurses. The three subscales measure emotional exhaustion, depersonalization, and low personal accomplishment. It takes 10 to 15 minutes to complete the MBI-HSS (MP) (Maslach & Jackson, 1981). Responses follow a six-point Likert-type scale: *Never = 0, to Every day = 6*, experiencing these feelings . Each subscale was scored separately, and not summed for an overall burnout score (Maslach et al., 1996). Each subscale was represented by their means and standard of deviation.

The Emotional Exhaustion (EE) subscale, which measures an individual's feelings of being drained by their job, includes nine items (Maslach & Jackson, 1981). To calculate the EE score, items 1, 2, 3, 6, 8, 13, 14, 16, and 20 of the MBI-HSS are summed, with higher scores indicating a higher level of EE. Possible scores range from 0 to 54 (Maslach & Jackson, 1981; Poghosyan et al., 2009). Items on the EE scale include: "*I feel emotionally drained from my work."*

The Depersonalization (DP) subscale measures a participant's lack of feeling, which may evoke an impersonal response to the patient, and includes five items. The DP scale is calculated by summing items 5, 10, 11, 15, and 22 of the MBI-HSS. Possible scores range from 0 to 30, with higher scores indicating a higher degree of depersonalization (Maslach & Jackson, 1981; Poghosyan et al., 2009). An example of items of DP includes "*I feel I treat some patients as if they were impersonal objects"*. Higher scores indicate a higher degree of DP.

The Personal Achievement (PA) subscale with a low-level defines feelings of embarrassment among medical staff due to their perceived lack of professional success and is comprised of eight items. Items 4, 7, 9, 12, 17, 18, 19, and 21 are summed for PA, so that a higher score indicates a lower degree of this component of burnout. Possible scores range from 0 to 48 (Maslach & Jackson, 1981; Maslach et al., 2018; Poghosyan et al., 2009). An example on the PA subscale items includes: "*I can easily understand how my patients feel about things."*

Psychometrics of MBI-HSS (MP)

The reliability and validity of MBI-HSS (MP) has not been established, however, the minor wording changes from recipients in MBI-HSS to patients in MBI-HSS (MP) are not felt to alter the constructs measured by MBI-HSS. But the MBI-HSS, which is quite similar to the MBI-HSS (MP) does have good reliability and validity across studies which included 54,734 nurses from 646 hospitals in eight different countries (Poghosyan et al., 2009).

The factor structure of the MBI-HSS has been stable and consistently reliable, and valid across diverse job-related groups and settings. MBI-HSS factor analysis supports the three-factor burnout scale (MBI) (Lee & Ashforth, 1993a). Therefore, the factor structure of the MBI-HSS mirrored the MBI three-factor structure. For example, Emotional Exhaustion and Depersonalization factors correlated, although distinct and both of these scales were more highly correlated with measures of psychological and physiologic strain than was Personal Accomplishment. Personal accomplishment on the contrary, was closely related to control-oriented coping mechanism. Some studies found noteworthy cross-loadings; specifically, the Personal Accomplishment item "*I feel very energetic*" loaded strongly (and negatively) on Emotional Exhaustion. Also, the Emotional Exhaustion item "*Working with people directly puts too much stress on me*," loaded strongly on Depersonalization. The additional 20 items of the MBI-HSS loaded steadily and solely on the correct scales (Byrne, 1993; Leiter & Durup, 1996; Schaufeli & Van Dierendonck, 1993).

Moreover, the validity of the MBI-HSS was demonstrated through correlational testing among the subscales, which showed significant positive relationships between Emotional Exhaustion and Depersonalization and significant negative relationships with the third subscale, Low Personal Accomplishment (Maslach et al., 1986; Sabbah et al., 2012) . Convergent validity was demonstrated by an association of job conditions with burnout, such as role ambiguity, workload, role conflict, job demands, and job resources (Alarcon, 2011; Jourdain & Chênevert, 2010). Job demands mostly determined emotional exhaustion feelings and indirectly caused Depersonalization; however, resources mostly related to Depersonalization (Jourdain & Chênevert, 2010). Burnout is negatively

associated with physical well-being; a study of 1,636 nurses found that both Emotional Exhaustion and Depersonalization were associated with sleep, appetite, and health disturbances (Jourdain & Chênevert, 2010).

MBI-HSS shows discriminant validity with research indicating that burnout measured by MBI-HSS is a unique construct (Schaufeli & Enzmann, 1998). General job dissatisfaction tested with workers in social services and mental institutions ($N = 91$) resulted in moderately negative correlation with Emotional Exhaustion ($r = -.23$, $p < .05$) and Depersonalization ($r = -.22$, $p < .02$), and mildly positive correlation with low Personal Accomplishment ($r = .17$, $p < .06$) (Maslach et al., 1996). Depression and burnout are linked to each other but are not the same construct. Job strain can predispose a person to depression through burnout, but a person with depression and job strain can be predisposed to burnout directly (Ahola & Hakanen, 2007).

Reliability of the MBI-HSS has been demonstrated with internal and test-retest consistency. The estimated internal reliability of the MBI-HSS using Cronbach's coefficient yielded alphas of .90 for Emotional Exhaustion, .79 for Depersonalization, and .71 for low Personal Accomplishment (Maslach & Jackson, 1981; Maslach et al., 1986). Similar reliability was found among Lebanese nurses (N=200) with MBI-HSS: Cronbach's alpha of .80 for Emotional Exhaustion, .73 for Depersonalization, and .71 for Reduced Personal Accomplishment (Sabbah et al., 2012). However, some studies reported lower Cronbach's alphas. For example, a study of intensive care nurses (N = 1,849) conducted in 12 European countries observed an alpha of .61 for Depersonalization (lower than the recommended cutoff of .70), and adequate alphas of .79 and .73, respectively, for Emotional Exhaustion and low Personal Accomplishment

(Bakker et al., 2005). Nevertheless, the majority of studies have reported that MBI-HSS has good internal consistency (Maslach et al., 1996).

Test-retest reliability data on the MBI-HSS was established by the fact that overall, longitudinal studies report a high degree of stability. Test-retest correlations of .74, .72, and .65, for an eight-month interval (Lee & Ashforth, 1993b). For a six-month interval, the test-retest correlation was: .59, .50, and .63 (Leiter, 1990); and for a three month interval it was .75, .64, and .62 (Leiter & Durup, 1996). As proof of inter-rater reliability, agreement coefficients showed a concurrence between the MBI and MBI-HSS in identifying burnout that exceeded what would be possible by chance alone (Gwet, 2014).

Several researchers have used the MBI-HSS scale in measuring burnout among nurses in different countries, including low-income nations such as Iran and Egypt (Anwar & Elareed, 2017; Rezaei et al., 2018). Therefore, this scale is suitable to be used in similar nations and population such as the nurses in Haiti. The scale is available in multiple languages, including French (Maslach et al., 1996). Although the scale is not available in the public domain, a license can be purchased (Maslach et al., 1996).

General Self-Efficacy Measurement

The General Self-Efficacy scale, developed first in the German language by Jerusalem and Schwarzer in 1979 and was later adapted to 26 other languages by diverse co-authors (Schwarzer & Jerusalem, 1995). When initially developed, the scale had 20 items, but was revised in 1981 and reduced to ten items. The authors' purpose is to assess a person's general sense of perceived self-efficacy, predicting coping with daily stressors,

and strategies to adapt after experiencing any stressful event (Schwarzer & Jerusalem, 1995).

It takes four minutes on average to complete the GSE. Response options are on a four-point Likert scale and range from *Not at all true* = 1, to *Exactly true* = 4. The sum of all ten items yields a final composite score ranging from 10 to 40, and higher scores denote greater GSE (Schwarzer & Jerusalem, 1995). The items on the scale represent the person's positive perception of personal accomplishment, which is the opposite of reduced personal accomplishment (third subscale of burnout). An example of general self-efficacy questionnaire is: "*I can always manage to solve difficult problems if I try hard enough*" (Schwarzer & Jerusalem, 1995).

Psychometrics of GSE

Confirmatory factor analysis (CFA) explored the relationships between GSE items and identified the total number of dimensions represented on the questionnaire, which supported the unidimensionality of the scale (Scholz et al., 2002; Schwarzer & Jerusalem, 1999). Convergent validity demonstrated that GSE scale correlated well at r = .49 with optimism and r = .45 with the perception of a challenge in stressful situations (Schwarzer & Jerusalem, 1999). Criterion-related validity demonstrated that GSE aligns with optimism, job satisfaction and well-being.

Internal consistency reliability, supported by evidence from 25 nations, appears to be strong with Cronbach's alphas ranging from .75 to .91--the majority in the high .80s (Scholz et al., 2002). Test-retest reliability coefficients reported were .55, .67, and .75 (Schröder et al., 1998; Schwarzer & Jerusalem, 1999). The scale fulfilled the criteria for

multicultural assessment and was adapted to French (Scholz et al., 2002). The authors of the scale grant their permission on their website to use and reproduce the scale for research purposes, with appropriate credit (Schwarzer & Jerusalem, 1995).

A survey containing GSE was pilot tested among Haitian nurses (n = 7) for cross-cultural equivalence and Haitian Creole. The GSE Cronbach's alpha .65 is less than the desired result of .70, this may be due to the small pilot sample. However, the cross-cultural equivalence yielded satisfactory results. The method used followed the Brislin's approach (forward and back translations by committee) (Brislin, 1970) explained with the demographics' measurement section.

Nurses' Work Environment Measurement

The nursing work environment is conceptually defined is a system that empowers nurses to deliver the best care, given opportunities for growth, autonomy, accountability, and collaboration with the medical staff and the management (Aiken et al., 2011; Duffield et al., 2011). Palmer's 9-item questionnaire stems from the original questionnaire in the 'Revised Nursing Work Index' developed originally by Linda H. Aiken and Patricia A. Patrician (2000). The original Revised Nursing Work Index (NWI) contains 55 questions and has an internal consistency of Cronbach's alpha .96 (Aiken & Patrician, 2000).

In 2014, Palmer used nine items from the NWI-R with emphasis on pay, reduced nursing staff, lack of recognition of nurses by the medical staff and the public, diminished work promotion, decreased autonomy, and lack of schedule flexibility and reworded them. Palmer identified these as salient issues affecting nurse job satisfaction and

turnover among Ecuadorian nurses reflecting similar qualitative findings. Other questions on the NWI-R were deemed inappropriate for the target Ecuadorian population because many items or concepts they included to did not exist or relate to nursing in a developing country. Dr. Palmer received permission from Dr. Aiken to use nine modified questions probing similar constructs (Palmer, 2014a, 2014b).

Psychometrics of a modified NWI-R-9 item

Palmer's modified NWI-R-9 item measures work environment on a four-point Likert scale: *Agree = 1, to Totally disagree = 4.* An example of items included is, *"I have autonomy to make clinical decisions."* To score the survey, one must compute the means and standard deviations for each question. Higher scores mean dissatisfaction with the nurses' work environment questions. Palmer's 9-item modified NWI-R displayed strong internal consistency (Cronbach's alpha = .81) (Palmer, 2014a). The completion of the scale takes less than five minutes. Dr. Palmer allowed the use her modified NWI-R-9-item for the proposed study (S. Palmer, personal communication, July 6th, 2018). The student researcher chose this scale because the proposed study's emphasis relates to the Ecuadorian nurses' issues. These issues of low pay, lack of autonomy, negative nurse-doctor relationship, lack of flexibility in schedule, and lack of professional development are similar to the Haitian nurses.

Resilience Measurement

Resilience is an individuals' ability to recover from traumatic, unexpected, and momentous life events, or a natural disaster. The 10-item version of the Connor-Davidson

Resilience Scale (CD-RISC-10) is a shorter version of the original 25-item scale and can be completed in five minutes (Campbell-Sills & Stein, 2007; Connor & Davidson, 2003). The developers' purpose is to assess an individual's personality traits, stress, coping mechanisms, and resilience during the last month, reflecting recovery from life's challenges (Campbell-Sills & Stein, 2007). The possible responses are on a five-point Likert scale: *Not true at all* = 0, to true nearly all the time = 4, with possible scores ranging from 0-40 (Campbell-Sills et al., 2009). Normative scores were determined by dividing scores into quartiles, with the first quartile showing the lowest 25% of the population (i.e., the least resilient). The second and the third quartiles represent the median scores. The fourth quartile includes the highest scores, indicating the most resilience (i.e., higher than 75% of the population observed) (Davidson et al., 2018). Examples of items include: "*I am able to adapt when changes occur."* and "*I am not easily discouraged by failure."*

In a community survey of 764 US adults, the 10-item version had a mean score of 31.8 (SD = 5.4) was obtained for the CD-RISC 10; median score was 32, with lowest to highest quartiles being 0 – 29, 30 – 32, 33 – 36, and 37 – 40 (Campbell-Sills et al., 2009). A score of 26 would fall in the lowest 25% of the population, a score of 36 would be the third quartile and 25% of the population, and 25% of the population would score higher (i.e., 37 – 40).

Psychometrics of the Connor-Davidson Resilience Scale (CD-RISC-10)

The CD-RISC-10 is a unidimensional scale with excellent psychometric properties (Cronbach's alphas = .75 – .88) and is applicable for different cultures

(Campbell-Sills et al., 2009; Campbell-Sills & Stein, 2007; Notario-Pacheco et al., 2011; Scali et al., 2012; Wang et al., 2010). The CD-RISC-10 has been used in populations, including nurses, and is also available in French (Hébert et al., 2018). Qualified psychologists and bilingual individuals assisted in the translation into French-Canadian. Psychometric experts contributed to the final version verifying the cultural and linguistic equivalence of the scale (Hambleton, 2005).

A sample of (N = 784) college women from two French-speaking universities in the province of Quebec had a resilience score of (M = 26.62; SD = 6.36) showing low resilience. Construct validity was established by a factor analysis of the French-Canadian version of the CD-RISC- 10 which revealed a unidimensional factor structure yielding a total of 38% of the score variance. All items had noteworthy factor loadings (>.50) exceeding the (.32) deemed significant (Comrey & Lee, 1992; Tabachnick et al., 2012).

The internal consistency of the CD-RISC-10 yielded a Cronbach's alpha of .86, indicating good internal reliability (Hébert et al., 2018). All responses from the scale demonstrated total-item correlations from r = .46 to .64. Construct validity was demonstrated by means of correlating five different indicators with the CD-RISC-10 score. Construct validity was supported by observed moderate correlations with anxiety, hostility, and depression, respectively, at r = -.39, -.34 and -.47. A strong correlation was found with well-being r = .52. and a moderate correlation for personal mastery at r = .40 (Hébert et al., 2018). The authors of the CD-RISC-10 advised that discriminant validity and test-retest reliability need to be explored through further research. The final French-Canadian translation, endorsed by the scale developers, is available on the website (Connor-Davidson-Resiliencescale.com). The authors of CD-RISC-10 scale gave their

permission for its use in this study (J. Davidson, personal communication, March 24, 2020).

The Creole Haitian version was created according to the World Health Organization (WHO) standard process, furnished by the authors of the scale (Cénat & Derivois, 2014). Five experts in Haitian Creole from the Haitian State University translated the first version, followed by a back-translation in English. In addition, after pretesting the version with 24 participants, they interviewed cognitively with eight participants and discussed with 12 researchers who changed two words to finally produced the Haitian Creole version (Cénat & Derivois, 2014). The Haitian version was psychometrically evaluated in a sample of $N = 872$ of post-earthquake Haitian children and adolescents with average mean ($M = 14.91$; SD = 1.94). Cronbach's alpha ($\alpha = .77$) (Cénat & Derivois, 2014). The researcher was granted use of this Haitian Creole version by the original scale developers (J. Davidson, March 24, 2020). The Haitian Creole version used in this study was the first time the scale was used among nurses.

Data Management

Data management involved the process of cleaning, sorting, entering, and analyzing survey data. The researcher was responsible for data management and kept the data in a password-protected computer kept securely. The original data forms will be kept for the duration of time required by Loma Linda University's Internal Review Board (IRB) and are in a locked cabinet at the school of nursing dedicated for this purpose.

The researcher entered the data twice on the computer database using survey-key (Table 2). Double-entry of 20% of the data was used for verification of data and 6%

discrepancies were noted and resolved. Statistical data analysis was accomplished using the Statistical Package for the Social Sciences (SPSS) (Version 26; IBM Corporation 1989, 2019).

Table 2. Survey Key and Levels of Measurements

Variable	Operational Definition	Level of Measurement
1. Gender	Female = 1 Male = 2	Nominal – Categorical Dichotomous
2. Age	Age (in years)	Continuous Interval
3. Marital Status	Single = 1, Married = 2 Widowed = 3, Divorced = 4 Separated = 5	Nominal – Categorical
4. Nursing Qualification	Auxiliaire (LVN) = 1 Diploma = 2 Associate degree = 3 Baccalaureate = 4 Master = 5 Doctorate = 6	Nominal – Categorical
5. Position/Title	----------	Nominal – Descriptive Writing
6. Years of Experience	Years	Continuous Interval
7. Work Setting	----------	Nominal – Descriptive Writing
8. Hours Worked per Week	Hours	Continuous Interval
9. Additional Job	Yes = 1; No = 2	Nominal – Categorical Dichotomous
10. General Self-Efficacy (10 items): Questions 10-19	GSE Scale: 1-10 items	Continuous Interval
11. Burnout (Dependent variable) (22 items): Questions 20-41 a) Emotional Exhaustion b) Depersonalization c) Reduced Personal Accomplishment -	MBI-HSS-MP Subscales a) Items 1, 2, 3, 6, 8, 13, 14, 16, and 20 b) Items 5, 10, 11, 15, and 22 c) Items 4, 7, 9, 12, 17, 18, 19, and 21	3 Continuous Variables
12. modified Nursing Work Environment (9 items): Questions: 42-50	modified NWI-R: 1-9 items	Continuous Interval
13. Resilience (10 items): Questions: 51-60	CD-RISC-10 Scale: 1-10 items	Continuous Interval

Data Analysis

The student researcher used descriptive frequencies to analyze all nominal variables to determine sample representation. Results of nominal variables such as gender, marital status, nursing degree, occupational title, work setting, and additional job were reported as number and percent. Continuous variables, including age, hours worked per week and years of experience, the three MBI subscales, GSE, modified NWI-R, and CD-RISC were explored using descriptive statistics, histogram, and normality plot, as well as the mean and standard deviation with normal curves, or median and range if skewed.

The internal consistency of each scale was checked to determine the reliability of the scale using Cronbach's alpha. A Cronbach's alpha of .70 is acceptable for coefficient reliability (Nunnally, 1978). To determine the strength and direction of relationships between GSE, modified NWI-R, and CD-RISC with the burnout subscales means, bivariate analyses (Pearson Correlations) were performed with normal data and non-parametric Spearman correlation was used with skewed data.

Correlations between burnout subscales emotional exhaustion, depersonalization, and personal accomplishment (dependent variable) and the independent variables were explored for significance. Variables found to be significantly associated with Emotional Exhaustion (EE), Depersonalization (DP), or Personal Accomplishment (PA) during correlational analyses were entered into a multiple linear regression (MLR) analysis stepwise. MLR analyses was intended to help determine how much of the variance in EE, DP, and PA the independent variables explained, however, weak correlations and

minimal variance undermined the meaningfulness of the MLR. Therefore, item-by-item analyses of all the scales was undertaken.

Strengths

The correlational analysis allowed the exploration of multiple variables at once and the student researcher assessed the strength and direction of associations between the variables of interest. The proposed study intended to describe burnout among nurses in Haiti, a novel topic of research in this population. The validated scales selected have been used in many countries in different languages and supported accurate description of burnout and associated variables. This allowed comparison to other studies using the same scales.

Limitations

This study is subject to self-report biases due to errors in recall, social desirability, or because the respondents may try to give the investigator's desired response. Although the participants speak and read French, the Canadian French of three scales (MBI-HSS-MP, GSE, and CD-RISC-10) seems slightly different than the French in Haiti. Furthermore, limitations include the correlational, cross-sectional design of the study, which did not permit the determination of cause-and-effect relationships. This point-in-time study may not represent Haitian nurses' burnout in general because the design is subject to external threats to validity, such as variations over time. Moreover, the convenience sample limits generalizability, and the sample size was limited. Lastly, some tools do not have established validity in Haiti.

The researcher took steps to decrease the risk of some biases. The survey was explained in detail to the participants and she was available to answer all the participants' questions. Some of the scales and demographics were piloted in advance for cross-cultural and linguistic equivalence. The General Self-Efficacy, Maslach Burnout Inventory-Human Services Survey (Medical Personnel) and Connor Davidson-RISC-10 scales are available and validated in French.

CHAPTER FOUR

MANUSCRIPT SUBMITTED FOR PUBLICATION

(Note: The following manuscript was formatted according to author guidelines for the Journal of Holistic Nursing)

BURNOUT, SELF-EFFICACY, AND RESILIENCE IN HAITIAN NURSES: A CROSS-SECTIONAL STUDY

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Burnout, Self-efficacy, and Resilience in Haitian Nurses: A Cross-sectional Study

Abstract

Purpose of Study: Though nursing burnout is a global problem, research on nurse burnout in Haiti is scarce. In a context of multiple personal, social, and environmental challenges, this study assessed burnout and associated factors among Haitian nurses.

Design of Study: A multi-site cross-sectional study.

Methods: A survey in French and Haitian Creole was conducted in five Haitian hospitals using forward and back translated scales measuring burnout (emotional exhaustion, depersonalization, personal accomplishment), self-efficacy, nursing work environment, resilience, and demographics.

Findings: Haitian nurses (N = 179) self-reported moderate emotional exhaustion (M = 21, SD = 11.18), low depersonalization (Mdn = 2.0, range = 29), and high personal achievement (Mdn = 41.0, range = 33). General self-efficacy (M = 32.31, SD = 4.27) and resilience (M = 26.68, SD = 5.86) were high. Dissatisfaction with salary, autonomy, and staffing were evident.

Conclusions: It is noteworthy that burnout was lower than expected given the scarce resource, difficult socio-politico-economic environment. High levels of self-efficacy and resilience likely mitigated a higher level of burnout. Adaptation enables these nurses to manage their critical conditions and practice holistic nursing, which may inspire hope among nurses in similar contexts.

Keywords: Burnout, nursing, resilience, self-efficacy, Haiti

Burnout, Self-efficacy, and Resilience in Haitian Nurses: A Cross-sectional Study

Introduction

Nurses in Haiti live and work in a challenging context that places them at risk for burnout. Indeed, burnout exists among nurses worldwide. A meta-analysis of burnout among nurses globally demonstrated it is prevalent in high, mid, and low-income nations (Woo et al., 2020). However, such evidence is lacking among Haitian nurses. Given the consequences of nurse burnout in exacerbating the global nursing shortage (Palazoğlu & Koç, 2019; Dyrbye et al., 2017), it may be beneficial to examine burnout among Haitian nurses.

Burnout was originally conceptualized as exhaustion, manifested both physically and emotionally, resulting from a workplace that demands excessive energy, strength, and resources from its workers (Freudenberger, 1974). Building on the work of Freudenberger, Maslach suggested that burnout is a psychological syndrome arising from long-term work stress. Maslach then described the psychological syndrome of burnout among healthcare workers as comprised of three facets: a) feelings of exhaustion or energy depletion, b) sensing depersonalization toward one's job, and c) experiencing low personal accomplishment (Maslach & Jackson, 1981).

The work of nursing, with its high demands, complex interactions, and stressful environment, places nurses at risk for burnout (Permarupan et al., 2020). Indeed, nurses may have the highest burnout rate among healthcare workers (Adams et al., 2018; Bakhamis et al., 2019; Haryanto, 2018). A systematic review of 113 studies and a meta-analysis of 61 studies among nurses (N = 45,539) in 49 countries across multiple specialties found an overall pooled prevalence of burnout symptoms of 11.23% among

nurses, which suggests that one-tenth globally suffered high burnout syndrome (Woo et al., 2020). Similarly, a meta-analysis of 24 studies (N = 6,092) from diverse countries found an even higher prevalence of burnout among nurses (Molina-Praena et al., 2018). That is, they observed emotional exhaustion among 31% of the nurses; 24% reported high depersonalization, and 38% reported low personal accomplishment. Unmarried nurses, with fewer years of experience and work overload experienced higher burnout (Molina-Praena et al., 2018).

Haitian nurses live and work in an environment impacted by frequent political upheaval and natural disasters. Malnutrition, lack of potable water, and lack of healthcare infrastructure further burden the chronically inadequate socio-economic system (Hashimoto et al., 2020). The precarious conditions faced by Haitian nurses put them at even higher risk of burnout than most nurses. Furthermore, Haiti has an estimated ratio of only 2.4 nurses per 10,000 citizens (Caporiccio et al., 2019). Nurses in Haiti and other low-income nations often face heavy workloads, low salary, a lack of safety, inefficient and insufficient medical facilities, and inadequate resources (Caporiccio et al., 2019; Hashimoto et al., 2020; Roberts et al., 2021; Scott et al., 2018). These issues affect nurses and place an already vulnerable public at even greater risk of receiving sub-standard care.

Thus, the purpose of this study was to assess burnout in its three dimensions (emotional exhaustion, depersonalization, and personal accomplishment) and to explore the relationship of these dimensions with other factors in a sample of Haitian nurses. These factors include demographics, general self-efficacy, work environment and resilience. Specifically, the following questions were addressed: a) To what degree do

nurses in Haiti experience burnout as manifested by emotional exhaustion, depersonalization, and personal accomplishment? b) How do demographics, general self-efficacy, work environment, and resilience relate to the levels of burnout in the nurses?

Methods

This cross-sectional study consisted of a survey including demographics and four scales in a paper/pencil format with the nurses. Study approval was received from the authors' Institutional Review Board (#5180098). Per the Declaration of Helsinki guidelines (World Medical Association, 2013), participants were treated with respect, fairness, and justice.

Theoretical Framework

The conceptual framework used to guide the study was the Caritas© processes of Watson's theory of Human Science/Human Caring (Watson, 2009). Human caring is essential to nurses (Sumner & Fisher, 2016). Caritas is a Latin word meaning love for humankind, and charity (Collins English Dictionary, 2014). The carative factors of Watson's theory represent essential elements of nursing practice which protect against burnout (Woo et al., 2020) and enable nurses to remember that nursing is truly a caring science. The Caritas Processes (Table 1) interrelate with one another and present a holistic caring worldview—spiritually, emotionally, physically, and environmentally for nurses and patients.

Insert Table 1 about here

Watson's theory of caring guided this study through five selected Watson's Caritas concepts: altruism, authenticity, problem-solving, healing environment, and holistically meeting basic needs through compassionate caring. These concepts represent

internal and external characteristics acting as nurse resources when present or threatening nurses' well-being when absent. Through this lens, nurses' resources or threats may determine how the independent variables influence the dependent variable burnout (see Figure 1). Caritas (#1, 2, 6, 8, 9), as noted in the following figure, conceptually align with the validated scales General Self-Efficacy (GSE) (Schwarzer & Jerusalem, 1995); modified Nursing Work Environment (mNWI-R) (Palmer, 2014); and Resilience (CD-RISC) (Connor & Davidson, 2003). Caritas #1, 2 & 6 pertain to holistic self-care and caring for others, as well as critical thinking aligning with both the Self-Efficacy and Resilience scales. Caritas # 8 & 9 pertain to items of the modified nursing Work Index-Revised scale such as holistic care with relationships, and healing environment.

Insert Figure 1 approximately here

The conceptual model depicts Haitian nurses at the center influenced by factors such as demographics, internal and external resources/threats. When the positive factors such as internal and external resources are available, nurses are presumably experiencing less risk of burnout. However, when these resources are lacking, nurses' well-being may suffer, and they may be more at risk of nurse burnout.

Setting and Sample

Recruitment of nurses was accomplished using convenience and snowball sampling techniques at five hospitals in five towns across Haiti. The convenience sample is a non-probability sample taken from the available nurses at the study sites. Snowball sampling consisted of study participants assisting in recruiting additional potential candidates from their respective hospitals.

The hospitals ranged in size from 10 to 70 beds, with 14 to 60 total nurses in each hospital. Only a third to half of the nurses are on duty at any given time, and staff the outpatient and ancillary departments in addition to the in-patient units. The sample consisted of registered nurses (RN) and Auxilliaires (equivalent to licensed vocational or practical nurses, LVNs or LPNs) (Caporiccio et al., 2019). In Haiti, a nurse is a person who has completed basic nursing education and is authorized by the Haitian Ministry of Health and Population (Ministère de la Santé Publique et de la Population [MSPP]) to practice nursing. The basic nursing education is recognized as a 3-year diploma program in the public sector. Private nursing schools provide a baccalaureate degree after a 4-year program. Physicians provide clinical instruction across specialties, so the nurses become generalist (Partners in Health, 2016). As a generalist, nurses may engage in the full range of nursing practice such as healthcare education, supervision, and work in all hospital's units/clinics.

There are about 1,400 authorized nurses in Haiti, or about 2.4 nurses per 10,000 patients (Caporiccio et al., 2019). The shortage of nurses is partially related to high staff turnover due to low salaries, causing nurses to emigrate to better-paid settings such as the U.S. (Floyd & Brunk, 2016; Partners in Health, 2016). The problem of nurse migration experienced by Haiti is similar to other low-income nations, which are also losing staff to high-income nations (Scott et al., 2018). Nurse migration increases the remaining staff's patient-to-nurse ratio, further contributing to nurse burnout (Dutra et al., 2018; Reith, 2018).

For this study, using an unconditional power calculation method, a sample size of $N = 176$ was needed to achieve 80% power when the significance level (alpha) is .05

(Cohen, 1988). Criteria for participation included nurses working in the selected facilities who could read and understand French/Haitian Creole. Potential participants received the study information sheet, and any questions were answered. Interested nurses were informed that participation in the survey would serve as passive consent and reassured that their responses would be confidential. No identifying participant or hospital information was collected on the survey.

Procedure

All study materials were forward and back translated into French and Haitian Creole by committee approach (Brislin, 1970). Data were collected when nurses voluntarily completed the anonymous survey between November to December 2020.

Instruments

The dependent variable was burnout, measured with the Maslach Burnout Inventory Human Services Scale for Medical Personnel (MBI-HSS-MP) (Maslach & Jackson, 1981). The independent variables included the demographics, and three validated scales: the General Self-Efficacy scale (GSE) (Schwarzer & Jerusalem, 1995), the modified Nursing Work Index Revised (MNWI-R) (Palmer, 2014), and the Connor-Davidson Resilience Scale (CD-RISC-10) (Campbell-Sills & Stein, 2007; Connor & Davidson, 2003).

Prior to commencing this study, preliminary work included testing a pilot instrument for cross-cultural equivalence and language with seven nurses in Haiti to evaluate both the French and Haitian Creole versions. The findings indicated that these translated scales were acceptable in terms of language, readability, comprehensibility.

Maslach Burnout Inventory Human Services Scale for Medical Personnel (MBI-HSS-MP)

The 22-item MBI-HSS-MP consists of three subscales, which measure emotional exhaustion, depersonalization, and low personal accomplishment. Each subscale is scored separately and summed (Maslach et al., 1986). Response options on a 7-point Likert scale are*: Never* = 0, *A few times a year or less* = 1, *Once a month or less* = 2, *A few times a month* = 3, *Once a week* = 4, *A few times a week* = 5, *Every day* = 6 (Maslach et al., 1986).

Emotional Exhaustion (EE) subscale. EE measures an individual's feelings of being drained by their job and includes nine items which are summed so that higher scores indicate greater emotional exhaustion. Possible scores range from 0 to 54 (Maslach & Jackson, 1981; Poghosyan et al., 2009).

Depersonalization (DP) subscale. This subscale measures a participant's lack of feeling, which may evoke an impersonal response to the patient. The DP subscale is calculated by summing five items for a possible score of 0 to 30. Higher scores indicate a higher degree of depersonalization (Maslach & Jackson, 1981; Poghosyan et al., 2009).

Personal Achievement (PA). The final subscale with a low level, measures feelings of embarrassment among medical staff due to their perceived lack of professional success. Personal achievement (PA) includes eight items which are summed, so that a higher score indicates greater personal accomplishments. Possible scores range from 0 to 48 (Maslach & Jackson, 1981; Maslach et al., 2018; Poghosyan et al., 2009).

In previous studies, the internal reliability of the MBI-HSS using Cronbach's alphas were reported as .90 for emotional exhaustion, .79 for depersonalization, and .71

for personal accomplishment (Maslach & Jackson, 1981; Maslach et al., 1996). No internal reliability has been reported as yet in the literature for MBI-HSS-MP. In the current study, Cronbach's α for EE, DP, and PA were α = .77, .42, and .62 respectively.

General Self-Efficacy (GSE)

The GSE scale assesses a person's general sense of perceived self-efficacy, predicting coping with daily stressors, and strategies to adapt after experiencing any stressful event (Schwarzer & Jerusalem, 1995). The 10-item GSE has been translated from German to 26 languages. Possible scores range from 10 to 40, and higher scores denote greater GSE. Response options on a 4-point Likert scale are: *Not at all true* = 1, *Hardly true* = 2, *Moderately true* = 3, *Exactly true* = 4 (Schwarzer & Jerusalem, 1995). Internal consistency reliability, supported by evidence from 25 nations, appears to be strong, with Cronbach's α ranging from .75 to .91 (Scholz et al., 2002). In the current study, the Cronbach's α is .78.

Modified Nursing Work Environment – Revised (NWI-R)

Palmer's 9-item questionnaire stems from the Nursing Work Index-Revised questionnaire (Aiken & Patrician, 2000). In 2014, Palmer modified the NWI-R, selecting nine items emphasizing pay, reduced nursing staff, lack of recognition of nurses by the medical staff and the public, diminished work promotion, decreased autonomy, and lack of schedule flexibility, with some rewording (Palmer, 2014). The modified NWI-R-9 item uses a 4-point Likert scale for response options: *Totally agree* = 1, *Agree* = 2, *Disagree* = 3, and *Totally disagree* = 4. Higher scores denote greater nursing work dissatisfaction. Strong internal consistency was demonstrated, Cronbach's alpha = .81 (Palmer, 2014). For the current study, scores were reversed so that lower scores indicated

dissatisfaction and higher scores indicated greater satisfaction with work environment. The Cronbach's α was .75.

Connor-Davidson Resilience Scale (CD-RISC-10)

The CD-RISC is designed to measure resilience, an individual's ability to recover from traumatic, unexpected, and momentous life events, or natural disasters. Shortened from the original 25 items, the 10-item version is available in Canadian French and Haitian Creole (Campbell-Sills & Stein, 2007; Connor & Davidson, 2003). The possible scores range from 0 – 40, and higher score denotes greater resilience. Response options followed a 5-point Likert scale: *Not true at all* = 0, *Rarely true* = 1, *Sometimes true* = 2, *Often true* = 3, *True nearly all the time* = 4 (Campbell-Sills et al., 2009). The CD-RISC-10 is a unidimensional scale with excellent psychometric properties (Cronbach's α = .75 – .88) and is applicable for different cultures (Campbell-Sills et al., 2009; Campbell-Sills & Stein, 2007; Notario-Pacheco et al., 2011; Scali et al., 2012; Wang et al., 2010). In the current study the Cronbach's α is .74.

Data Analysis

We conducted quantitative analyses using the Statistical Package for the Social Sciences (SPSS) (Version 27; IBM Corporation 1989, 2020). Descriptive analyses included frequencies, percentages, means, and standard deviations as well as median and range for non-normally distributed variables. Bivariable associations with burnout subscales and co-variates were explored using Pearson's correlations for normally distributed data and Spearman's rho for abnormally distributed variables. Due to weak correlations and minimal variance, the multiple regression results were not found to be meaningful and are therefore not presented in the results. Subsequently, we proceeded to

run item-by-item analyses to better understand the nurses' responses on each scale and this analysis proved meaningful. These results were presented in number with percentages.

Results

Participant Demographics

The vast majority of the participants (*N* = 179) were women (97.8%) and married (63.7%). The age range of the nurses was 24 to 67 years (*M* = 36.27, *SD* 9.05). All were employed by one of the five hospitals and on average had 9.30 years of nursing experience (*SD* 8.51, range 5 months to 39 years). The number of hours worked per week ranged broadly, from 4 to 72 hours (*M* = 41.60, SD 11.75), with most working full-time. Surprisingly, over a quarter of the respondents (25.7%) worked an additional job. Most were RNs rather than Auxilliaires (76.4% and 23.6%, respectively). Almost half of the nurses had four years of nursing education, equivalent to a bachelor's degree (48.0%), while approximately a quarter of the nurses had either three years of nursing education (equivalent to an Associate degree), or a diploma (24.6% and 25.7% respectively). The majority of respondents were staff nurses (81.4%), with the remainder in various specialty positions, or administrative and educational roles. See Table 2.

Insert Table 2 approximately here

Descriptive Analysis of Variables of Interest

The emotional exhaustion (EE) was moderate among the participating nurses (*M* = 21.80, *SD* = 11.18). Depersonalization (DP) was low with a median of 2.00 (range 29); and a high personal accomplishment (PA) reported with a median of 41.0 (range 33). On average, general self-efficacy (GSE) was fairly high (*M* = 32.37, *SD* = 4.27). The

modified Nursing Work Index-Revised (NWI-R) scale indicated that the nurses held a moderately positive view of their work environments (*M* = 24.22, *SD* = 4.47). The CD-RISC-10 data analysis indicated high resilience (*M* = 26.68, *SD* = 5.86).

Item Analyses

To better understand and capture the nuances of the data, descriptive analysis of individual items from the validated scales are provided. Item-by-item analysis captures variances otherwise obscured by summative scores.

Emotional Exhaustion (EE) Frequencies. Response options were collapsed into three categories; 1) never, 2) a few times a month or less, and 3) once a week or more. The majority of nurses experienced EE to some degree a few times a month or less than once a week or more (Figure 1). The two items most frequently endorsed by the nurses were *"I feel used up at the end of the working day"* and *"I feel fatigued when I get up in the morning and have to face another day on the job,"* with 98% and 90% respectively, indicating feeling this way. Approximately one-third of the nurses endorsed *"I feel emotionally drained from my work," "working with people all day is really a strain for me," "I feel burned out from my work," "I feel frustrated by my job,"* and *"I feel I am working too hard on my job."* Just about half (50%) of the respondents indicated that they felt that working with people directly puts too much stress on them. Almost 60% of the nurses indicated they were at the end of their rope *a few times a month or less* or *once a week or more*. See Figure 2.

[Insert Figure 2]

Depersonalization (DP) Frequencies. Figure 3 shows "*never*" responses to DP items ranged from about 55% to 89%. The nurses' responses to the DP subscale indicate

that this is not an aspect of burnout they generally experience. Nevertheless, approximately 12% of the nurses felt they treated patients as if they were impersonal objects and became callous toward people since they took the job. About 27% don't really care what happens to some patients and 33% of the nurses worry that the job is hardening them emotionally. Approximately 45% reported patients blaming them for what happened to them.

[Insert Figure 3]

Personal Accomplishment (PA) Frequencies. The vast majority of respondents indicated high Personal Accomplishment. Positive responses to PA subscale items ranged from 82% to 97% endorsed as once a week or more often. The highest percentages were for items "*I feel exhilarated after working closely with my patients"* and "*I have accomplished many worthwhile things in this job"* (97% each). Approximately 18% did not think that they could deal with their emotional problems calmly, and unfortunately, 12% did not feel they were influencing someone's life positively through their work. See Figure 4.

[Insert Figure 4]

General Self-Efficacy (GSE) Frequencies. On average, GSE was high, with 78% – 95% endorsing *moderately true* or *exactly true* for all ten GSE scale items. Approximately 22% did not think they could find the means and ways to get what they want if someone opposes them, nor remain calm when facing difficulties. Figure 5.

[Insert Figure 5]

Modified Nursing Work Environment Index-Revised (NWI-R) Frequencies. Responses *agree* and *totally agree* were collapsed into the *agree* category. Overall, 60%

of the nurses positively endorsed their work environment by agreeing on six items. Approximately 80% agree that the supervisors collaborate with and help the nurses, and 90% felt that the nurses are a valued part of the hospital. About 63% felt that the public appreciates and values the nurses, and 84% perceived teamwork between physicians and nurses. Flexibility with schedule was endorsed by 67% of the nurses, and 63% agreed that there are sufficient opportunities to advance in the work environment. The three remaining items that fell below 60% were "*I have autonomy to make clinical decisions*" (46%), "*There are sufficient nurses to provide excellent care at work*" (34%), and "*I am satisfied with my pay*" (19%). Roughly 40% were dissatisfied with at least some work environment parameters. See Figure 6.

[Insert Figure 6]

Resilience (CD-RISC-10) Frequencies. Responses *Sometimes true* to *True nearly all the time* were collapsed to show the high level of resilience endorsed by the majority of nurses. Overall, participants endorsed resilience as true of them on all items (80-95%) except one item falling below 60% "*I tend to bounce back after illness, injury, or other hardships.*" See Figure 7.

[Insert Figure 7]

Bivariate Correlation Analysis

The total sum of each variable was used when calculating the correlations among the variables. The three subscales of the MBI-HSS-MP (Emotional Exhaustion, Depersonalization, and Low Personal Accomplishment) were bivariably analyzed with all independent variables; however, only the significant correlations are presented here. Emotional Exhaustion was weakly negatively correlated with work environment (*r* [179]

= -.30, $p < .001$) and resilience (r [179] = -.17, p = .023). Low Personal Accomplishment (more burnout) was weakly negatively correlated with self-efficacy (r [179] = -.21, p = .006), resilience, (r (179) = -.26 $p < .001$), and weakly positively correlated with age (r [175] = .22, p = .003). All the correlations were weak with r less than .39 (Schober et al., 2018). See Table 3.

Insert Table 3 here

Discussion

This multi-site study is groundbreaking in the sense that, to our knowledge, it is the first study quantifying Haitian nurse responses to work perspectives. This study evaluated self-efficacy, work environment, and resilience as possible correlates of burnout. As caring is central to nursing, five of Watson's 10 Caritas© processes influenced the conceptual framework guiding the study design. Nursing burnout is a phenomenon of concern in much of the world, and given the low-resource, complex environment in which Haitian nurses work, we hypothesized that these nurses were at increased risk for burnout. However, our results show that while moderately prone to emotional exhaustion (EE), depersonalization (DP) is low, and personal accomplishment (PA) is high.

Emotional exhaustion is the stress aspect of burnout theory caused by nurses feeling worn out through the routine of a demanding job (Maslach, 1993). Researchers report that nurses are prone to burnout when emotionally exhausted, which may negatively affect their well-being, health, and job satisfaction. Patient satisfaction and the quality of patient care may also be negatively affected (Hailay et al., 2020; Khamisa et al., 2017; Poku et al., 2020; Ugwu et al., 2017). However, the Haitian nurses in our study

showed they continued to function and even demonstrate compassionate caring as postulated in Watson's Caritas. Perhaps because they themselves experience hardships, these nurses were able to be compassionate towards themselves and others, reducing their stressors and risk for burnout.

Depersonalization is characterized as a detachment and a tendency to becoming insensitive towards patients (Galletta et al., 2016; Maslach et al., 1986)—the opposite of compassionate caring. The majority of the nurses in our study did not endorse depersonalization as reflective of their experience. This result contrasts with findings among nurses in Egypt, and sub-Saharan Africa which indicated moderate to high levels of burnout at all three dimensions (Anwar & Elareed, 2017; Dumit & Honein-AbouHaidar, 2019; Owuor et al., 2020). A previous study indicated that the public regards nurses favorably in Haiti (Roberts et al., 2021), which may cause Haitian nurses to feel valued, thus decreasing the risk of burnout.

Additionally, 82-97% of the participating nurses indicated feelings of high personal accomplishment. These results reflect commitment and a sense of fulfillment in caring holistically for patients, which aligned with the Watson's Caritas processes pertaining to authentic presence, trusting-caring relationships, and human dignity (Watson, 2009). In Haiti, some consider nursing a sacred calling, and in this society, nurses are generally held in high esteem (Roberts et al., 2021).

The nurses' general self-efficacy, work environments, and resilience were also examined as possible correlates of burnout. The strength of these correlations was weak but nonetheless provide directional information pertaining to their influence on the components of burnout (EE, DP, PA) (Schober et al., 2018). Overall, the nurses rated

their self-efficacy as high, which fits with their perception of personal accomplishment and is reflected in the significant correlation between GSE and PA. Furthermore, these findings are congruent with the literature as self-efficacy tends to have a protective effect on nursing burnout. When self-efficacy increases, stressors are reduced (Yao et al., 2018) as well as burnout. The current study suggests that the high level of self-efficacy protected these nurses from burnout and boosted their sense of personal accomplishment.

The nurses' perceptions of their work environment with emotional exhaustion were inversely and weakly correlated. The negative direction of the correlation indicates that nurses' emotional exhaustion increases when they are dissatisfied with their work environment. While overall the nurses positively endorsed their work environment, most were not satisfied with their salary, staffing ratios, or level of autonomy. Thus, our findings are consistent with other studies that found nurse burnout associated with job dissatisfaction factors, including low salary and a shortage of nurses (Dyrbye et al., 2017; Guo et al., 2018; McHugh et al., 2020; Pisanti et al., 2016; Shin et al., 2018; Woodhead et al., 2016).

The other factor that influenced burnout in this sample of nurses was resilience. Although the correlation of resilience with emotional exhaustion was weak, it was significant. As resilience increased, EE decreased, indicating that resilience may act as a protective factor, which is consistently confirmed in the literature (Marie et al., 2017; Ngoasong & Groves, 2016; Ramalisa et al., 2018; Rushton et al., 2015). Resilience was also negatively correlated with low personal accomplishment, although weakly. Resilient nurses can usually adapt to their circumstances, manage their challenging roles, and retain their sense of personal and professional accomplishments (Robertson et al., 2016).

Thus, it appears that resilience may enhance the ability of the nurses in Haiti to avoid burnout, as it may have mitigated some of the identified risks for burnout syndrome.

Strengths and Limitations

This study provides evidence about burnout among nurses in Haiti, a novel research topic in this population. The selected validated scales have been used in many countries allowing comparison to other studies. The data, having been collected in various hospitals from the North to the South of Haiti, including the capital's vicinity, engenders trust in the findings as fairly representative.

Nevertheless, there are also some limitations to consider. The convenience sample limits generalizability, and the cross-sectional design does not permit the determination of cause-and-effect relationships. Moreover, social desirability bias may have inflated positive responses, particularly personal accomplishment, self-efficacy, and resilience. At the same time, participants might not have trusted that their responses would remain confidential, therefore, fearing possible supervisor/employer retribution if they shared negative views -- particularly regarding emotional exhaustion, depersonalization, and work environment.

Other potential limitations are research naivete in this sample, and differences between the written and spoken language familiar to the nurses. Although the participants speak and read French, the French-Canadian version of two scales (MBI-HSS-MP and CD-RISC-10) did seem to present some difficulties in transliteration.

The internal reliability for the DP subscale was lower than desirable (Cronbach's $\alpha = .42$). It is possible that the overall concept of depersonalization does not fit culturally. Haitian culture may deter negatively thinking about patients, who, like them, suffer

chronically difficult living conditions, therefore fostering a genuine desire to help community members and show compassion in caring (Percy & Richardson, 2018; Sinclair et al., 2016; Watson, 2009).

Implications for Advancing Knowledge

Owing to the precarious conditions where Haitian nurses practice and live, it was critical to understand burnout syndrome in their setting. This new knowledge may inform future interventions to improve their well-being, thus promoting quality of care for the patients.

This novel study's contribution to the nursing discipline is the Haitian Creole version of the Maslach-Burnout Inventory Health Service Survey for Medical Professionals (MBI-HSS-MP). This version is now available online for future research at https://www.mindgarden.com. Furthermore, this study adds to the limited literature on Haitian nurses' burnout pertaining to its correlates and provides evidence that the attributes of resilience and self-efficacy are means to mitigate nursing burnout.

Implications for Clinical Practice Environment

Studies have shown that self-efficacy, resilience, and personal achievement are protective factors that alleviate nurse burnout, thus, programs to enhance these attributes are warranted. Programs such as mindfulness exercises, positive thinking, altruism, and supportive interpersonal relationships are personal interventions for holistic practice (Montanari et al., 2019; Wei et al., 2019). Encouraging nurses' growth and building on their strengths are administrative interventions that may be effective as well (Wei et al., 2019). Resilient nurses are able to maintain their well-being and thereby achieve better

patient care outcomes. Additionally, understanding nurses' dissatisfaction with their work environment, provides direction for strategic planning.

Implications for Nursing Research and Education

Future research to include pre-and-post interventional studies on strengthening nurses' self-efficacy and resilience to lessen emotional exhaustion, a component of burnout, is warranted. Mitigating nurse burnout will likely increase effective, holistic, quality care for the patients.

Furthermore, understanding the protective effects of self-efficacy and resilience, provides insight pertaining to strengths to build on and support of further studies on holistic caring. Educators may also choose to integrate the concepts of self-efficacy, resilience, and Watson's Caritas© processes, as ways to strengthen the preparation of future nurses. Strengthening these areas in the curriculum may decrease future risk of burnout for new nurses.

Conclusion

This study examined burnout among Haitian nurses, a novel and important contribution to the literature. The finding of lower-than-expected symptoms of burnout (primarily moderate emotional exhaustion) is noteworthy given the low resource context aggravated by a difficult socio-politico-economic environment. It seems that these nurses have developed a degree of adaptation that permits them to manage their critical conditions. The findings provide tentative evidence that the high resilience with high self-efficacy may have buffered precarious conditions and contribute to nursing strength in caring for others holistically. While facing their own lack of the basic needs of life, their performance in high levels of resilience, self-efficacy and personal accomplishment is

quite remarkable and commendable. Haitian nurses seem to possess a caring nursing worldview which galvanized them to empathize with others despite adversities. This worldview aligns well with the conceptual model of Human Caring/Human Science of Jean Watson and her carative factors (Watson, 2009). Watson's Caritas Processes portrays the holistic vision of nursing healthcare in order to avoid burnout. Haitian nurses are in a good position to be examples for others in promoting an environment conducive to holistic restoration of their fellow citizens.

Table 1

The Ten Caritas Processes©

1. Sustaining humanistic-altruistic values by the practice of loving-kindness, compassion, and equanimity with self/others.
2. Being authentically present, enabling faith/hope/belief system; honoring subjective inner lifeworld of self/others.
3. Being sensitive to self and others by cultivating own spiritual practices, beyond ego-self to transpersonal presence.
4. Developing and sustaining loving, trusting-caring relationships.
5. Allowing for the expression of positive and negative feelings; authentically listening to another person's story.
6. Creatively problem-solving, 'solution-seeking' through caring process; full use of self and artistry of caring-healing practices via use of all ways of knowing/being/doing/becoming.
7. Engaging in transpersonal teaching and learning within context of caring relationship; staying within other's frame of reference; shift toward coaching model for expanded health/wellness.
8. Creating a healing environment at all levels; subtle environment for energetic authentic caring presence.
9. Reverentially assisting with basic needs as sacred acts, touching mind/body/ spirit of other; sustaining human dignity.
10. Opening to spiritual, mystery, unknowns; allowing for miracles (Watson, 2016).

Note. Reprinted from "Watson Caring Science Institute," by J. Watson, 2016. *Health Sciences Library Photograph Collection and Special Collections*, University of Colorado, Anschutz Medical Campus; Publications.

Table 2

Demographics (N = 179)

Variables	*N*	%
Gender		
Male	4	2.2
Female	175	97.8
Marital Status		
Single	58	32.4
Currently Married	114	63.7
Previously married	7	3.9
Nursing Degree		
Diploma	46	25.7
Associate degree	44	24.6
BSN	86	48.0
Master of science	3	1.7
Health Qualification		
LPN (Auxiliaire)	42	23.6
RN	136	76.4

Table 2 Continued

Position		
Staff nurse	136	81.4
Charge nurse	9	5.4
Supervisor	8	4.8
Nurse educator	2	1.2
Other positions	13	7.2
Additional job		
No	133	74.3
Yes	46	25.7

Note. Other positions included anesthetist, community nurse, emergency room nurse, surgical nurse, and ancillary services.

Table 3

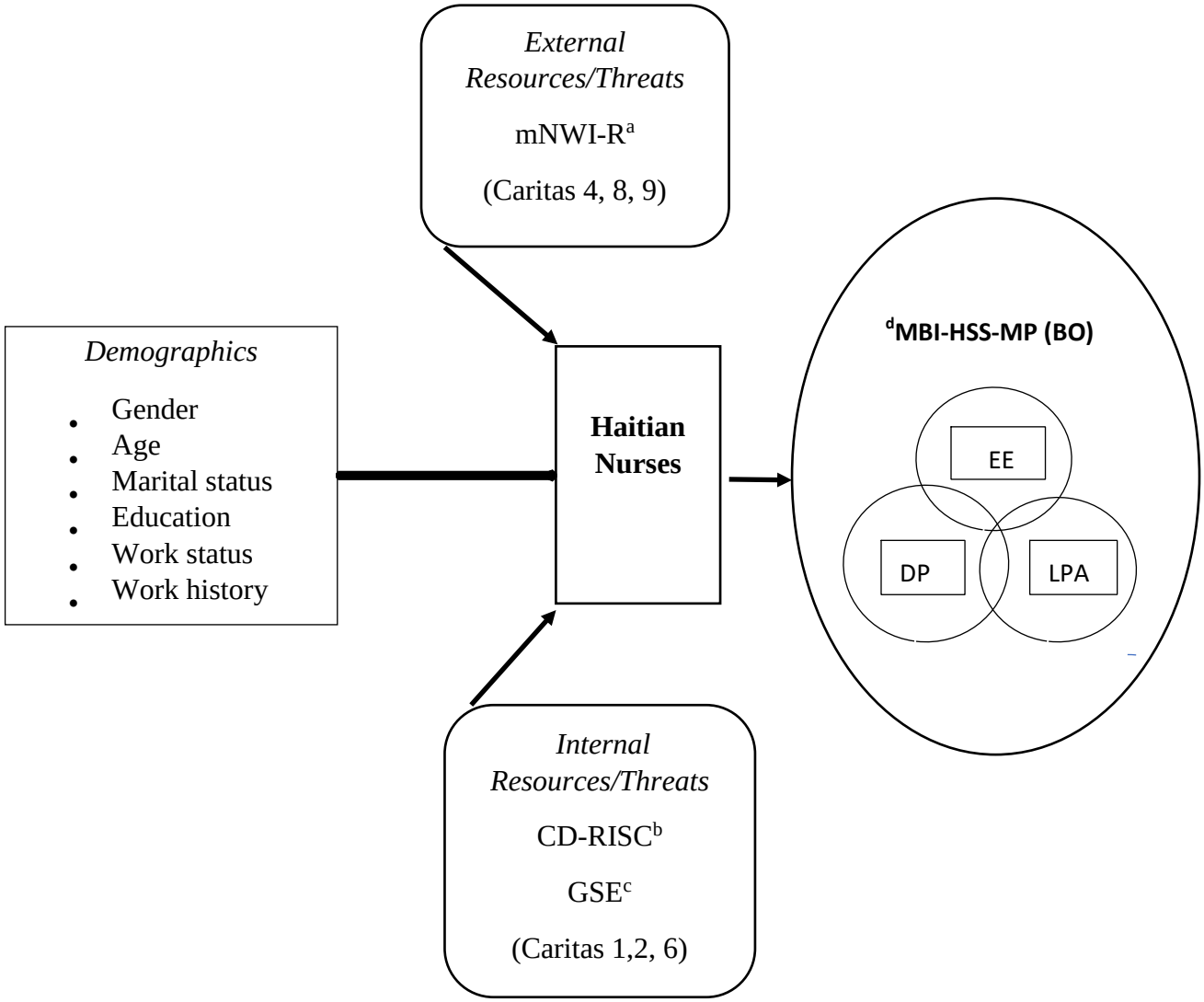
Correlates of independent variables with the three subscales of burnout

Measure	EE	*p*-value	DP[!]	*p*-value	PA[!]	*p*-value
GSE	-.137	.067	.040	.592	-.205*	.006
Modified NWI-R	-.297*	<.001	-.052	.486	.038	.611
CD-RISC-10	-.170*	.023	-.007	.924	-.263*	<.001
Age in years	-.057	.452	.055	.472	.224*	.003

Note. [!]Spearman's rho correlation used with PA (Personal Accomplishment), and DP (Depersonalization), as these variables were not normally distributed.

Figure 1

Conceptual Framework Based on Watson's Caritas© and Haitian Nurse



Note. [a] mNWI-R: modified Nursing Work Practice Index Scale – Revised

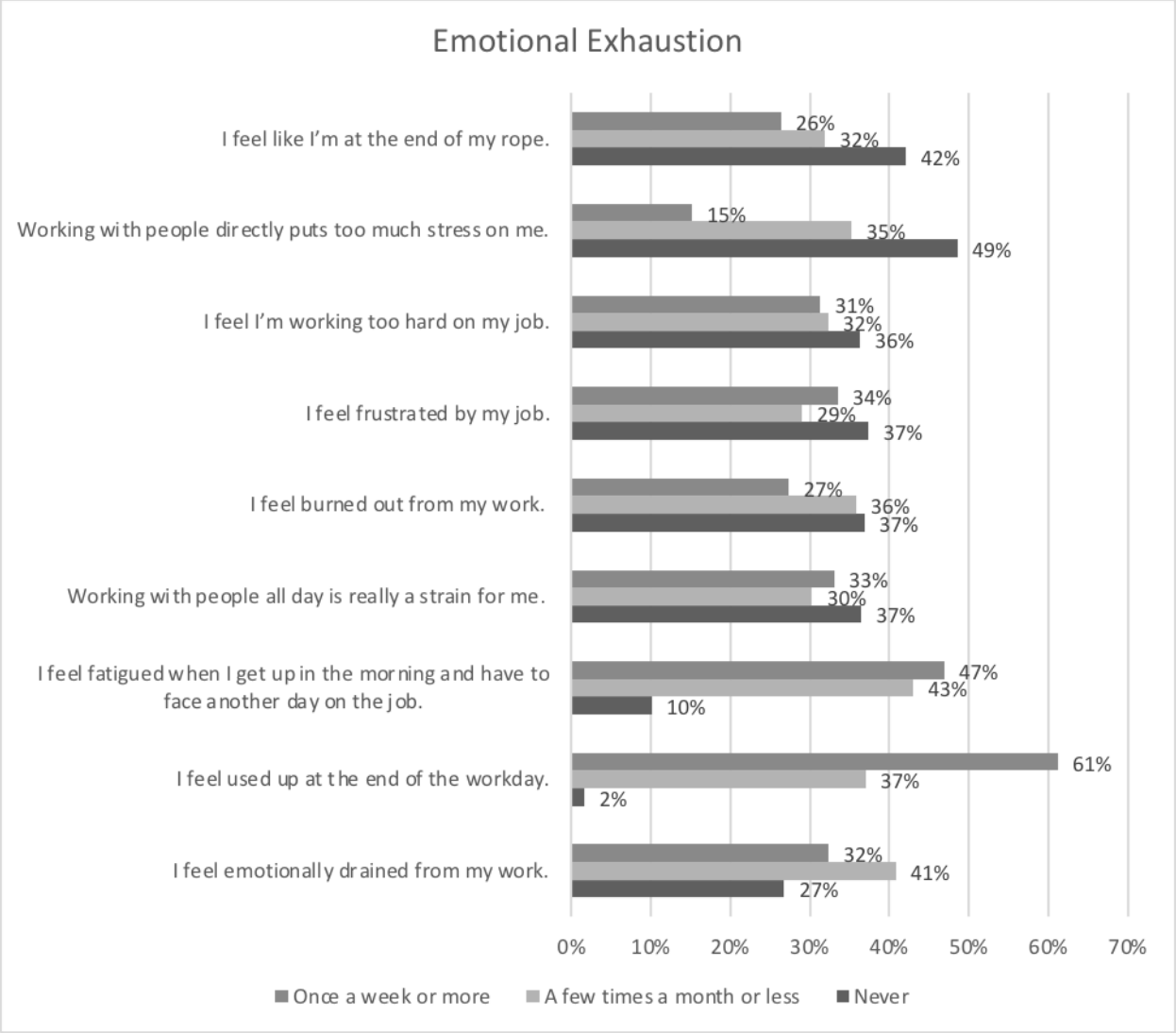
[b]CD-RISC: Connor-Davidson Resilience Scale

[c]GSE: General Self-Efficacy Scale

[d]MBI-HSS-MP (BO): Maslach Burnout Inventory – Human Services Scale (Burnout Scale) with EE: Emotional Exhaustion, DP: Depersonalization, and LPA: Low Personal Accomplishment subscales

Figure 2

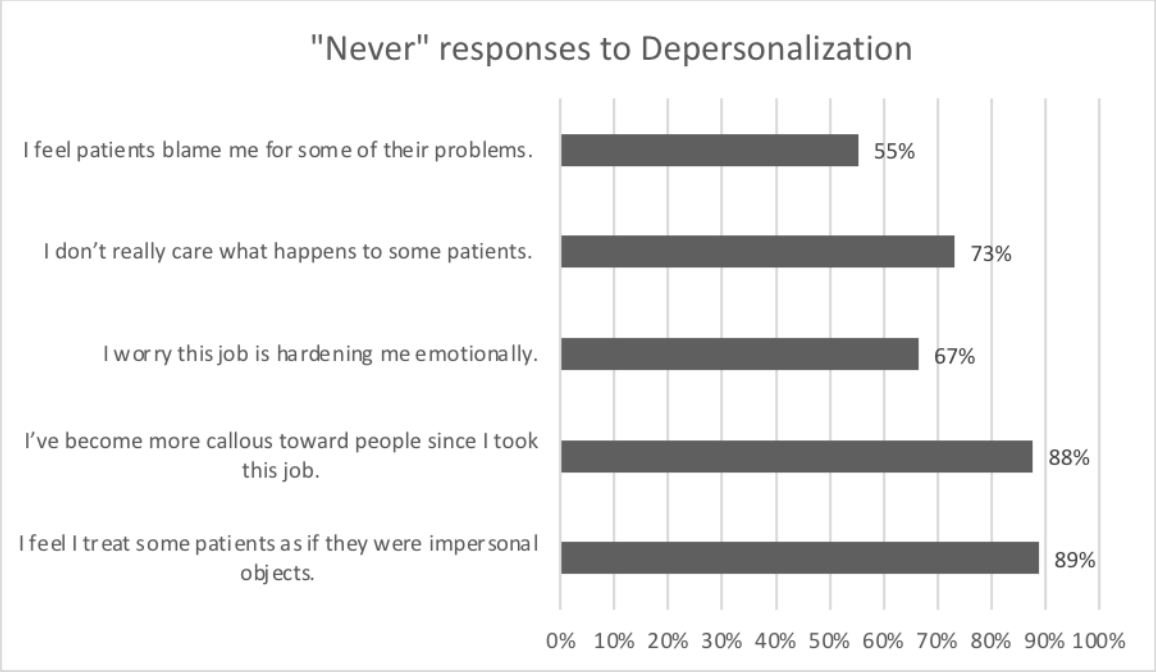
Emotional Exhaustion



Note. The frequency of Emotional Exhaustion endorsed by the Haitian nurses.

Figure 3

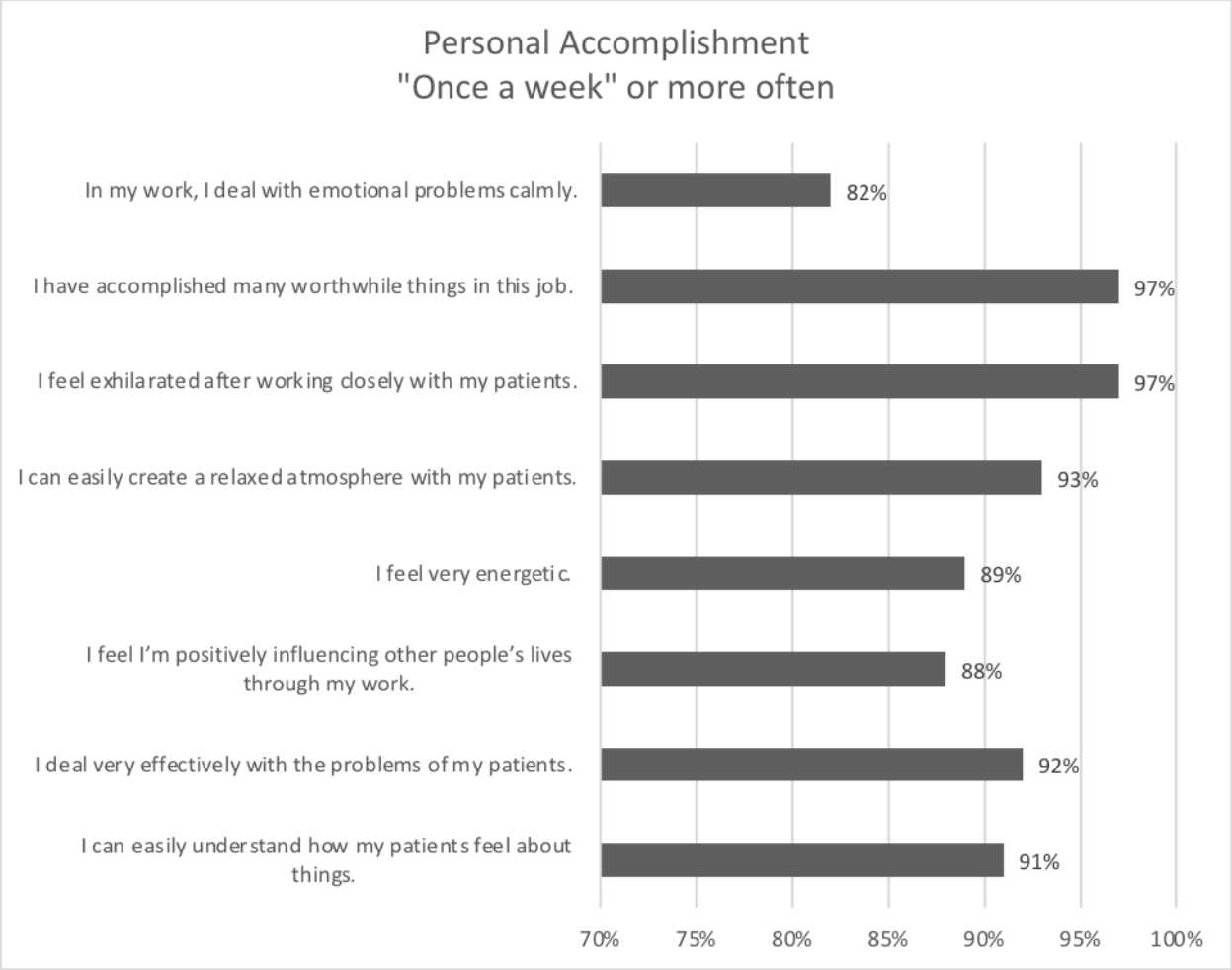
"Never" Responses to Depersonalization



Note. The percentage of nurses who chose response option "Never" for the Depersonalization subscale items.

Figure 4

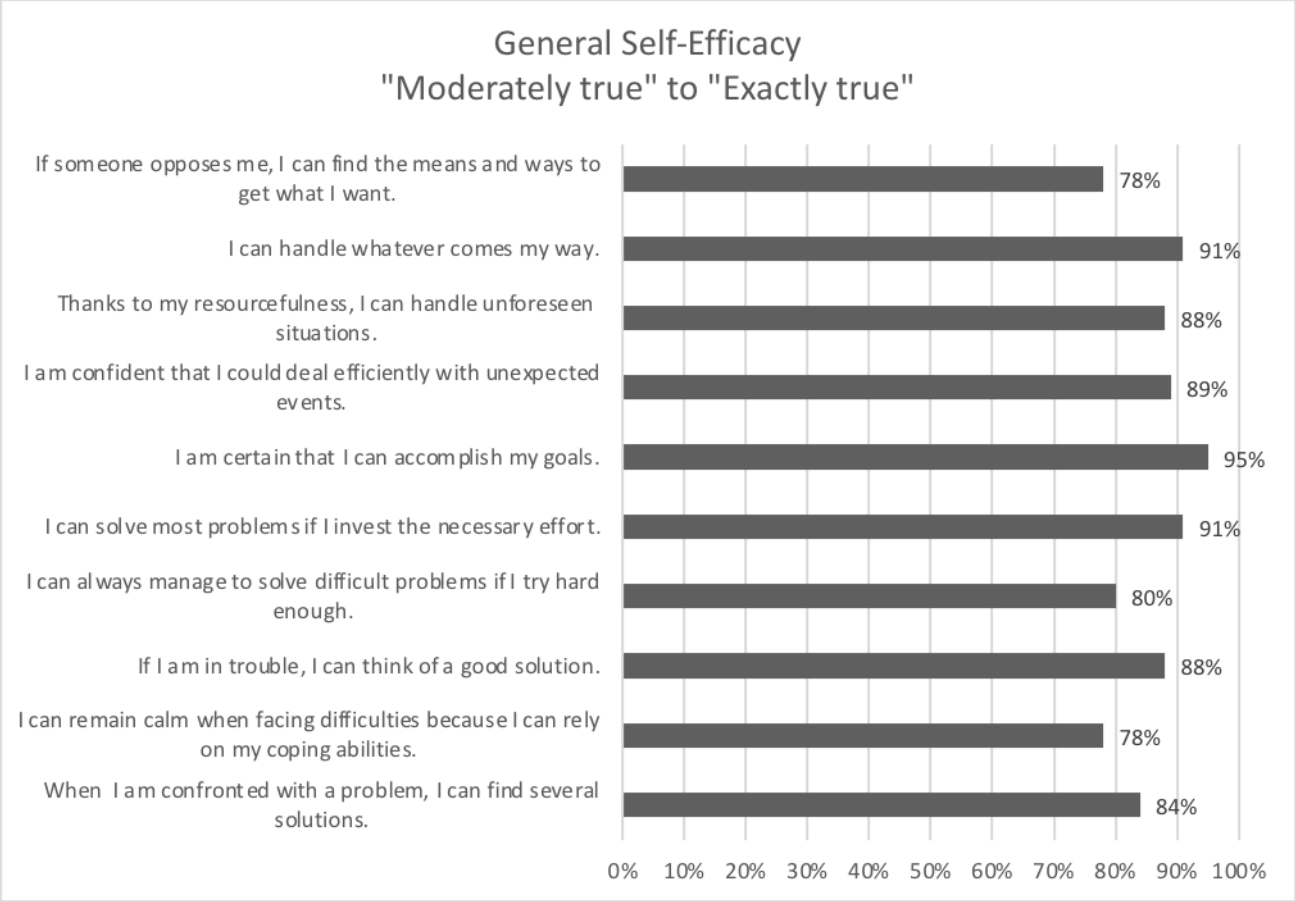
Personal Accomplishment "Once a Week" or More Often



Note. The percentage of nurses who responded "*At least once a week"* for the Personal Accomplishment subscale items.

Figure 5

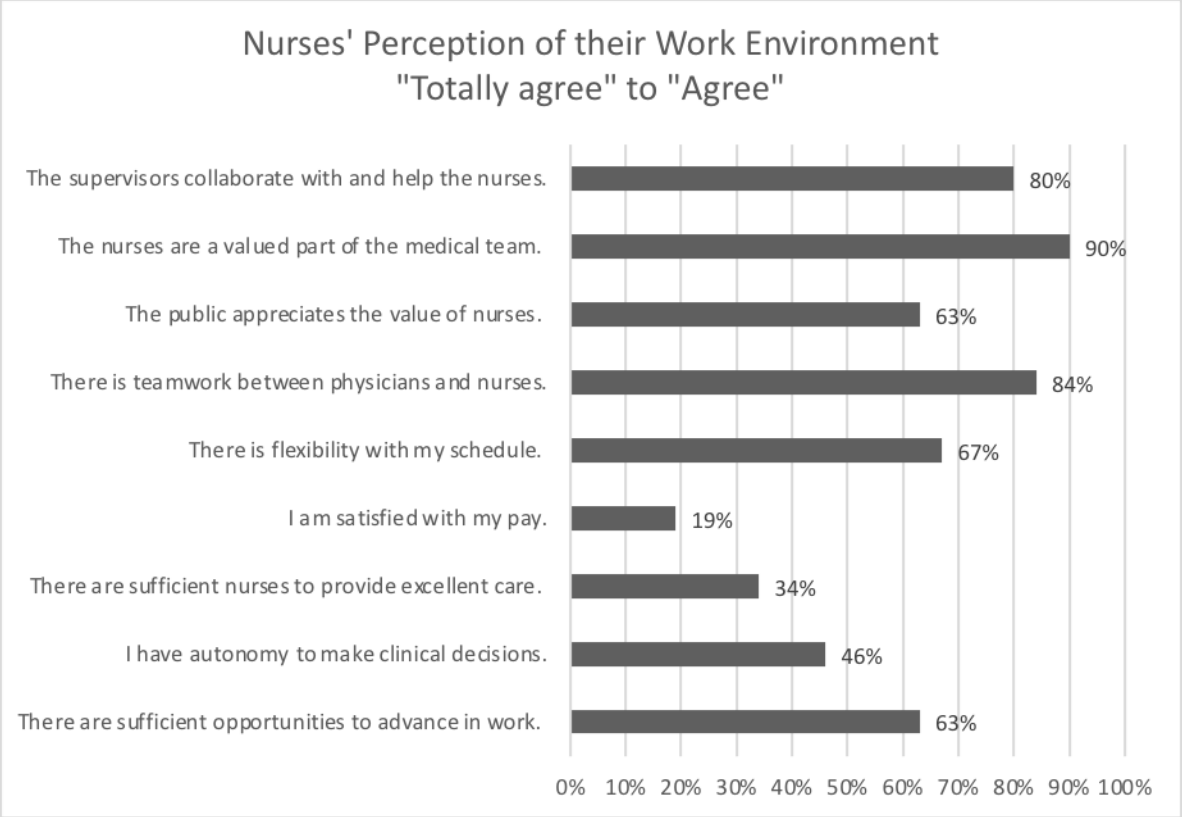
General Self-Efficacy "Moderately true" to "Exactly true"



Note. The percentage of nurses who endorsed "*Moderately true"* to *"Exactly true"* on the General Self-Efficacy scale items.

Figure 6

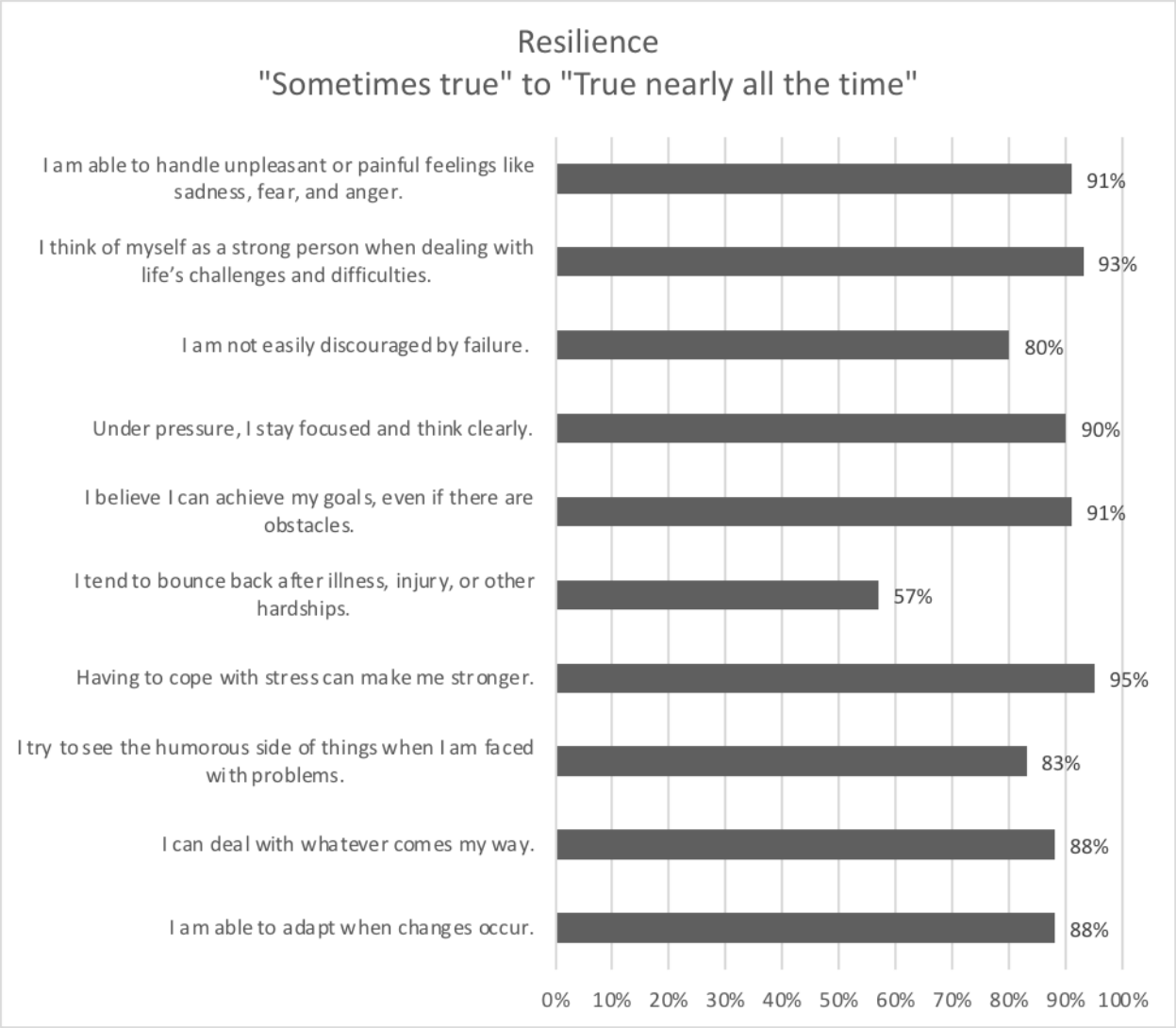
Nurses' Perception of their Work Environment "Totally agree" to "Agree"



Note. Percentage of *"Agree*" to "*Totally agree*" responses to modified Nursing Work Index-Revised scale items.

Figure 7

Resilience Responses "Sometimes true" to "True nearly all the time"



Note. Nurses who endorsed "*Sometimes true*" to "*True nearly all the time*" to the CD-RISC-10 Resilience scale items.

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CHAPTER FIVE

Conclusion

This study examining burnout among Haitian nurses represents an important contribution to the limited literature about nursing in Haiti, as there are no prior studies on burnout in this population. The results illustrate that this sample of nurses experienced a moderate level of one component of burnout (emotional exhaustion), whereas a high level of depersonalization, and low personal achievement which typically accompany emotional exhaustion were not observed. Like other studies in challenging milieus, our sample was comparable with levels of moderate to high emotional exhaustion (Hailay et al., 2020; Poku et al., 2020). However, other studies of low-income countries with similar stressors showed that all three components of burnout negatively impact nurses and the delivery of care, subsequently contributing to the development of burnout syndrome (Hewitt et al., 2020; Khamisa et al., 2017; Owuor et al., 2020; Saha et al., 2019; Ugwu et al., 2017).

In contrast, our findings showed high resilience and general self-efficacy among the Haitian nurses. Researchers report that resilience and self-efficacy play a mediational role in burnout among health care professionals (Arrogante & Aparicio-Zaldivar, 2017; Marie et al., 2017; Ngoasong & Groves, 2016). These authors stress the importance of resilience and self-efficacy to decrease the negative consequences of work stressors and improve mental health among nurses. They noted that it is important to research the sources of nurse resilience to develop appropriate programs to maintain their resilience. Our findings of high resilience and high general self-efficacy levels probably contributed to ameliorating the effects of emotional exhaustion and a higher risk of burnout

syndrome. Future studies could focus on the sources of the Haitian nurses' resilience to share with other nurses functioning in similarly challenging contexts.

Haitians' adaptative experiences in a chronically stressful environment may have galvanized these nurses to continue their social and professional commitments with empathy. Their response to this stressful environment appears similar to those of Iraqi nurses, though not as intense as working in a war zone. In a study with an Iraqi nurse sample, a sense of pride, moral values, compassion, and hope spurred them on in their work. Although working and living in a war zone, they developed adaptation and resilience strategies as sources of courage and inspiration (Al-Hawdrawi et al., 2017). Their high levels of self-efficacy and resilience while caring for their fellow men is quite remarkable when they themselves are faced with personal unmet needs. Haitian nurses appear to have an altruistic worldview which helps them work effectively despite adversities and empathize with others facing similar circumstances. This worldview fits well with the conceptual model of Human Caring/Human science of Jean Watson and her caritative factors (Watson, 2009).

Watson’s Caritas Processes portrays the virtues and ethical duties of the caring nurse towards the patients. This study emphasizes the caring properties of the Haitian nurses while working in a difficult context, thus aligning with the caring conceptual framework. This framework requires nurses to care for themselves and others as stipulated in the Theory of Human Caring (Watson, 2009). Self-care is paramount for the nurses spiritually, emotionally, and physically to avoid burnout syndrome (Brewer et al., 2020). Caring for themselves enables them to care for others’ basic needs in a respectful and agreeable way generating an environment conducive to holistic restoration.

Approximately 60% of Haitian nurses in this study perceived their work environment favorably and also reported low depersonalization. This indicates that within their environment, they value their patients. This finding aligns with the patient-centered care noted in a recent qualitative study of Haitian nurses in two faith-based hospitals in Haiti (Roberts et al., 2021). These nurses are capable of creating a healing environment for their care receivers. Without altruistic values, being present, and problem-solving demonstrated in their self-efficacy score, it would have been difficult for these nurses to maintain high personal achievement. Because self-efficacy is considered an antecedent for resilience, the nurses seem to have personal competence and are well equipped to continue their caring work.

Resilience is this persistent ability to move beyond negative circumstances and continue to thrive using effective coping mechanisms toward recovery or a better mental health state (Health & Human Services, 2015). It seems that the Haitian nurses have the ability to overcome misfortune and persistently work through difficult problems such as frequent natural disasters, poverty, acute and chronic maladies. Because the nurses in the current study live and breathe the same miserable conditions as their patients, it appears that they can demonstrate courage, resilience, and compassionate caring. In addition, with resilience, they are better able to combat stress and burnout (Brewer et al., 2020).

Strengths and Limitations

Strengths of this study include being the first to explore burnout among nurses in Haiti. Other strengths lie in using carefully selected validated scales that have been tested in many countries and specifically, low-income nations. Additionally, the sample came

from an admixture of private, faith-based, and governmental hospitals from different regions of the country, adding to the credibility of the findings. The sample size (N = 179) satisfies the G-power analysis.

Some limitations must also be noted. The convenience sample limits generalizability, and the cross-sectional design does not allow a causal relationship of the variables. Therefore, this investigation only determined how study variables correlated with the burnout subscales. Due to weak correlations and minimal variance, the multiple regression analysis was not meaningful enough to be reported in the results section. Subsequently, we proceeded to run item-by-item analyses to better understand the nurses' responses on each scale and this analysis proved insightful.

The item-by-item analyses added a more nuanced understanding of which items were clearly understood and endorsed by the nurses, versus those items that did not perform well. A few items appear not to have resonated with participants' cultural experience despite the careful choice of validated scales. Since participants repeatedly asked questions for clarification of two items on the MBI-HSS-MP scale, we question the face validity of these items for our sample. These items were "*I feel burned out from my work"* on the Emotional Exhaustion (EE) subscale and "*I feel patients blame me for some of their problems"* on the Depersonalization (DP) subscale. Furthermore, the CD-RISC-10 (resilience scale), already translated into Haitian Creole, was available. However, this scale was psychometrically validated among children and adolescents post-earthquake in Haiti (Cénat & Derivois, 2014) and is new to the nursing sample. As explained earlier, one item in particular, "*I tend to bounce back after illness, injury, or other hardships*,"

was difficult for the nurses to understand. Thus, further transliteration of these items in the Haitian nurses' cultural context is warranted.

Moreover, social desirability bias may have inflated positive responses, particularly for personal accomplishment, self-efficacy, and resilience. Social desirability bias, the desire to look good (Furnham, 1986), may have been particularly strong in this culture. Additionally, while the researcher reassured the participants of the anonymity of data with aggregate results, it is a possibility the nurse participants might not have trusted that their responses would remain confidential. Fear of losing their job if they indicated emotional exhaustion, depersonalization, and poor work environment may have contributed to social desirability.

Further limitations consist of the data collection's timing during the COVID-19 pandemic. It is reasonable to postulate that the pandemic circumstances may have affected the nurses' responses. The questions pertained to their normal work routine, and we do not know how these extraordinary circumstances affected their responses. Additionally, the pandemic resulted in limited time to travel to Haiti as well as within Haiti. Due to the compressed timeframe for data collection, the student researcher could not spend as much time at each of the five sites as desired. Therefore, the charge nurses/supervisors continued distributing the survey to nurses during night shifts and after her departure.

Significance to nursing

Because of the unique and challenging conditions in which Haitian nurses' practice, understanding burnout syndrome in this population is critical. This knowledge

may inform future interventions to improve the nurses' wellbeing, thereby increasing their effectiveness and quality of care to their patients. The purpose of this study was to assess the degree of burnout among these nurses. The student researcher intended to identify the influencing factors affecting Haitian nurse burnout. These results showed some Haitian nurses were dissatisfied with their low pay, decreased autonomy, and insufficient staffing. These issues are typical of other low-income countries (Dubale et al., 2019; Elbarazi et al., 2017; Koy et al., 2015; Mitonga-Monga & Mayer, 2020; Mudallal et al., 2017; Peters et al., 2020; Rezaei et al., 2018). Partnership with other organizations such as the University of Global Health Equity (UGHE) to advocate for nurses' equity, rights, and participation in policy changes may be beneficial.

A significant contribution this study makes to the nursing discipline is the translation of the survey into Haitian Creole and, particularly, the Maslach-Burnout Inventory Health Service Survey for Medical Professionals (MBI-HSS-MP). The Haitian Creole version of the MBI-HSS-MP is now available online for future studies at https://www.mindgarden.com. Additionally, this study adds to the currently limited literature on burnout syndrome and perceptions of Haitian nurses pertaining to correlates of burnout. Results from this study provide support that self-efficacy and resilience are attributes that may assist in mitigating burnout. With this knowledge, efforts to enhance these attributes may be worthwhile.

Implications and Recommendations

Although presumed to be at risk for burnout syndrome, only moderate emotional exhaustion resulted among the Haitian nurses in this sample. Nevertheless, there are

implications for nursing practice, education, policy, and leadership changes generating from this novel study on Haitian nurses. Therefore, recommendations for future research among Haitian nurses and the patients cared for are warranted.

Implications for Work Environment

Job-related factors such as excessive workload and limited organizational support can promote burnout (Dyrbye et al., 2017; Maslach et al., 1996). The nurse work environment includes organizational attributes, setting, processes, and structures facilitating or deterring the nurses' ability to offer the best of quality care possible to the patients (Dyrbye et al., 2017; Swiger et al., 2017). Other factors such as autonomy, nurse-patient ratio, shift work, income, nurse retention, and interpersonal teamwork influence nurse burnout (Dyrbye et al., 2017; Guo et al., 2018; Welp et al., 2016). Haitian nurses' dissatisfaction with their environment consisted of low salaries, autonomy, and staffing. The financial, administrative personnel may use practical ways to offer performance incentives and appreciation to the nurses, thus creating a healthy work environment. In return, a healthy work environment will reduce stress, cultivate well-being among the nurses, thereby protecting them from further emotional exhaustion (Dyrbye et al., 2017; Guo et al., 2018).

Haitian nurses may create a nursing club to boost their autonomy by making decisions for their work environment and patient care. A nursing club is also appropriate where each one can voice their needs and possible solutions for the well-being of all the nurses. Organizations can encourage interdisciplinary teamwork among healthcare personnel. Thus, increasing job satisfaction, and counteracting burnout, will increase

patient care quality and safety (Welp et al., 2016). Building teamwork and retention of Haitian nurses will certainly help during disasters and health crisis. Appropriate nurse-to-patient ratios resulted in less emotional exhaustion, greater nursing staff satisfaction, and higher patient quality care and safety (McHugh et al., 2020). Developing adequate nurse-to-patient ratios in the hospitals can certainly optimize the nurses' work performance, well-being, and higher quality of care.

Implications for Clinical Practice Environment

Other studies have demonstrated that resilience, self-efficacy, and personal achievement are protective factors that mitigate burnout. Therefore, efforts to enhance these attributes may be worthwhile. Several researchers recommend personal and administrative interventions to increase resilience and maintain positive contributions among nurses (Guo et al., 2018; Jackson et al., 2018; Wei et al., 2019). Personal interventions may include mindfulness exercises, promoting positive thinking, practicing altruism, and building up interpersonal relationships (Montanari et al., 2019; Wei et al., 2019). Administrative interventions may include encouraging nurses' growth and utilizing their areas of strength (Wei et al., 2019). Resilience can be learned or enhanced though workshops incorporating mindfulness, well-being, and other exercises, which employers could offer. Resilient nurses are better able to maintain their own wellbeing which supports better patient care outcomes.

Implications for Nursing Education

Haitian nurses would benefit from having a cadre of well-prepared advanced academicians to increase the number of prepared nurses. While promoting the international standard of education in Haiti in accord with the Haitian Ministry of Health and the Population, these nurses will be able to increase the healthcare staffing for all Haitians, therefore decreasing the nursing shortage. As the backbone of a fragile healthcare system (Hashimoto et al., 2020), the preparation of the future nurses to resist adversities, have tenacity, endurance, and compassion in their caring is paramount. The burnout concept should be explored as part of the nursing curriculum since it is a global issue. Resilience and self-efficacy should also be part of their curriculum to prevent and mitigate burnout at all costs.

Implications for Policy and Leadership

Policymakers and leaders need to find ways to improve the nursing workforce to decrease the nursing shortage. Nurses who aspire to be in academia or leadership positions should have the opportunity to do so through advanced educations, workshops, or leadership classes. In addition, it is essential to prepare nurses to engage in policy and leadership to represent nurses' interests at the national level. Thereby nurses will have a voice in decision-making regarding salary ranges, benefits, and asset distribution within the healthcare system at the local and national levels.

Haitian nurses' lack of representation was made poignantly clear when the student researcher listened to some of the nurses' frustrations during this study. The nurses expressed thwarted dreams of attaining middle-class, as their salary did not provide for

middle-class comforts such as a car for transportation. They expressed knowing that these things are possible for nurses in other countries, which contributes to the brain drain as nurses migrate to high-income nations (Roy & Bhuiya, 2020). Nurses have the right to receive an equitable salary for their hard and demanding work. They should not lack the commodities in life, such as a car for transportation. Leaders of low-income nations and particularly Haiti, must find means to invite nurses to discuss sensitive issues that are dear to them, such as better salary, respect, privacy, and interdisciplinary collaboration, to mitigate nurse burnout worldwide.

Recommendation for Future Research

Recommendations for further research include pre-and-post interventional studies on strengthening nurse resilience, with the goal of further mitigating burnout and increase patient care quality. Thus, it would follow that it is necessary to involve Haitian nurses and their care receivers (nurse-patient dyads) in a study to understand the perception of care from the patients' viewpoint. Patient perceptions may also expand nurses' understanding of their role in the health of their communities. Other studies may focus on further psychometric evaluation of this current study instrument with a larger sample of nurses in Haiti. Factor analyses may shed light on concept relevance and provide direction to help resolve translation/transliteration concerns noted. After refinement and further evaluation of the bilingual tools, researchers may find it useful to replicate the current study with a larger sample of Haitian nurses to increase generalizability.

Additional variables to consider in future studies include the role of intrinsic religiosity and sacredness of nurses' work on burnout variables since some studies

suggest that faith and spirituality play a positive role in increasing resilience, promoting healing, and decreasing environmental stress (Al-Hawdrawi et al., 2017; Marie et al., 2017; Roberts et al., 2021).The pilot study had those variables, but we opted to remove them to reduce the sample size needed due to the limited number of nurses available within the timeframe possible for data collection during the pandemic.

Summary

In summary, this dissertation may provide a path toward a rich research trajectory. The review of literature indicated that risk factors for burnout abounded in the Haitian nurses' context. The conceptual framework underscored that altruistic caring is inherent to nursing. The data collection provided an opportunity to understand how Haitian nurses perceive themselves and their environment. The results indicate that while moderate emotional exhaustion does exist in this sample of nurses, the other two components of burnout were not problematic. They were also found to have high general self-efficacy and attitudes aligned with the selected Watson's Caritas. It may be that the amalgamation of these factors forged an adaptive strength supporting the high resilience indicated in the results, despite difficult circumstances. Thus, perhaps there is much that the nursing discipline in high resource nations can learn about resilience from these Haitian nurses.

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APPENDIX A (FLYER IN ENGLISH)

LOMA LINDA UNIVERSITY
School of Nursing

STUDY TITLE: HAITIAN NURSES STUDY

Nurses!

We're looking for volunteers like you!

You will be asked to complete

- **One 30-60-minute survey in French/Haitian Creole**
- **Location: (To be announced)**

Participants will receive

- **Satisfaction of having contributed to nursing science**
- **Satisfaction knowing that the insight you share may benefit other Haitian nurses, patients, and the community**

Are you eligible?

- **Haitian nurse (LVN/Auxiliaire, RN)**
- **Working in hospitals or clinics**
- **Able to read and understand French**

If you are interested, call or email
Marie Therese Georges,
MSN-FNP, RN, Doctoral student
Email: mgeorges@students.llu.edu
Mobile: WhatsApp: 909-272-8411

APPENDIX A (FLYER IN FRENCH)

LOMA LINDA UNIVERSITY
School of Nursing

TITRE : ÉTUDE SUR LES INFIRMIERS (ES) EN HAITI

Infirmiers (es) !
Nous recherchons des bénévoles comme vous !

On vous demandera de remplir

- ***Un 30-60 minutes Sondage en Français et en Créole***
- ***Location : (à annoncer)***

Les participants recevront

- **Satisfaction d'avoir contribué à une augmentation des connaissances en sciences infirmières**
- **Un aperçu qui profite aux autres infirmières haïtiennes, aux patients et à la communauté**

Êtes-vous éligible ?

- **Infirmier Haïtien (Auxiliaire, RN)**
- **Travailler dans des hôpitaux ou des cliniques**
- **Capable de lire et de comprendre le français**

Si vous êtes interessés, consultez
Marie Therese Georges,
MSN-FNP, RN, Doctorante
Courriel : mgeorges@students.llu.edu
Mobile: WhatsApp: 909-272-8411

APPENDIX B (ENGLISH)

Study Information Sheet

TITLE: STUDY ON NURSES IN HAITI

Principal Investigator: Lisa Roberts, DrPH, MSN, RN, FNP-BC, FAANP

Student Researcher: Marie Therese Georges, PhD(c), MSN, RN, FNP-BC

Dear nurse,

You are invited to participate in a survey on the experiences of Haitian nurses because you are a nurse. The aim of the study is to increase understanding of the experiences of nurses working in hospitals or clinics in Haiti. Participation in this study involved answering questions about your experiences and perceptions of your work environment. The survey will take approximately 30 to 40 minutes. Whether you participate or not is completely voluntary and will not affect your relationship with your employer.

There is a minimal risk of breach of confidentiality; however, this possibility will be minimized by completing the survey anonymously. If you would like to continue and participate after reading this letter, please complete the attached questionnaire. When we receive the survey, there will be no information linking your responses to you. While you will not directly benefit from this study, the information provided will potentially benefit the nursing field with a better understanding of nursing and working life in Haiti.

Participation in this study is free and voluntary. Thank you in advance for considering this invitation. By completing this survey, you will be giving your consent to participate.

Regards,

Lisa Roberts, DrPH, MSN, RN, FNP-BC, FAANP, Principal Investigator

Marie Therese Georges, PhD(c), MSN, RN, FNP-BC, Student Researcher

APPENDIX B (FRENCH)

Informations sur l'Etude

TITRE : ÉTUDE SUR LES INFIRMIÈRS (ES) EN HAÏTI

Chercheuse Principale : Lisa Roberts, DrPH, MSN, RN, FNP-BC, FAANP

Chercheuse Etudiante : Marie Therese Georges, PhD(c), MSN, RN, FNP-BC

Chère infirmière,

Vous êtes invité à participer à une enquête sur les expériences des infirmières haïtiennes parce que vous êtes infirmière. Le but de l'étude est d'accroître la compréhension des expériences des infirmières qui travaillent dans les hôpitaux ou dans les cliniques en Haïti. La participation à cette étude impliquait de répondre à des questions sur vos expériences et vos perceptions de votre environnement de travail. L'enquête durera environ 30 à 40 minutes. Que vous participiez ou non est entièrement volontaire et n'affectera pas votre relation avec votre employeur.

Il existe un risque minimal de violation de la confidentialité ; cependant, cette possibilité sera minimisée en remplissant le sondage de manière anonyme. Si vous souhaitez continuer et participer après avoir lu cette lettre, veuillez remplir le questionnaire ci-joint. Lorsque nous recevrons le sondage, il n'y aura aucune information reliant vos réponses à vous. Bien que vous ne bénéficiiez pas directement de cette étude, les informations fournies bénéficieront potentiellement au domaine des soins infirmiers avec une meilleure compréhension de la profession infirmière et de la vie professionnelle en Haïti.

La participation à cette étude est gratuite et volontaire. Merci d'avance d'avoir pris en considération cette invitation. En répondant à ce sondage, vous donnerez votre consentement pour participer.

Cordialement,

Lisa Roberts, DrPH, MSN, RN, FNP-BC, FAANP, Chercheuse Principale

Marie Therese Georges, PhD(c), MSN, RN, FNP-BC, Chercheuse Etudiante

APPENDIX B (HAITIAN CREOLE)

Enfòmasyon sou Etid la

TIT: ETID SOU ENFIMYÈ AYITI YO

Chèchè Prensipal: Lisa Roberts, DrPH, MSN, RN, FNP-BC, FAANP

Chèchè Etidyant: Marie Therese Georges, PhD(c), MSN, RN, FNP-BC

Chè enfimyè,

Nou envité ou pou patisipé nan yon ankèt sou eksperyans enfimyè Ayisyen yo paské nou se enfimyè. Bi étid la se pou fè grandi konpreyansyon eksperyans enfimyè yo ki travay nan lopital yo oubyen nan klinik yo nan Ayiti. Patisipasyon nan étid sa'a enpliké pou réponn kèk kesyon sou eksperyans ou yo ak pèsepsyon ou yo nan anvirònman travay ou. Ankèt la ap diré 30 a 40 minit. Ke wap patisipé ou non se antyèman volontè é li pap afekté rélasyon ak moun ki anplwayé w la.

Gen yon risk tou piti nan vyolasyon konfidansyalité a; sépandan, posibilité sa'a ap minimisé si w ranpli sondaj la san w pa mété non w. Si w swété kontinyé épi patisipé aprè ou fin li lèt sa'a, ranpli késyonè ki vin aprè a. Lè nou résevwa sondaj la, pap gen okenn enfòmasyon kap rélye répons ou yo a oumenm. Byen ké ou pap bénéfisyé dirèkteman dé étid sa'a, enfòmasyon founi yo ap bénéfisyé potansyèlman nan domèn swen enfimyé yo avèk yon meyè konpreyansyon pwofesyon enfimyè a ak lavi pwofesyonèl an Ayiti.

Patisipasyon nan étid sa'a gratis é volontè. Mèsi davans paské ou té pran an konsidérasyon envitasyon sa'a. Lè w reponn ak sondaj sa'a, ou bay konsantman w pou patisipé.

Kòdyalman,

Lisa Roberts, DrPH, MSN, RN, FNP-BC, FAANP, Chèchè Prensipal

Marie Therese Georges, PhD(c), MSN, RN, FNP-BC, Chèchè Etidyant

APPENDIX C (ENGLISH)

LOMA LINDA UNIVERSITY
School of Nursing

TITLE: HAITIAN NURSES STUDY QUESTIONNAIRE

Principal Investigator: Lisa Roberts, DrPH, MSN, RN, FNP-BC, FAANP

Student Researcher: Marie Therese Georges, PhD(c), MSN, RN, FNP-BC

English Survey – Questionnaire

Demographics: ***Please circle the answer that applies to you or fill in the blank.***

1. Gender: Female Male

2. Age: (years) _____

3. Marital status: Single Married Widowed Divorced Separated

4. Which nursing credential/degree do you have?
LVN (Auxiliary) Diploma Associate degree Baccalaureate
Master Doctorate

5. What is your nurse occupation title? ----------

6. How many years of experience do you have as a nurse? ----------

7. Please indicate the setting you work in (specify unit type/department, or clinic):
_____

8. How many hours per week do you work as a nurse? ----------

9. Additional job: Yes ---------- No ----------

Thank you for filling out the demographic section above. The next 3 pages contain questions about your opinions and experiences. There are no right or wrong answers, please answer freely with the first response that comes to mind.

10. ***Please read each statement below and indicate how true it is for you***

	Not at all True	***Hardly True***	***Moderately True***	***Exactly True***
1. When I am confronted with a problem, I can find several solutions.	□	□	□	□
2. I can remain calm when facing difficulties because I can rely on my coping abilities.	□	□	□	□
3. If I am in trouble, I can think of a good solution.	□	□	□	□
4. I can always manage to solve difficult problems if I try hard enough.	□	□	□	□
5. I can solve most problems if I invest the necessary effort.	□	□	□	□
6. I am certain that I can accomplish my goals.	□	□	□	□
7. I am confident that I could deal efficiently with unexpected events.	□	□	□	□
8. Thanks to my resourcefulness, I can handle unforeseen situations.	□	□	□	□
9. I can handle whatever comes my way.	□	□	□	□
10. If someone opposes me, I can find the means and ways to get what I want.	□	□	□	□

11. ***For each statement, mark the box that most accurately reflects your response: If you have never had this feeling, mark the box 'Never.'). If you had this feeling, indicate how often you feel it by checking the appropriate box.***

	Never	***A few times a year or less***	***Once a month or less***	***A few times a month***	***Once a week***	***A few Times a week***	***Every day***
1. I feel emotionally drained from my work.	□	□	□	□	□	□	□
2. I feel used up at the end of the workday.	□	□	□	□	□	□	□
3. I feel fatigued when I get up in the morning and have to face another day on the job.	□	□	□	□	□	□	□
4. I can easily understand how my patients feel about things.	□	□	□	□	□	□	□
5. I feel I treat some patients as if they were impersonal objects.	□	□	□	□	□	□	□
6. Working with people all day is really a strain for me.	□	□	□	□	□	□	□
7. I deal very effectively with the problems of my patients.	□	□	□	□	□	□	□
8. I feel burned out from my work.	□	□	□	□	□	□	□
9. I feel I'm positively influencing other people's lives through my work.	□	□	□	□	□	□	□

10. I've become more callous toward people since I took this job.	□	□	□	□	□	□	□
11. I worry that this job is hardening me emotionally.	□	□	□	□	□	□	□
12. I feel very energetic.	□	□	□	□	□	□	□
13. I feel frustrated by my job.	□	□	□	□	□	□	□
14. I feel I'm working too hard on my job.	□	□	□	□	□	□	□
15. I don't really care what happens to some patients.	□	□	□	□	□	□	□
16. Working with people directly puts too much stress on me.	□	□	□	□	□	□	□
17. I can easily create a relaxed atmosphere with my patients.	□	□	□	□	□	□	□
18. I feel exhilarated after working closely with my patients.	□	□	□	□	□	□	□
19. I have accomplished many worthwhile things in this job.	□	□	□	□	□	□	□
20. I feel like I'm at the end of my rope.	□	□	□	□	□	□	□
21. In my work, I deal with emotional problems very calmly.	□	□	□	□	□	□	□
22. I feel patients blame me for some of their problems.	□	□	□	□	□	□	□

12. ***For each statement, mark the box that most accurately reflects your response***

	Totally Agree	***Agree***	***Disagree***	***Totally Disagree***
1. There are sufficient opportunities to advance in work.	□	□	□	□
2. I have autonomy to make clinical decisions.	□	□	□	□
3. There are sufficient nurses to provide excellent care.	□	□	□	□
4. I am satisfied with my pay.	□	□	□	□
5. There is flexibility with my schedule.	□	□	□	□
6. There is teamwork between physicians and nurses.	□	□	□	□
7. The public appreciates the value of nurses.	□	□	□	□
8. The nurses are a valued part of the medical team.	□	□	□	□
9. The supervisors collaborate with and help the nurses.	□	□	□	□

13. ***For each statement, mark the box that most accurately reflects your response that may apply to you in the past month. If a particular situation has not happened recently, respond based on how you usually feel.***

	Not true at all	***Rarely True***	***Sometimes True***	***Often True***	***True Nearly All the Time***
1. I am able to adapt when changes occur.	□	□	□	□	□
2. I can deal with whatever comes my way.	□	□	□	□	□
3. I try to see the humorous side of things when I am faced with problems.	□	□	□	□	□
4. Having to cope with stress can make me stronger.	□	□	□	□	□
5. I tend to bounce back after illness, injury, or other hardships.	□	□	□	□	□
6. I believe I can achieve my goals, even if there are obstacles.	□	□	□	□	□
7. Under pressure, I stay focused and think clearly.	□	□	□	□	□
8. I am not easily discouraged by failure.	□	□	□	□	□
9. I think of myself as a strong person when dealing with life's challenges and difficulties.	□	□	□	□	□
10. I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	□	□	□	□	□

Thank you kindly for your participation!

APPENDIX C (FRENCH)

LOMA LINDA UNIVERSITY
School of Nursing

TITRE: ETUDE SUR LES INFIRMIER(ES) EN HAITI

Chercheuse Principale : Lisa Roberts, DrPH, MSN, RN, FNP-BC, FAANP

Chercheuse Etudiante: Marie Therese Georges, PhD(c), MSN, RN, FNP-BC

Questionnaire Français

Données démographiques : Veuillez encercler la réponse qui vous concerne où compléter l'espace blanc.

1. Genre : Féminin Masculin

2. Age : _____

3. État civil : Célibataire Marrie(e) Veuf (ve) Divorce(e) Séparé(e)

4. Quel diplôme d'infirmier avez-vous ?

Diplôme Associe Baccalauréat Maitrise Doctorat

5. Quelle est votre qualification de sante ? Auxillaire RN (Infirmiere autorisée)

6. Quel poste occupez-vous ? Infirmier(e) de ligne Chef Infirmier(e)

Superviseur(e) Administrateur(rice) Infirmier(e) clinicien(ne)

Infirmier(e) clinicien(ne) de recherche Infirmier(e) clinicien(ne) spécialisé(e)

Infirmier(e) éducateur(rice) Autre(précisez)_____

7. Combien d'heures travaillez-vous par semaine ? _____

8. Combien d'années d'experience de travail à votre niveau de qualification ? ____

9. Travaillez-vous un travail supplémentaire ? Non ---------- Oui ----------

Merci de remplir la section démographique ci-dessus. Les 4 pages suivantes contiennent des questions sur vos opinions et experiences. Il n'y a pas de bonne ou de mauvaise réponse. S'il vous plait, veuillez répondre librement avec la première réponse qui vous vient à l'esprit.

10. ***Lisez attentivement chaque phrase et encerclez le chiffre qui vous décrit le mieux.***

	Pas du tout vrai	***A peine vrai***	***Moyenne-ment vrai***	***Totale-ment vrai***
1. Je peux arriver toujours à résoudre mes difficultés si j'essaie assez fort.	□	□	□	□
2. Si quelqu'un s'oppose à moi, je peux trouver une façon pour obtenir ce que je veux.	□	□	□	□
3. C'est facile pour moi de maintenir mon attention sur mes objectifs et accomplir mes buts.	□	□	□	□
4. J'ai confiance que je peux faire face efficacement aux évènements inattenndus.	□	□	□	□
5. Grâce à ma debrouillardise, je sais comment faire face aux situations imprévues.	□	□	□	□
6. Je peux résoudre la plupart de mes problèmes si j'investis les efforts nécessaires.	□	□	□	□
7. Je peux rester calme lorsque je suis rencontré a des difficultés car je peux me fier à mes habiletés pour faire face aux problèmes.	□	□	□	□
8. Lorsque je suis confronté à un problème, je peux habituellement trouver plusieurs solutions.	□	□	□	□
9. Se je suis "coincé," je peux habituellement penser à ce que je pourrais faire.	□	□	□	□
10. Peu importe ce qui arrive, je suis capable d'y faire face généralement.	□	□	□	□

11. ***Pour chaque enoncé, cochez la case qui correspond le mieux à votre réponse:***

	Jamais	*Quelques fois par année, tout au plus*	*Une fois par mois ou moins*	*Quelques fois par mois*	*Une fois par semaine*	*Quelques fois par semaine*	*Tous les jours*
1. Mon travail me vide émotivement	□	□	□	□	□	□	□
2. Je me sens epuisé á la fin de ma journée de travail.	□	□	□	□	□	□	□
3. Je me sens fatigué lorsque je me lève le matin et que j'envisage une autre journée de travail.	□	□	□	□	□	□	□
4. Je peux facilement comprendre ce que mes patients ressentent.	□	□	□	□	□	□	□
5. J'ai impression de traiter certains patients comme s'ils étaient des objets.	□	□	□	□	□	□	□
6. Travailler avec des gens toute la journée est vraiment épuisant pour moi.	□	□	□	□	□	□	□
7. Je traite avec beaucoup d'efficacité les problèmes de mes patients.	□	□	□	□	□	□	□
8. Mon travail m'épuise.	□	□	□	□	□	□	□

9. J'ai l'impression d'avoir, par mon travail, une influence positive sur d'autres personnes.	□	□	□	□	□	□	□
10. Je suis devenu plus insensible envers les gens depuis que j'occupe ce travail.	□	□	□	□	□	□	□
11. J'ai peur que ce travail m'endurcisse émotivement.	□	□	□	□	□	□	□
12. Je me sens plein d'énergie.	□	□	□	□	□	□	□
13. Mon travail m'apporte de la frustration.	□	□	□	□	□	□	□
14. J'ai l'impression de trop travailler.	□	□	□	□	□	□	□
15. Je me soucie parfois peu du sort de mes patients.	□	□	□	□	□	□	□
16. Le fait de travailler auprès des gens me stresse énormément.	□	□	□	□	□	□	□
17. J'arrive facilement à mettre mes patients à l'aise.	□	□	□	□	□	□	□
18. Après avoir travailler de près avec mes patients, je me sens bien.	□	□	□	□	□	□	□
19. J'ai accompli beaucoup de choses utiles dans ce travail.	□	□	□	□	□	□	□

20. J'ai l'impression d'être "au bout du rouleau".	□	□	□	□	□	□	□
21. Au travail, j'aborde les problèmes émotifs bien calmement.	□	□	□	□	□	□	□
22. J'ai l'impression que des patients me blâment pour certains de leurs problèmes.	□	□	□	□	□	□	□

12. ***Pour chaque enoncé, cochez la case qui correspond le mieux à votre réponse***

	Totalement d'accord	***D'accord***	***Pas d'accord***	***Totalement en désaccord***
1. I y a suffisamment d'opportunités pour advancer dans le travail.	□	□	□	□
2. J'ai l'autonomie pour prendre des dcisions cliniques.	□	□	□	□
3. I y a suffisamment d'infirmiers pour fournir d'excellents soins.	□	□	□	□
4. Je suis satisfait de mon salaire.	□	□	□	□
5. I y a de la flexibilité dans mon emploi du temps.	□	□	□	□
6. I y a un travail d'équipe entre les médecins et les infirmiers.	□	□	□	□
7. Le public apprecie la valeur des infirmiers.	□	□	□	□
8. Les Infirmiers sont un élement précieux de l'équipe médicale.	□	□	□	□
9. Les superviseurs collaborent avec et aident les infirmiers.	□	□	□	□

13. ***Veuillez indiquer dans quelle mesure les propositions ci-dessous vous conviennent et peuvent s'appliquer à vous au cours de dernier mois. Si une situation particulière ne s'est pas produite récemment, répondez en fonction de ce que vous ressentez habituellement. Merci pour votre participation !***

	Pas du tout	***Rarement***	***Parfois***	***Souvent***	***Pratiquement tout le temps***
1. Je suis capable de m'adapter lorsque des changements surviennent.	□	□	□	□	□
2. Je peux gérer toutes les situations qui se présentent à moi.	□	□	□	□	□
3. J'essaie de voir le côte humoristique des choses lorsque je suis confronté(e) aux problèmes.	□	□	□	□	□
4. Devoir gérer le stress peut me render plus fort(e).	□	□	□	□	□
5. J'ai tendance à rebondir après une maladie, une blessure ou d'autres épreuves.	□	□	□	□	□
6. Je crois pouvoir atteindre mes objectifs même s'il y a des obstacles.	□	□	□	□	□
7. Sous pression, je reste concentré(e) et je reflechis clairement.	□	□	□	□	□
8. Je ne suis pas facilemenmt decouragé(e) par l'echec.	□	□	□	□	□
9. Je me considere comme une personne forte lorsque je suis confronté(e) aux defis et aux difficultés de la vie.	□	□	□	□	□
10. Je suis capable de gérer des sentiments déplaisants ou douloureux comme la tristesse, la peur ou la colère.	□	□	□	□	□

APPENDIX C (HAITIAN CREOLE)

LOMA LINDA UNIVERSITY
School of Nursing

TIT: ETID ENFIMYÈ AYISYEN YO

CHÈCHÈ PRENSIPAL: Lisa Roberts, DrPH, MSN, RN, FNP-BC, FAANP

Chèchè Etidyant: Marie Therese Georges, PhD(c), MSN, RN, FNP-BC

Kesyonè Ayisyen Kréol

Démografik: silvouplè ansèkle repons ki konsène w la oubyen ranpli espas blan yo.

1. Sèks: Femèl Mal

2. Laj : _____

3. Éta sivil : selibatè Maryé vèf/vèv Divòse séparé

4. Ki sètifikasyon/degré enfimyè ou genyen?

Diplòm Dégré asosye Bakaloreya Mastè Doktora

5. Ki kalifikasyon santé ou genyen? Auxiliaire RN (enfirmyè ki gen lisans)

6. Nan ki pozisyon ou yé? Pèsonèl enfimyè Enfimyè an chaj

Sipèvizè Administratè Enfimyè Klinik

Enfimyè nan Réchèch Enfimyè Klinik espesyalis

Enfimyè Praktisyonè Enfimyè Edikatè lopital Ot (espesifyé)

_____

7. Konbyen lè ou travay nan yon semèn? _____

8. Konbyen ané eksperyans travay ou genyen nan nivo kalifikasyon w nan? _____

9. Eské ou genyen yon travay adisyonèl? Non ----- Wi ------

Mèsi paské w ranpli seksyon Démografik anwo a. Lòt 4 paj apré yo gen kesyon sou opinyon w avèk esperyans ou yo. Pa gen bon ak mové répons, silvouplè réponn libréman avèk prémye repons ki vin nan lespri w la

10. ***Li atantivman chak fraz epi ansèkle chif ki dekri w pi byen an.***

	Pas ditou vré	***A pen vré***	***Mwayenmant vré***	***Total-mant vré***
1. Mwen ka rivé toujou rezoud difikilté mwen yo si m éseyé asé fò.	□	□	□	□
2. Si yon moun opozé l ak mwen, mwen ka jwenn yon fason pou m jwenn sa mwen vlé a.	□	□	□	□
3. Li fasil pou mwen kenbé atansyon m sou objektif mwen yo é akonply bi mwen yo.	□	□	□	□
4. Mwen gen konfyans ké mwen ka fè fas éfikasman nan évenman inatandi yo.	□	□	□	□
5. Gras ak débwouyadiz mwen, mwen konnen kòman pou m fè fas ak sitiyasyon enprevi yo.	□	□	□	□
6. Mwen ka rézoud laplipa nan pwoblèm mwen yo si mwen envesti efò ki nésesè yo.	□	□	□	□
7. Mwen ka rété kalm lè mwen konfwonté ak kèk difikilté paské mwen ka fè konfyans ak abilité mwen yo pou m fè fas ak pwoblèm yo.	□	□	□	□
8. Lè mwen konfwonté ak yon pwoblèm, mwen ka abityèlman jwenn plizyè solisyon.	□	□	□	□
9. Si mwen kwensé, mwen ka abityèlman pansé ak kisa mwen ta ka fè.	□	□	□	□
10. Kelkeswa sa ki rivé, mwen ka fè fas généralman	□	□	□	□

11. ***Pou chak fraz, maké ti bwat ki réflété ak plis précision répons ou a. Si w pa janm gen santiman sa'a, maké bwat "Jamè" a. Si w té gen santiman an enfilé ak ki frékans nan bwat apwopriyé.***

	Jamè	***Kèk fwa nan yon ané ou mwens***	***Yon fwa pa mwa ou mwens***	***Kèk fwa pa mwa***	***Yon fwa pa semèn***	***Kèk fwa pa semèn***	***Chak jou***
1. Mwen santim emosyonèlman épizé ak travay la.	□	□	□	□	□	□	□
2. Mwen santim épizé nan fen jounen travay.	□	□	□	□	□	□	□
3. Mwen santim fatigé lêm lévé le maten é oblijé al fè fas ak yon lòt jounen.	□	□	□	□	□	□	□
4. Mwen ka fasilman konprann kijan pasyan mwen yo santi yo ak bagay yo.	□	□	□	□	□	□	□
5. Mwen santi mwen trété pasyan yo kòmsi yo té dé bagay enpèsonèl.	□	□	□	□	□	□	□
6. Travay ak moun tout jounen sé reyèlman yon souch pou mwen.	□	□	□	□	□	□	□
7. Mwen trété trè éfektivman pwoblèm pasyan mwen yo.	□	□	□	□	□	□	□
8. Mwen santim boulé pa travay mwen an.	□	□	□	□	□	□	□

9. Mwen santi mwen enfliyanse pozitivman lavi lòt moun atravè travay mwen an.	□	□	□	□	□	□	□
10. Mwen santim pi ensansib anvè moun dépi mwen pran travay sa'a.	□	□	□	□	□	□	□
11. Mwen krenn ké travay sa'a rann mwen pi difisil émosyonèlman.	□	□	□	□	□	□	□
12. Mwen santi m trè enèjik.	□	□	□	□	□	□	□
13. Mwen santim fristré avèk travay la.	□	□	□	□	□	□	□
14. Mwen santim mwen travay twò di nan travay la.	□	□	□	□	□	□	□
15. Mwen pa reyèlman prété atansyon a sak rivé kèk pasyan.	□	□	□	□	□	□	□
16. Travay ak moun dirèkteman mété twòp strès sou mwen.	□	□	□	□	□	□	□
17. Mwen ka fasilman kreyé yon atmosfè détandi avèk pasyan mwen yo.	□	□	□	□	□	□	□
18. Mwen santim an jwa lêm fin travay nan etwat kolaborasyon ak pasyan mwen yo.	□	□	□	□	□	□	□
19. Mwen akonpli anpil bagay valab nan travay saa.	□	□	□	□	□	□	□

20. Mwen santim mwen nan fen kòd la.	□	□	□	□	□	□	□
21. Nan travay mwen an mwen trété pwoblèm emosyonèl yo avèk kalm.	□	□	□	□	□	□	□
22. Mwen santi pasyan yo blamé mwen pou kèk pwoblèm yo.	□	□	□	□	□	□	□

12. ***Pou chak fraz, maké bwat ki réflété ak plis présizyon repons ou a:***

	Totaleman dakò	***Dakò***	***Pa dakò***	***Totaleman pa dakò***
1. Gen sifizan opòtinité pou avansé nan travay là.	□	□	□	□
2. Mwen gen otonomi pou mwen pran décision clinik.	□	□	□	□
3. Gen asé enfimye pou bay eksélan swen.	□	□	□	□
4. Mwen satisfè avèk sa yo peyé m nan.	□	□	□	□
5. Gen fleksibilite avèk orè mwen an.	□	□	□	□
6. Gen yon travay dekip ant medsen yo ak enfimye yo.	□	□	□	□
7. Piblik la apresyé valè enfimye yo.	□	□	□	□
8. Enfimye yo se yon éléman presyé nan ekip médikal la.	□	□	□	□
9. Sipèvizè yo kolabore avèk enfimye yo epi édé yo.	□	□	□	□

13. ***Pou chak fraz, silvouplè fè yon "x" nan ti kare ki anba a ki pi byen eksplikè nan kijan ou dakò ak lidé nou pral di la yo sou fèy sa pi sanblé ak sitiyasyon w viv depi dènye mwa ki sot pasé a. Si geyen yon sitiyasyon ki pat rivé w nan dènye jou ki fèk sot pasé la, reponn nan fason ou pansé ou ta ka santi w si sa té rivé w.***

	Sé pa vré ditou	***Sé Vré Yon lè konsa***	***Sé vré Pafwa***	***Sé souvan***	***Sé vré presé tou tan***
1. M kapab adapté m lè bagay yo chanje.	□	□	□	□	□
2. Kelkeswa problèm ki vini an man pran l ak bra louvri.	□	□	□	□	□
3. Lè m devan problèm yo m eséyé gadé kijan m ka fè blag ak sa.	□	□	□	□	□
4. Lè m abitye fè fas ak problèm sa ba w plis fòs.	□	□	□	□	□
5. M ka tounen djanm menm si m lévé anba maladi, menm si m té blésé oubyen m té sot nan malé.	□	□	□	□	□
6. M kwè m kapab rive koté m vlé alé a, menm si chimen an gen pikan.	□	□	□	□	□
7. Lè m sou tansyon, m rété konsantré, mwen réfléchi san m pa chajé tèt mwen.	□	□	□	□	□
8. M pa fasil kité echèk, desepsyon dekourajé m.	□	□	□	□	□
9. M wè tèt mwen tankou yon moun ki gen kouraj sitou lè m anfas problèm lavi ak lòt difikilté.	□	□	□	□	□
10. Mwen kapab andiré santiman ki di, ki pa fè moun plezi tankou santiman latristès, laperèz ak lakòlè.	□	□	□	□	□

Mesi pou w paticipé nan sondaj sa