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The Role of Primary Care Nurses in Addressing Unmet Social Needs

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University of Massachusetts Worcester

Graduate School of Nursing

The Role of Primary Care Nurses in Addressing Unmet Social Needs

A Dissertation Presented

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Abstract

PURPOSE

The purpose of this study was to explore how primary care registered nurses address unmet social needs in patients.

SPECIFIC AIMS

- Explore how RNs in a safety net, primary care setting develop an awareness of and address patient's unmet social needs.
- Describe how information about unmet social needs are integrated into nursing assessment and intervention activities, and are shared with other members of the health care team.
- Describe the challenges primary care RNs face when addressing SDH.

FRAMEWORK

Critical caring theory provided the framework for this study.

DESIGN

This study used a descriptive, qualitative design. Semi-structured interviews were conducted with seventeen nurses working in 11 different safety-net primary care clinics within a hospital -based system.

RESULTS

Three major themes emerged. Key findings included the importance of the nurse-patient relationship, the establishment of trust, and a caring, nonjudgmental approach to patients with unmet social needs. Nurses used knowledge of unmet needs to coordinate patient care, provide social support, and work collaboratively with care team members to refer patients to resources within the health care system and in the community.

CONCLUSION

Unmet social needs contribute to adverse health outcomes, and addressing both social and medical needs is critical to eliminating health inequities and reducing health care costs. In this study, primary care nurses described relationships with patients that allowed for the sharing of sensitive information, leading the nurse to identify and address unmet social needs that could impact patient health.

Keywords: unmet social needs, social determinants of health, primary care registered nurse, critical caring theory

Addressing the Social Determinants of Health in Primary Care:

The Role of the Registered Nurse

Dissertation Proposal

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Submitted August 2017

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Introduction

There is growing recognition that addressing the social determinants of health (SDH) is critical to improving health outcomes, reducing health care costs, and eliminating health inequities (Adler et al. 2016; DeVoe et al, 2016; Gottlieb et al., 2017; Taylor et al., 2016). In 2015, \$3.2 trillion was spent on health care in the United States (U.S.) – more than any other industrialized nation (Centers for Medicare & Medicaid Services (CMS), 2017). Despite this, the U.S. suffers from worse health outcomes, including lower life expectancy, increased rates of maternal and infant mortality, and higher rates of obesity (Davis, Stremikis, Schoen, & Squires, 2014; Squires & Anderson, 2015). Additionally, there is an uneven distribution of poor health outcomes within the U.S. population, with those from disadvantaged groups significantly more affected (Adler et al., 2016). Social determinants of health (SDH) are those factors that are nonmedical-such as social environments, and the conditions in which people live, work and play- that impact health (Marmot et al., 2008). The role that social determinants play in health is based on a growing body of evidence (Berkowitz et al., 2015; Link & Phelan, 1995; Marmot et al.; McGinnis & Foege, 1993). It is now estimated that up to 40% of health outcomes can be attributed to determinants such as low income, housing instability, and food insecurity. (World Health Organization (WHO), 2008). These, and other health related social needs contribute to greater incidence of illness, shorter life expectancy, and higher health care spending (Alley et al., 2016; Bachrach et al., 2014; WHO, 2008). A different approach to health care, one that addresses the social determinants, is necessary if we are to successfully improve the health of all populations (Adler et al., 2016; Braveman, Egeter, & Mockenhaupt, 2011; Reutter & Kushner, 2010; WHO, 2008).

There is renewed worldwide attention to SDH (Reutter & Kushner, 2010; WHO, 2016). In the U.S., health care reform, health system transformation, and a focus on population health is fueling this renewed interest. New care delivery models are tasked with improving population health under restructured payment methodologies that reward providers for improved outcomes. These new requirements have incentivized providers to explore partnerships with community organizations to address the economic and social needs of their patients (Sandberg et al., 2014; Taylor et al., 2016).

The primary care setting has been described as the natural choice for addressing SDH and implementing these new care models (DeVoe et al., 2016). Evidence exists that primary care improves health and reduces inequalities in the distribution of health within populations (Starfield, Shi, & Mainko, 2005). Primary care is comprehensive, attending to more than just physical needs, extending to social and community aspects of patient care (Coleman et al., 2016).

Safety net providers, who provide care for large numbers of uninsured and Medicaid patients, are at the forefront of efforts to address SDH (Sugarman et al., 2014). Safety net providers care for vulnerable populations that are low income, have limited English fluency, are clinically complex and often have social needs that contribute negatively to their health.

Nursing has a long history of addressing health problems through a SDH lens. Nightingale focused on the critical role of environment, such as fresh air, nutritious food, and overall cleanliness in promoting and maintaining health. Lillian Wald and other early public health nurses provided care to the poor in tenements, recognizing that crowded conditions, poverty, and lack of education impacted health outcomes (Abbott & Elliott,

2016). Contemporary literature provides examples of how public health and traditional community health nursing settings address SDH (Abbott & Elliott, 2016; Falk-Raphael & Betker, 2012b). However, there is little research focused on the role of the nurse in primary care settings addressing SDH. Nurses employed in primary care- particularly those in the safety net- come into daily contact with patients whose health is impacted negatively from social determinants, and are in a position to provide care to improve health outcomes that may ultimately contribute to reducing health inequities. Addressing SDH is consistent with nursing's social mandate and commitment to social justice, and efforts by the profession in all settings need to be understood and clearly articulated (Reutter & Kushner, 2010).

The purpose of this qualitative descriptive study, therefore, is to explore the registered nurse's role in the primary care setting in understanding and addressing the social determinants of health of their patients. Participants of this study will be recruited from primary care clinics that are considered safety net providers. Critical caring theory will be used to guide the proposed study (Falk-Raphael, 2005a).

The specific aims are to:

1. Explore how RNs in a safety net setting develop awareness of SDH and address patient's social needs related to social determinants of health.
 - a. Individual patient social needs
 - b. Underlying societal/structural issues
2. Describe how SDH data are integrated into nursing assessment and intervention activities, and are shared with other members of the health care team.
3. Describe the challenges primary care RNs face when addressing SDH.

The findings from this study will add to the literature about the role of nurses in primary care settings, further articulates nursing's contribution to addressing SDH, and helps inform nursing education and practice.

Background & Significance

Health Care Costs

The U.S. spends more on health care than any other industrialized nation (Squires & Anderson, 2015). National health care expenditures grew to \$3.2 trillion in 2015, accounting for 17.8% of Gross Domestic Product (GDP). Efforts to address both cost and quality issues were promoted as part of the Patient Protection and Affordable Care Act (ACA). New payment methodologies, referred to as value-based purchasing, provide financial incentives for providing care that is low cost and high quality (Bachrach, Pfister, Wallis, & Lipson, 2014; National Academies of Science, Engineering, and Medicine (NASEM), 2016). These new payment methodologies are spurring rapid changes in the way care is delivered (American Academy of Ambulatory Nursing (AAACN), 2017; Taylor et al., 2016). While there is much uncertainty about the ACA under the current administration, there is broad bipartisan support for value-based payment models, and it is highly likely that issues of low cost and high quality will remain relevant (Cragun, Lazerow, & Zeitlin, 2017).

Some of the new reimbursement strategies have had the unintended effect of penalizing providers that care for large numbers of low-income patients and other vulnerable populations. They have encountered decreased reimbursements reflective of the poorer health outcomes experienced by these groups. Calls for payment readjustments has resulted in CMS devoting resources to explore the social factors that impact health

and examine potential changes to Medicare payment structures for those that care for patients with higher social risks (NASEM, 2016).

Social Determinants of Health

The social determinants of health have been described as “the circumstances in which people are born, grow, live, work, and age” (Marmot et al., 2008, p. 1661). A growing body of evidence links poor health, mortality, and life expectancy with race, gender, and structural social factors like poverty, education, economic policies, resource distribution, and allocation of power (Dickman, Himmelstein, & Woodhandler, 2017; Marmot et al., 2008). Although it has been known for some time that poor social and environmental conditions contribute to adverse health outcomes, it has been a challenge for the U.S. health care system to develop a clear strategy to address them, and SDH have been largely absent from U.S. health policy (Adler, et al. 2016; Taylor et al., 2016).

Good health is a critical component of personal wellbeing and is needed to fully participate in society (Braveman, Egerter, & Mockenhaupt, 2011; NASEM, 2016). SDH can impact not only health by limiting access to care but also by determining the options that individuals and populations have about their health and general life choices, such as where they live, which schools they attend, and which foods they eat (Koh et al., 2016). These “upstream” factors can lead to health inequities-differences in health status and outcomes based on social, environmental, economic, and structural factors (NASEM, 2016).

Responding to concerns about how SDH impact provider reimbursements under value-based purchasing models, CMS commissioned NASEM to review the impact for their Medicare population (NASEM, 2016). Their model considers the following as

social risk factors that may impact health: socioeconomic position; gender; race, ethnicity, and cultural context; social relationships; and residential and community context. Health literacy is also included within their model. While identifying health literacy as an individual risk factor, they acknowledge the role that social risk factors have on health literacy, and the influence of health literacy on health outcomes.

NASEM examined these social risk factors specifically in the context of health care utilization, costs, and outcomes. They note that social risk factors may impact health care through direct and indirect pathways, including health behavior, risk for disease, access to care, satisfaction with care, and quality outcomes. Social risk factors are often correlated, but they consider them to be separate and distinct dimensions (NASEM, 2016).

Socioeconomic position

Socioeconomic position (SEP) is a measure of an individual's position or rank in society based on social and economic factors (Galobardes et al. 2006; NASEM, 2016). NASEM has identified income, insurance status, education and occupation as specific measures of SEP.

Income has been strongly associated with morbidity and mortality (NASEM, 2016). A gap exists between the richest and poorest 1% of the population in the U.S. in terms of life expectancy-a difference of 14.6 years in men, and 10.1 years in women for the years 2001-2014 (Chetty et al., 2016). Income is associated with access to economic resources such as adequate housing, food, and other materials necessary for health (NASEM, 2016). Food insecurity- lack of access to adequate food- impacts as many as fifty million

Americans, and has been consistently found to negatively impact health (Gunderson & Ziliak, 2015).

Insurance status is commonly used as a proxy for income in research studies (NASEM, 2017). Lack of health insurance is associated with increased mortality and lower rates of preventive care (Christopher et al., 2015).

Education has also been associated with better health-related outcomes. Higher educational attainment is associated with increased availability of resources, including food access, health care access, spaces for physical activity, and decreased environmental exposures to toxins (Zimmerman, Woolf, & Haley, 2015).

Occupational status is linked to health outcomes in terms of employment status, workplace exposure to toxins, and psychosocial impacts of stressful work environments (NASEM, 2016). Education, job classification and income have also been linked to cardiovascular outcomes (Mirowsky et al. 2017).

Race, Ethnicity, and Community Context

Race and ethnicity have long been known to negatively impact health (IOM, 2003). For example, racial disparities exist in pediatric asthma and hypertension for black populations. Black children are more than twice as likely than white children to have asthma (Akinbami et al., 2014). Forty percent of black adults have hypertension compared with 30% for whites (Hicken et al., 2014). Attitudes and behaviors of health care providers can also contribute to health disparities, and studies have found that the many health care providers have implicit negative biases towards people of color (Hall et al., 2015). Limited English proficiency has been reported to impact health care, with

poorer access, health status and less preventive care received by those with less proficiency (Shi, Lebrun, & Tsai, 2009).

Gender

Gender differences have been found in research related to health system factors and health outcomes (NASEM, 2016). In a study examining inpatient experiences, women reported worse patient experience of care than men. The effect was larger for patients that had worse self-reported health status and were older (Elliott et al., 2012). Lesbian, gay, bisexual, and transgender (LGBT) individuals have health disparities believed to be largely due to social stigma secondary to their sexual orientation and gender identity (IOM, 2011a). In a study of health disparities, lesbian, gay and bisexual adults 55 years and older were reported to have higher risks of smoking, excessive alcohol use, mental health issues, and disability compared to heterosexual groups. Lesbian and bisexual women had higher risks for obesity and cardiovascular disease, and gay and bisexual men more often lived alone and had poorer physical health (Fredriksen-Goldsen et al., 2013). Gay, lesbian, and bisexual youth have increased odds of suicidal ideation, suicide planning and suicide attempts (Stone et al., 2014).

Social Relationships

Social relationships may impact health through better access to resources and by emotional and social support, particularly for older people (NASEM, 2016). Social connectedness has been found to impact outcomes for both physical and mental health. (Holt-Lunstad et al, 2015). The effect of social relationships on health is often examined within the constructs of marital status, living alone, and social support (NASEM).

Although not identified by NASEM as a social risk factor in their model, some authors view stigma as a key social determinant contributing to adverse health outcomes that lead to health inequities. Stigma, resulting from multiple conditions such as HIV, mental illness, or sexual minority status, negatively impacts health through limiting resource availability, social isolation, stress, inadequate coping behaviors, and the resultant structural social power differentials it causes (Hatzenbuehler, Phelan, & Link, 2013).

Residential and Community Context

A growing body of literature suggests that the neighborhoods where people live can adversely affect health outcomes. Neighborhood level socioeconomic status has been found to contribute to cardiovascular mortality, stroke, coronary heart disease and myocardial infarction (Mirowsky et al., 2017). Variables to be considered for residential context include education, owner occupied housing, income, race, employment and types of housing (Mirowsky et al.). Exposure to neighborhood violence and perceptions of neighborhood safety negatively impact health and perceived health (Assari, Caldwell, & Zimmerman, 2015; Johnson et al., 2009).

Health Literacy

There is a large body of literature documenting the impact of low health literacy on health outcomes and costs (NASEM, 2016). Health literacy is defined as “the degree to which individuals can obtain, process, understand, and communicate about health-related information needed to make informed health decisions” (Berkman, Davis, & McCormack, 2010, p. 16). In a 2011 systematic review, researchers found moderate evidence of higher emergency department use and hospitalizations in those with low health literacy, and a lower use of mammography screening and influenza vaccination.

Additionally, lower health literacy was associated with higher rates for all-cause mortality (Berkman et al., 2011). Lower health literacy has been found to be associated with worse chronic obstructive pulmonary disease (COPD) severity and COPD related health care utilization (Omachi et al., 2012), and in another study, older adults with low health literacy were found to have higher health care utilization and expenditures, and lower satisfaction with care (MacLeod et al., 2017). Nutbeam (2000) highlights 3 levels of health literacy. The highest level -critical literacy- is a necessary component of empowerment, which enables people to overcome key structural societal barriers and address social, political, and environmental determinants of health (Nutbeam, 2000).

Approaches to Addressing SDH

Despite the mounting evidence linking SDH to individual and population health, little is known about how health care systems can best address these needs (Gottlieb et al., 2016a). It is widely believed that if we are to truly improve population health and reduce health inequities, health care systems need to address both social and medical needs (Adler et al., 2016; Braveman, Egeter, & Mockenhaupt, 2011; Gottlieb et al.). Primary care has been identified as an appropriate setting to address SDH, and is often where experiments testing new payment methods and care delivery occur (Alley et al., 2016; Gottlieb et al., 2016a; Coleman et al., 2016; DeVoe et al., 2016; Pinto et al., 2016). Described as the first contact for access to the health care system for most Americans, primary care provides care that is continuous, coordinated, comprehensive, and with a whole person orientation. This orientation calls for attention not just to traditional medical concerns, but also mental health and social needs (Coleman et al.).

Recent literature on SDH and the health care system has focused on the need to routinely screen patients for social risk factors and integrate that data into the patient's electronic medical record (EMR). (DeVoe et al., 2016; Gottlieb et al., 2016b; Pinto et al., 2016). It is suggested that better integration of medical and social data will allow providers to target interventions- including specific health screenings, referrals to outside social agencies and care coordination services- with the goal of improving health outcomes by addressing upstream SDH factors (Gottlieb et al., 2016b).

There is a need to build an evidence base about strategies to address SDH within the health care system. In 2016, CMS announced a new initiative- the Accountable Health Communities (AHC) demonstration project -as one model of care that will evaluate approaches to the social needs of Medicare and Medicaid patients. CMS will invest \$157 million over 5 years, and test several factors that address SDH: screening and referral, community and social service navigation, and partner collaborations with community based organizations (Alley, Asomugha, Conway, & Sanghair, 2016; Gottlieb et al., 2016a).

Nursing is a profession that is well positioned to act on the SDH and advance health equity (Abbott & Elliott, 2016; Lathrop, 2013; Mahoney & Jones, 2013; Martsolf, et al., 2016; Smith, 2007). Some have identified the need to address health inequities as nursing's social and moral mandate (Reutter & Kushner, 2010). Nursing's holistic view of patients, families, and communities builds upon the work of early nurse leaders such as Nightingale and Wald, and is based upon the principles of social justice and advocacy (Abbott & Elliott, 2016; Lathrop, 2013; Mahoney & Jones, 2013; Martsolf, et al., 2016; Smith, 2007). Smith (2007) states that caring is central to nursing practice and theory,

and that “health disparities are, fundamentally, the result of lack of caring within society” (p. 286). In order to address SDH, nurses must move beyond particular patient behaviors, and address the contexts of their lives (MacDonald et al., 2013).

Role of the Registered Nurse in Primary Care

There is increasing attention being paid to the role of the registered nurse (RN) in ambulatory care settings, and in primary care in particular (AAACN, 2017; Anderson, Hilaire, & Flinter, 2012; Haas & Swan, 2014; Oelke, Besner, & Cater, 2014; Smolowitz et al., 2105). The shifting of care to the outpatient setting combined with health care reform has increased opportunities for nurses to broaden their scope and practice in expanded roles (Fraher, Spetz, & Naylor 2015; IOM, 2011b). There is growing awareness that RNs have been underutilized, and that their skills are well suited to impacting health outcomes and building capacity, particularly in primary care (IOM, 2011b; Macy Foundation, 2016).

Approximately 25% of all RNs work in ambulatory settings (AAACN, 2017). The ambulatory nurse role has not been well studied in comparison to acute care nursing roles (Rondelli, Omery, Crawford, & Johnson, 2014). However, that is changing as researchers and nurse leaders seek to identify how best to utilize the RN in these settings, develop an evidence-base for ambulatory nursing practice, and develop ambulatory nurse sensitive indicators (AAACN, 2017; Esposito, Rhodes, Besthoff, & Bonuel, 2016; Haas & Swan, 2014; Swan, Conway-Phillips, & Griffen, 2006). Ambulatory nursing practice is complex, multi-faceted, and requires a broad base of nursing knowledge (Mastal, Matlock, & Stark, 2016). In a recently published position paper, AAACN (2017) highlights the RN role in patient safety, reduction of adverse events, and in transition

management. The authors note the change in care delivery from a traditional medical perspective, to one that is better aligned to nursing's core beliefs, demonstrated by nursing practice focused on population health, health promotion, disease prevention, and a more holistic view of the patient cared for in the community setting. AAACN clearly states that care delivery by ambulatory nurses is influenced by social determinants and other environmental factors (AAACN, 2017).

There is significant variation in how ambulatory nurses are utilized in ambulatory settings, based upon differences in care delivery models, staffing patterns and skill mix (Martinez et al., 2015). Current literature about ambulatory nursing is descriptive, focused on roles and activities. AAACN (2017) describes today's core elements of ambulatory nursing practice as chronic disease management, care coordination, health risk appraisal, disease prevention, and health promotion. In a 2014 study (Rondelli, Omery, Crawford, & Johnson), RNs described their most common activities as patient assessment, nurse advice, message management, and triage. The nurses perceived they impacted patient outcomes by improving patient satisfaction, normalizing lab values, and linking patients to the correct level of medical care. The authors note that little activity was reported on the use of nursing interventions, suggesting that they were not working to their full scope of practice (Rondelli, Omery, Crawford. & Johnson, 2014).

Primary care, an area of ambulatory care, is well suited to RN practice (Bodenheimer & Bauer, 2016; Fraher, Spetz, & Naylor, 2015; Korda & Eldridge, 2011; Oelke, Besner & Carter, 2014). The goal of primary care is to meet most of people's health care needs, including acute (curative), chronic, and end of life care, in addition to health promotion and disease prevention (Coleman et al., 2016; Starfield, Shi, & Macinko, 2005).

Traditionally, the role of the RN in primary care has been task-focused, with many nurses performing clerical duties such as scheduling appointments and rooming patients (Anderson, St. Hilaire, & Flinter, 2012; Conrad & Alfredson, 2016; Oelke, Besner, and Carter, 2012; Somolowitz et al., 2015). These roles are undergoing transformation as care delivery models such as the patient centered medical home (PCMH) are implemented. In a study of 25 high-performing primary care practices, changes in the RN role included less focus on triage, and an active role in the management of patients. Many sites employed a complex care manager- an RN focused on coordinating the care of patients with multiple comorbid conditions and high utilization of hospital and emergency department services. These RNs conducted assessments of both physical and social determinants of health, created detailed care plans, and made home visits (Ladden et al., 2013). In a similar study, RN practice was centered on episodic and preventive care, chronic disease management, and practice operations (Smolowitz et al., 2015). The authors suggest nursing education must better prepare new graduates for primary care practice (Smolowitz et al.). Multiple authors echo this need for both new graduates and existing nurses in primary care (Barton, 2017; Haas & Swan, 2014; Macy Foundation, 2016; Stewart et al., 2015; Wojnar & Whelan, 2016). Currently, specialty certification is available for ambulatory care nursing and for care coordination and transition management, but not specifically for primary care (AAACN).

The transformation into high functioning primary care practices that utilize nurses to their fullest scope can be a challenging process. In a qualitative study examining the change to a team-based model of care, RNs expressed some dissatisfaction with changes in their role, particularly not having the opportunity to get to know their patients as they

had previously. They also reported being pulled in multiple directions, and experienced role ambiguity (Stewart et al., 2015). Several authors note role ambiguity within primary care nursing (Bodenheimer & Bauer, 2016; Fraher, Spetz, & Naylor, 2015; Oelke, Besner, & Carter, 2014; Smolowitz et al., 2015).

The nursing process is central to the practice of nursing, and historically has been used to guide assessment, diagnosis of problems, planning of interventions, and evaluating outcomes of care (American Nurses Association, 2017). It is through this process that nurses are best able to address SDH. Assessments at both the individual and community level need to incorporate SDH to develop nursing interventions that are reflective of the complex medical and social needs of those cared for (Reutter & Kushner, 2010). Care coordination is one activity driven by the nursing process, and is often cited as a nursing role in PCMH care delivery models (AAACN, 2017; Anderson, St. Hilaire, & Flinter, 2012; Bodenheimer & Bauer, 2016; Macy Foundation, 2016; Stewart et al., 2015; Swan & Haas, 2014; Zazworsky & Bower, 2016). In safety net settings, in particular, care coordination offers an opportunity to reduce care fragmentation; address patient's social service needs; track patients who receive outside care; assist with care transitions; and develop a comprehensive plan of care (Horner, Schaefer, & Wagner, 2013). However, this may prove difficult in challenging work environments. In one study of a safety net PMCH primary care clinic, only 15% of nurse's time was spent on care coordination activities, subsumed by other, more traditional nursing tasks (Anderson, St. Hilaire, & Flinter, 2012).

Formerly the domain of public and community health nurses, the focus on population health demands that primary care nurses understand the complex social factors that

impact health, at both the individual and broader community level (Fraher, Spetz, & Naylor, 2015). In addition to knowing how social determinants impact health, nurses need to assess for these factors and know what resources are available to determine appropriate nursing interventions (Mahoney & Jones, 2013). However, there is little research focused explicitly on how primary care nurses routinely address SDH in their practice.

Theoretical Framework

Critical caring is a middle-range, descriptive theory developed by Falk-Rafael (2005a) to guide public health nursing practice. In addition to using the NASEM model of social risk factors as a means of operationalizing SDH, critical caring theory will be used to guide this proposed study, assisting in the development of the interview guide and providing a lens through which to describe the findings. Primary care is transforming to a population-based approach to care, and is well aligned to the core principles of public health (IOM, 2012). Falk-Raphael (2005a) states that public health nursing is considered to be “widely congruent with primary healthcare” (pg. 40).

Critical caring theory is derived from Watson’s caring science, critical feminist theory, and the work of Nightingale, and is solidly grounded in the discipline of nursing. Critical caring is underpinned by the ethics of social justice that was characteristic of early nurse leaders in public health practice, such as Nightingale and Wald (Falk-Rafael & Betker, 2012a; Falk-Rafael & Betker, 2012b). The foundational basis of SDH to the practice of public health nursing and as a source of health inequities is evident in the theory’s evolution (Falk-Raphael, 2001; Falk-Raphael, 2005a; Falk-Raphael & Betker, 2012b).

The theory builds upon earlier work of Falk-Raphael around the concept of empowered caring (2001). She describes the context for empowerment as within the nurse-client relationship that is the focus of nursing practice. Strategies used by nurses to empower their clients include advocacy, developing trust, and focusing on strengths and building capacity (Falk-Raphael, 2001). The integration and extrapolation of Watson's theory of human caring and the concepts of health, caring, holism, and interconnectedness further expanded the theory (Falk-Raphael, 2005a).

Nurse scholars have described social justice as central to nursing practice, and it is figured prominently in critical caring theory (Thompson, 2014; Falk-Raphael, 2005a). Falk-Raphael highlights the role that social inequalities have in contributing to health inequities. From a feminist critical theory perspective, Falk-Raphael notes that external forces have impacted the scope of practice for public health nurses, dominated by biomedical approaches, hierarchical employment structures, and economic factors. Recent changes to the Canadian public health system have resulted in less autonomy, isolation from peers, and more specialized-program specific roles for public health nurses. Critical caring theory offers "a means for public health nurses to center their practice in their own rich nursing historical legacy and disciplinary knowledge" (Falk-Raphael & Betker, 2012b, p. 316).

Key Components of Critical Caring Theory

Critical caring theory is visually and metaphorically depicted as a tree. The roots provide stability and nourishment, and are strongly grounded within the nursing discipline by Watson's caring science, Nightingale's work, and critical feminist theory. The trunk denotes the essential core elements of the theory: preparing oneself to be in

relation; developing and maintaining trusting-helping relationships; and the essence of critical caring, described as a way of being, knowing, choosing, and doing. The trunk supports the branches, which energizes the theory through 5 areas of praxis: using a systematic and reflective approach; engaging in transpersonal teaching-learning; providing, creating, and maintaining supportive and sustainable environments; meeting needs and building capacity; and being open and attending to the spiritual-mysterious and existential dimension. The 5 praxis areas and the theory's core elements combine to form 7 carative health promoting processes (CHPPs) that define the core of public health nursing practice (Falk-Rafael, 2005a; Falk-Rafael & Betker, 2012b). These carative processes are derived from Watson's science of caring (Falk-Raphael, 2005a; Appendix A).

Methods

I will use a qualitative descriptive design to describe how primary care nurses that work in safety net primary care clinics become aware of and address the SDH of their patients as part of their nursing practice. Qualitative description is a research methodology that is naturalistic, stays close to the data, and allows for rich description of an experience (Sandelowski, 2000; 2010; Sullivan-Bolyai, Bova, & Harper, 2005). It has been identified as a useful and appropriate method of inquiry for those conducting research in health services (Sandelowski, 2000), particularly issues of health disparities (Sullivan-Bolyai, Bova, & Harper, 2005).

Specifically, this study will explore if primary care nurses assess SDH when developing plans of care for their patients; if and how SDH data about patients is used in developing nursing interventions; how SDH data is documented and shared with other

care team members; and explore the challenges faced by RNs when addressing SDH. Data will be collected through semi-structured, face-to-face interviews with participants.

Sample and setting.

Purposive sampling will be used to recruit registered nurses for this study. Recruitment and data collection will be conducted simultaneously, and will continue until informational redundancy is achieved. An initial target of 20 participants is planned. A sample size of 20 is within the recommended range of 10-50 participants for qualitative studies (Sandelowski, 1995). Given the demographics and characteristics of RNs working in the sites participating in this study, it is expected that the sample will be fairly homogeneous.

The setting for this study will be primary care clinics that are part of the Cambridge Health Alliance, an integrated, safety net public hospital system in the Boston metro-north area. This hospital system consists of 2 acute care hospitals, 3 school-based health centers, 12 primary care clinics and multiple specialty clinics, and is spread out over 5 urban communities (Cambridge, Somerville, Malden, Everett, Revere). The hospital system shares a robust electronic medical record platform (EPIC) in both inpatient and ambulatory settings.

Eligible participants will be recruited from the 12-individual primary care clinics. Primary care at these clinics is delivered by providers with backgrounds in family medicine, internal medicine, and pediatrics. Eight of the clinics provide primary care for both pediatric and adult patients, 2 exclusively serve pediatric populations, and 2 clinics are adult only, internal medicine practices. Each clinic is a NCQA level 3 recognized PCMH, with a team-based care delivery model. The clinics provide primary care services

for a total panel size of approximately 110,000 patients. The 12 clinics differ in size based on number of providers and annual patient visits. Several practices are small (10,000-20,000 annual visits); most are moderate in size (20,000-40,000 annual visits); and 2 clinics are large with > 40,000 annual visits. The number of registered nurses employed at each clinic is variable, based on size, and ranges from 4 full time equivalent (FTE) registered nurses for smaller clinics, to up to 8 FTEs at larger ones. All clinics employ licensed practical nurses (LPNs) to provide the majority of task-based care such as immunizations, with the goal that RNs focus largely on chronic disease management, care coordination, and triage. There may be some cultural and ethnic differences in the patient populations cared for at each clinic based on immigration patterns, however, the patients served are homogenous in terms of income and insurance status- most patients are low income and have publicly funded health insurance (Medicaid and Medicare). The hospital system is considered to be a core safety net provider based on their public hospital status and mission, and is recognized by the state and federal governments as such (F. McCaughan, personal communication, 2017).

Inclusion and exclusion criteria.

Inclusion criteria includes the following: registered nurse licensure, ability to understand English, employed in a staff nurse position in a safety net primary care clinic, and a minimum of 2 years of experience in primary care nursing. Exclusion criteria consists of licensure as a licensed practical nurse, advanced practice nurse, staff nurses employed as Complex Care Managers, nurses employed in a non-staff nurse capacity, and less than 2 years of primary care experience. Nurses with a diploma, associate's, or baccalaureate or higher degree in nursing are eligible to participate.

Recruitment

I will meet with the nurse managers, nurse educators, and the nurse director responsible for the primary care clinics to explain the purpose of the study and the plan for data collection. The Cambridge Health Alliance Senior Director of Primary Care has agreed to send an email (Appendix B) to all registered nurse staff nurses working in the Cambridge Health Alliance 12 primary care clinics informing them of the study, the eligibility criteria, and my contact information. This will ensure that all staff nurses who meet the inclusion criteria will have an equal opportunity to participate if they choose to. Any staff nurses interested in the study may contact me directly for additional information. I will follow up via email and/or phone call to those that express interest in participating. After validating that they meet the inclusion criteria, we will set up a mutually convenient date, time, and private setting for the informed consent process and to conduct the interview. All interviews will be conducted outside of the nurses scheduled work hours. Participants will be informed that their participation is entirely voluntary and will be kept confidential and their decision to participate or not participate will not affect their employment in any way. To increase the heterogeneity among the sample I will use maximum variation sampling and if necessary, I will purposely target nurses who express interest in participating who come from different clinics, different educational backgrounds, and have different years of employment as a registered nurse than previous participants. I will use an inclusion criteria checklist to capture this information (Appendix C). All participants will be entered into a drawing with a chance to win an Apple iPad™.

If I have not received an adequate response after 3 weeks, the Cambridge Health Alliance Senior Director of Primary Care, will send out a second email informing the primary care registered nurses about the opportunity to participate in the study. An additional recruitment effort will use a snowball technique. Each participant will be given 3 index cards describing the purpose of the study and my contact information and they will be asked to share a card with other primary care registered nurses that they work with (Appendix D). If an adequate pool is not obtained through these methods, further recruitment will be pursued at the Boston Medical Center Primary Care Clinics, a large safety net health system in Boston.

Data collection

I will collect data during scheduled face-to-face, one-on-one interviews with participants. Interviews will be scheduled for a mutually convenient time outside of the participants scheduled work hours and at an agreed upon private location convenient for the participant. It is anticipated that interviews will last approximately one hour. I will give each potential participant a Fact Sheet (Appendix E) that describes the study purpose, requirements of participation, risks of participation, the voluntary nature of participation, and efforts to protect confidentiality. Verbal consent will be obtained from the participant at the initiation of each interview, given the minimal risk of participating in the study.

Interviews will begin with an explanation of the study's purpose and will include a definition of social determinants of health. An example(s) will be provided so that the participant is clear of which types of experiences I will be asking about. (Example- what kinds of things do you do when you find out one of your patients is unable to fill a

prescription because he can't afford to?). A semi-structured interview guide will be used to provide some structure to the interview process, but interview questions will be open-ended (Appendix F). Open-ended probes will be used to illicit further information from the participant when indicated. SDH will be operationalized based on the social risk factors identified by NASEM (2017) for consideration with Medicare populations (SEP, gender, race, ethnicity, social relationships, residential context, and health literacy). While these particular factors were chosen for a Medicare population, they are consistent with other SDH descriptions reported elsewhere (Marmot et al., 2008).

All interviews will be digitally recorded. At the end of each interview, the participant will be asked to fill out a demographic data sheet, which will include information about number of years of RN experience, number of years working in primary care, educational preparation, age, gender and ethnicity (Appendix G). Field notes will be written immediately after each interview, and will include observations, initial first thoughts, impressions, and reflections that were gained during the interview process, and may include initial analysis of data through coding.

Data management

I will maintain study participant confidentiality by assigning each participant a pseudonym. Pseudonyms will be chosen with an online random name generator (<http://random-name-generator.info/random/?n=10&g=3&st=2>) as each interview is completed. Participants will not be informed of their assigned pseudonym, and pseudonyms will not start with the same letter or be similar to the participant's real name. Digital recordings, demographic forms, field notes, and transcriptions will be labeled with the pseudonym. Interview data will be professionally transcribed, and stored

electronically on the University of Massachusetts Medical School (UMMS) secure R drive. Access to the file will be restricted to my dissertation committee members and myself. I will review all transcripts for accuracy against the original digitally recorded interview. Field notes will be kept in a locked file cabinet until entered electronically into the secure research drive at UMMS. The digital recordings of interviews will be kept in a locked cabinet until transcription verification is complete, at which time they will be destroyed with double deletion. The log of participant's real names and their assigned pseudonym will be stored separately from other study materials in a locked cabinet. This log will be destroyed when data analysis is complete and no further contact with participants is anticipated.

Data Analysis

Data obtained through the interview process will be analyzed through qualitative content analysis, a commonly used method in qualitative studies. (Hsieh & Shannon, 2005). Specifically, conventional content analysis will be used as described by Hsieh and Shannon (2005). Categories and code names flow from the data, without any preconceived categories. Data analysis in qualitative studies is an iterative and emergent process, with data collection, preparation, analysis and interpretation occurring simultaneously at times (Sandelwoski, 1995). Meaning emerges from the data as it is organized through the process of coding and developing themes.

After proofing transcripts against the digital recording, transcripts will be read multiple times to immerse myself in the data and develop an overall impression of the whole of the interview. Transcripts will then be read broken down by section. Notes will be taken to record thoughts, impressions and initial codes that emerge from the data. The

coding process is an integral part of organizing data (Hsieh & Shannon; Sandelowski, 1995). Codes will be labeled, and then sorted into categories organized as themes.

Descriptive statistics (SPSS) will be used to analyze demographic data of the participants.

Trustworthiness

Trustworthiness is a validation strategy used in qualitative research. Lincoln and Guba (1985) identified four criteria for developing trustworthiness: credibility, transferability, dependability, and confirmability.

Credibility is one of the most important factors in developing trustworthiness, and includes techniques to ensure that the results obtained in a study are true. Strategies to maintain credibility for this study will include peer review of findings and debriefings with dissertation committee members. Two RN participants will be asked to participate in member checking by reviewing the researcher's preliminary data interpretations.

Transferability refers the ability to demonstrate that the findings from this study can be applicable in other contexts. Purposive sampling, and rich, vivid description of the data and the context of the study will achieve this. Dependability refers to consistency in findings from the study over time, and will demonstrated by the use of an audit trail to ensure that all study processes and procedures are appropriately represented.

Confirmability refers to objectivity- assurances that findings of the study emerge from the data, and not from the researcher. Regular debriefings with committee members will address these concerns as part of the confirmability audit (Creswell, 2013; Lincoln & Guba, 1985). Reflexive journaling will be used to record the personal thoughts and feelings of the researcher throughout the study. Field notes will record interview

observations and all study activities. These documents will be considered part of the audit trail.

Limitations

There are several limitations of this study. The small sample size limits the applicability of the findings of the study to other settings. Another factor limiting applicability to other settings is that participants will be recruited from clinics that are part of one organization. While there is a different working culture associated with each individual clinic, and clinics are located in different geographic locations, the overall processes of care are similar; clinics share an executive leadership team; and have a shared mission, value system, and strategic plan. CHA is a safety net provider and caring for vulnerable populations is its core mission. This may mean that patients that the nurses in this study encounter are poorer, more likely to be insured by Medicaid, and have more social needs than patients that are cared for by non-safety net providers. Additionally, safety net providers may be reimbursed under different payment methodologies than private, physician office practices do. This includes the Medicaid waiver process, which encourages and tests innovative care delivery models that are more likely to collect SDH-level data from their patients.

Ethical Consideration and Protection of Human Subjects

Approval for this study will be obtained through an interagency agreement between the CHA Institutional Review Board (IRB) and UMMS. Given the nature of the study, it is anticipated there will be minimal risk to participants. Participants may experience some degree of emotional or moral distress when recalling and describing events in which they felt they were unable to effectively help patients with their social and/or medical needs,

or by the emotional intensity of some situations. Emotional support will be provided to participants as needed.

Conclusion

The role of nursing in addressing SDH is foundational to the discipline and is consistent with nursing's social and moral mandate. A focus on SDH offers an alternative and necessary approach to addressing the high costs, health inequities, and poor health outcomes that have not been addressed in our traditional health care delivery model. Using critical caring theory as a guide, this study will provide a description of primary care nursing practice in addressing SDH. Findings from this study can inform practice, education, policy and research, and can help to delineate the nurse role in addressing SDH in primary care, safety net setting

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Summary of Changes from the Proposal

The Role of Primary Care Nurses in Addressing Unmet Social Needs

This study used a qualitative descriptive design to explore how primary care registered nurses develop an awareness of and address unmet social needs in their patients. Minimal changes to the study were made from the original proposal.

- Interviews with study participants were to have been conducted in person. Because of difficulty in scheduling face-face interviews, a modification was made to also include telephone interviews, based on nurse preference.
- The title of the study changed from the original proposal. The term “unmet social needs” was used instead of “social determinants of health”. This change reflected contemporary language in some of the health services literature.

Dissertation Defense Slides

The Role of Primary Care Nurses in Addressing Unmet Social Needs



SUSAN NATALE MS, RN
AUGUST 22, 2018
UNIVERSITY OF MASSACHUSETTS MEDICAL
SCHOOL
GRADUATE SCHOOL OF NURSING

Background & Significance



- U.S. spends the most on health care and has some of the worst health outcomes compared with other industrialized nations
(Papanicolas, Woskie, & Jha, 2018)
- Growing health inequities
- Social Determinants of Health
 - Poverty, living conditions, housing instability, food insecurity, stigma, racism *(Marmot et al., 2008)*
- Growing recognition of need to address social determinants of health
 - Unmet social needs: nonmedical needs

Background & Significance



- **Focus on primary care settings**
 - Comprehensive, holistic, care coordination
 - Population health
 - Team-based care delivery models
 - ✦ Patient Centered Medical Home (PCMH)
 - ✦ Enhanced roles for RNs

Background & Significance

- **Social mandate for nursing**
 - Nightingale, Wald
- **Social Justice**
- **Historically, unmet social needs addressed by public health and community health nurses**
- **Nurses need to have awareness of broader social context**
- ***Gap***
 - Little known how primary care nurses address unmet social needs

Primary Care RNs




- Limited research on ambulatory nursing roles
- Diversity in primary care practices
- Team-based care offers opportunities for RNs to work at full scope of practice

(Bauer & Bodenheimer, 2017; Flinter et al., 2017; Fraher, Spetz, & Naylor, 2015)

- Independent nurse visits, chronic disease management, patient education, use physician approved protocols to manage patients, care management, care coordination

(Flinter et al., 2017; Ladden et al., 2013; Smolowitz et al., 2015)



Purpose	Specific Aims
<p>Explore the role of the primary care RN in addressing unmet social needs.</p>	<ul style="list-style-type: none">• Explore how RNs in a safety net, primary care setting develop an awareness of and address patient's unmet social needs.• Describe how information about unmet social needs are integrated into nursing assessment and intervention activities, and are shared with other members of the health care team.• Describe the challenges primary care RNs face when addressing SDH.

Methods



- **Design**
 - Qualitative description
 - Stays close to data, rich description (*Sandelowski, 2000*)
- **IRB approval through UMMS**

Methods



Inclusion Criteria

- Registered Nurse licensure
- English speaking
- Employed as a staff nurse in safety-net primary care clinic
- Minimum of 2 years primary care experience as RN

Exclusion Criteria

- Advanced practice nurses
- RNs employed as complex care managers

Theoretical Framework



- **Critical Caring Theory**

Falk-Raphael, 2005

- Middle range theory
- Developed to guide public health nursing practice
- Watson's caring science, Nightingale's work, Critical feminist theory
- Strong focus on social justice
 - ✦ *Critical* caring leads to advocacy at a sociopolitical level

Recruitment & Data Collection



- **Purposive sampling**
- **12 primary care clinics**
 - Integrated public hospital, safety-net health system
 - All NCQA Level 3 recognized PCMHs
- **Leadership support**
- **Email sent to all primary care nurses inviting participation in study**
 - 2 additional emails sent over the course of 5 months

Recruitment & Data Collection



- **Fact sheet sent to participants prior to interview**
- **Individual interviews**
 - Semi-structured interview guide
 - Length: 45 minutes- 1 hour
 - 5 interviews in person; 12 via telephone
 - Verbal consent obtained prior to interview
 - Participant demographics after interview
 - Definitions of social determinants of health, nonmedical, social needs reviewed

Recruitment & Data Collection



- Digitally recorded
- Professionally transcribed
 - Transcripts reviewed for accuracy
- Field notes immediately after interviews
- Recruitment and data analysis were conducted simultaneously
 - Informational redundancy achieved

Data Analysis & Management



- Conventional content analysis (*Hsieh & Shannon, 2005*)
 - Coding and categories flowed directly from interview data
 - Data immersion
 - Interview text coded, labeled, sorted into categories
 - Categories organized as themes

Data Analysis & Management



- **Trustworthiness** (*Lincoln & Guba, 1985*)
 - **Credibility**
 - ✦ Debriefings with committee members
 - ✦ Member checking
 - **Transferability**
 - ✦ Purposive sampling
 - ✦ Rich description of data
 - **Dependability**
 - ✦ Audit trail
 - **Confirmability**
 - ✦ Reflexive journaling, field notes

Participant Demographics (N=17)

Characteristic	n (%)	Characteristic	n (%)
Gender		Education	
Female	17 (100)	Associates	4 (24)
		Bachelors	11 (65)
		Masters	2 (11)
Race/Ethnicity		Clinic Type	N=11
White	13 (76)	Pediatrics	1 (9)
Black	3 (19)	Family Medicine	1 (9)
Hispanic	1 (5)	Internal Medicine	2 (18)
	Mean (Range)	Combined peds, IM, FM	7 (64)
Age in years	55 (36-71)		
Years as RN	23 (3-44)		
Years in Primary Care	7 (2-24)		

Findings



- **3 Themes**
 - The Role of the Primary Care Nurse: *To Know the Whole Person*
 - Identifying Unmet Needs: *Caring Enough to Ask the Next Question*
 - Addressing Unmet Needs: *Putting the Pieces Together*

The Role of the Primary Care Nurse: *To Know the Whole Person*



- Participants provided a rich description of their practice and who they cared for.
- Spoke of their patients with empathy, respect, affection
- Subthemes
 - Who I Care For
 - I am Your Nurse

Who I Care For



- Diverse, multi-cultural patient population
- Commonly cared for patients with unmet social needs typically seen in safety-net settings

Who I Care For



- Nurses understood how social factors impacted patient health

“So if you have small children at home and you’re supposed to go to appointments and you need to bring everyone with you because you don’t have child care and you need to take public transportation, it’s a burden. And people don’t always get places because of that.”

I Am Your Nurse

- **Nursing practice**

- Telephone and in-person
- Patient education
- Chronic disease management
- Transitions management
- Care coordination
- Triage
- Medication management

- **Evolution of Practice**

- Team-based model
 - ✦ Strongly identified with team
- Addition of staff and services
 - ✦ LPNs

I Am Your Nurse



- Nurse-patient relationship

“A lot of my relationships are, I don’t want to say personal, but the patients feel that way about me—we develop like a friendship and a nursing role, and they look to me for guidance; they trust me.”

- Knowing their patients

“I know pretty much almost everything about them and most patients are willing to share that information when they get to a point with you, and I think that enters into the type of care that that you give and the type of conversations you have with people, to know the whole person versus just what they’re calling about on any given day.”

I Am Your Nurse



- **Connecting**
 - Human, person-person
 - Established role as nurse

When patients are brand new, I say to them “I’m your nurse. If you need anything, if you call up and somebody says you can’t see Dr. P for 3 months, I say just tell them you need to talk to the nurse if you’re not feeling well and I will get on the phone. We’ll always get you in.”

Identifying Unmet Needs: *Caring Enough to Ask the Next Question*



- Nurses learned of unmet social needs in several different ways
- Subthemes:
 - Creating a Sharing Space
 - Asking the Right Questions

Creating a Sharing Space



- Patients need to feel “comfortable”
 - Patients proud, and embarrassed about needs
- Key elements:
 - Building trust
 - ✦ Following through
 - Nonjudgmental approach
 - Listening
 - Caring

“They want to hear a caring voice, that you understand their concerns, feel what they’re going through and that you’re caring enough to want to help”.

Asking the Right Questions



- Easing questions into the conversation
- Following clues
- Skill and patience

“I’ve been doing this for a while now-I’m getting a feel for what spells trouble, what needs more intervention, what question I might ask next”.

- **Caring**

“You have to be caring enough to ask the next question and the next.”

“...its caring and patience- its not all intellectual.”

Addressing Unmet Needs: *Putting the Pieces Together*



- Nurses worked collaboratively with others to address other needs.
- Nurse as problem solver
- Subthemes:
 - Working with the Team
 - Navigating the challenges

Working with the Team



- **Nurses commonly referred patients to other team members**
 - Financial services, CHW, pharmacy, mental health providers, complex care managers
- **Resources**
 - Cab vouchers, gift cards, clinic food pantries
 - Pharmacy
- **Documentation**
 - No consistent way to document unmet social needs

Working with the Team



- **Coordination of Care**

“I said can you put him in front of the TV-Brazil was playing the World Cup. Could you please get him in front of the TV for the game tomorrow? I said he’d love to see that. He was happy. He watched the game on the TV. His kids came to see him and brought their children on Sunday for Father’s Day and she called me, she called me on Monday...she said it was like a love fest, they were hugging him and everything. And he didn’t wake up Monday morning.”

- **Providing support**

“I’ll listen to them because that’s why I’m here..”, “...just encouraging people and telling them they are doing a great job...” “Sometimes the patient may just need a kind word.”

Navigating the Challenges



- Need for more resources
- Time
- Complexity of the health care system
- Insurance issues
- Lack of funding for social programs
- Lack of prevention efforts
- Unable to meet needs

“I was so pissed when I got out of that room with her that I picked up the phone and I called the governor’s office and I got some guy on the phone, and I go look... I’m going to tell you what happened here today. I said I am so angry...I know he doesn’t care, but you go back and tell him that when this person has a stroke because she can’t pay for her blood pressure pills, (the state) is going to pay for it.”

Discussion



- Primary care nurses routinely address unmet social needs
- Lack of systematic, consistent approach to identifying unmet social needs
- Current research, demonstration projects focused on the use of standardized, routine screening for unmet needs
(Andermann, 2018; Byboff et al., 2017; LaForge et al., 2018; Pinto et al., 2016)
- Lack of systematic, consistent approach to identifying unmet social needs
- EMR tools to integrate social data
(LaForge et al., 2018; Pinto et al., 2016)
- Community partnerships *(Pinto et al., 2016)*
- Role of other team members
 - CHW, Complex Care Managers (RNs and Social Workers), other staff

Discussion: Framework



- **Theoretical Framework: *Critical Caring***
 - Emphasis on trust, being nonjudgmental, respect, following through consistent with theory's developing and maintaining a helping-trusting relationship.
- **Advocacy**
 - Nurses identified themselves as strong advocates
 - Ambulatory Nurse Practice Council
 - Contacting representatives, outreach Medicaid officials
- **Prominence of caring**

Discussion



- **Social justice**
 - *Critical* caring leads to advocacy and social justice action at the sociopolitical level
- **Nurses able to identify structural issues that contribute to unmet social needs**
 - Poverty, little education, low-paying jobs, immigration
- **Most nurses not involved with advocacy at sociopolitical level**
- **Discussion of integration of public health and primary care** *(IOM, 2012)*

Implications



- **Primary care nurses have knowledge of patient unmet social needs**
 - Nurse should be involved in system-level efforts to integrate unmet social needs into clinical processes
 - × Developing of tools for screening, workflows
- **Role of team members**
 - *Which social domains should the nurse be involved with?*
 - × Medication management, complex medical issues, arranging outside services for medical need
- **Advocacy at sociopolitical level**
 - Education, involvement with professional organizations, collaboration with others
 - × Within the profession and with other disciplines
- **Research**
 - Nursing education
 - Practice

Limitations



- Participants came from one organization located in the Northeastern U.S.
- Participants all female
- Only one nurse from a pediatric setting included
- *Strengths*
 - All clinics were NCQA Level 3 PCMHs
 - Contemporary, team-based nursing practice

Conclusions



- Unmet social needs contribute to adverse health outcomes.
- Health care system needs to address both social and medical needs.
- Nurses contribute to these efforts.

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 - Chair: Nancy Morris PhD, RN
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 - Diane Lancaster PhD, RN
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- **Colleagues**
- **Family & Friends**

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Dissemination Plan

The primary description of this dissertation work was submitted as a manuscript on *September 8, 2018* to *Advances in Nursing Science* for review and consideration for publication.

APPENDICIES

Appendix A

Critical Caring Theory

Carative Health Promoting Processes (CHHP)

CHPP I-Preparing self

This process refers to the nurse being prepared to be in relation with others, characterized by clinical expertise. Falk-Raphael (2005a) notes that this expertise comes from multiple ways of knowing-personal, aesthetic, ethical, and sociopolitical.

CHPP II-Developing and maintaining a helping trusting relationship

The second CHPP describes the basis of developing relationships with clients. It includes the relationship factors of trust, being helpful, authentic and respectful, and the importance of “truly listening” (Falk-Raphael, 2005a, pg. 43).

CHPP III-Using a systematic, reflexive approach

This CHPP refers to the need for comprehensive assessment, a necessary component before improving health (Falk-Raphael, 2005a).

CHPP IV-Engaging in transpersonal teaching-learning

Transpersonal teaching-learning within a critical caring approach is active, and incorporates both caring and the empowerment associated with critical social theory. Learning is enhanced by exploration of meaning and consciousness raising (Falk-Raphael, 2005a).

CHPP V-Contributing to the creation of supportive and sustainable physical, social, political, and economic environments

This CHPP focuses on the environmental determinants of health, and acknowledges both the upstream and downstream factors that nursing can impact. It reinforces the complexity and interconnectedness of all determinants of health, consistent with an ecological perspective (Falk-Raphael, 2005a). Income inequality, in particular, is discussed as a contributor to health inequalities (Falk-Raphael, 2005b). Falk-Raphael (2005b) also describes this CHPP as “particularly suited to enacting Nightingale’s legacy of political action as an expression of caring” (pg. 213). She further states that nurses are morally obligated to advocate at the political and policy level.

CHHP VI- Meeting needs and building capacity of communities and their members

This CHPP describes the nurse’s role in meeting both basic and social needs of individuals and communities, providing care for the vulnerable, and the need to participate in community development (Falk-Raphael, 2005a).

CHPP VII-Being open and attending to spiritual –mysterious and existential dimensions

CHPP VII refers to the need to allow communities to make their own meaning out of events and situations, recognizing that this allows healing in a way different than traditional approaches (Falk-Raphael, 2005a).

Appendix B

Text of Recruitment Email to CHA Nurses

Hello,

My name is Susan Natale, and I am a doctoral student at the University of Massachusetts Worcester, Graduate School of Nursing. I am inviting you to participate in a research study I am conducting because you are a registered nurse working in a primary care clinic. The purpose of my study is to explore how RNs in the primary care setting become aware of and use information about social determinants of health to care for their patients. Social determinants are those factors such as lack of adequate health insurance, food insecurity, unreliable transportation, or lack of a social support system.

Participation in this study involves a one-on-one private interview with myself to discuss your experiences with these types of issues. The interview will take place at a mutually convenient time and place outside of your normal working hours. Your participation is voluntary and confidential, and the information you provide will not be shared with anyone at CHA, including management. Your participation will not affect your employment status at CHA in any way. The Institutional Review Board at the University of Massachusetts Medical School has approved this study.

To be eligible for this study, you must be a registered nurse employed in a staff nurse position and have at least 2 years of primary care experience. Because I am interested in the experiences of nurses employed in regular staff nurse positions, complex care managers are not eligible to participate. If you complete an interview, you will be entered into a drawing with other participants for a chance to win an iPad™.

If you are interested in learning more, I would love the opportunity to discuss the study with you further. I can be contacted at SusanNatale1@gmail.com, or by cell at 857-998-3018. I am happy to answer any questions you may have.

Thank you for your consideration.

Sincerely,

Susan Natale MS, RN

Appendix C

Inclusion Checklist

- Registered Nurse
- At least 2 years experience in primary care
- Employed in a staff nurse role in primary care clinic

Education:

- Diploma
- Associate's degree
- BSN
- Masters
- Other _____

Clinic: _____

Number of years of RN experience: _____

Gender:

- Female
- Male
- Other

Appendix D

Recruitment Index Card Text

Share your experiences caring for patients

Are you interested in participating in a research study involving primary care nurses here at CHA? I am conducting a study to better understand how nurses obtain and use the information they learn about the social needs of their patients to help the patients with their health care needs. These factors-such as low income, food insecurity, and lack of transportation can impact patient's health. I would like to meet with you for an approximate 1 hour interview to hear your stories and learn more about the challenges you face when you provide nursing care. Please reach out if you are interested or would like to learn more. As compensation for participating in this study, you will be entered into a drawing with other study participants to win an Apple iPad™

Sue Natale MS, RN

SusanNatale1@gmail.com

857-998-3018

**Appendix E
Fact Sheet**

**UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL
COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS IN
RESEARCH**

FACT SHEET

- A. You are invited to participate in a research study called *Addressing the Social Determinants of Health in Primary Care: The Role of the Registered Nurse*.
- B. The purpose of this study is to explore how RNs working in primary care, safety net clinics obtain and use information about patient's social determinants of health. Social determinants of health are the nonmedical, social needs of patients such as difficulty paying for prescriptions, lack of transportation resulting in difficulty getting to the clinic for care, or lack of a social support system.
- C. The research requires a one-time, face-to-face interview with the researcher. The interview will last approximately one hour, and will take place at a time and private place convenient for you.
- D. As part of this study, you will be asked to talk about your experiences caring for patients who have social needs, including how you learned about their needs, how you used that information to provide care, and what some of the challenges are caring for patients with social needs. As compensation for participating in this study, you will be entered into a drawing with other study participants to win an Apple iPad™
- E. Recordings of interviews will be transcribed and assigned a pseudonym. Once reviewed for completeness, the recordings themselves will be permanently deleted. All study materials (notes, transcripts, demographic data) will be kept locked in a secure file.
- F. There is minimal risk to participating in this study.
 - a. You may experience some emotional distress when discussing experiences where you felt you were unable to effectively provide the care a patient needed.
 - b. One of the risks is that your personal information could be lost or exposed. This is very unlikely to happen, and we will do everything to make sure that your information is protected.
- G. Participation is voluntary. You do not have to be in this study, and if you do join, you can stop or leave at any time. In either case there are no penalties and this will not impact your employment at the Cambridge Health Alliance in any way.
- H. We will try to limit access to your personal information to people who have a need to review this information. We cannot promise complete privacy. The UMMS Institutional Review Board and other representatives of UMMS may see your information. The researcher's dissertation committee will have access to information. Your participation in this study will be kept confidential, and your

private information will not be shared with anyone at the Cambridge Health Alliance.

- I. If you have any questions, concerns, or complaints, or think that the research has hurt you, you can talk to Nancy Morris, PhD, Chair of the researcher's dissertation committee at the University of Massachusetts Worcester Graduate School of Nursing. She can be reached at Nancy.Morris@umassmed.edu or 508-856-3661. This research has been reviewed and approved by an Institutional Review Board. You can reach them at (508) 856-4261 or irb@umassmed.edu if you would prefer to speak with someone not associated with the study or have questions about your rights as a research subject.
- J. The University of Massachusetts Medical School does not provide funds for the treatment of research-related injury. It is highly unlikely, but if you are injured as a result of your participation in this study, treatment will be provided. You or your insurance carrier will be expected to pay the costs of this treatment. No additional financial compensation for injury or lost wages is available. You do not give up any of your legal rights by participating in this research.

Appendix F

Interview Guide

1. Tell me about your relationships with your patients.
 - How do you best develop relationships with your patients (in person clinic visits, telephone calls, long-standing relationships with providers)?
 - How important is trust in your relationships with patients?
 - How do you get to “know” your patients?
2. Tell me about some of the challenges your patient’s experience in terms of social issues or needs that impact their health care.
 - Examples- transportation, insurance issues, food insecurity, social support, neighborhood/living conditions, language barriers, immigration status, etc.
 - Do you have a story to share about a particular patient?
 - Can you share an experience in which you had to address a patient’s social needs and how you went about that?
 - What are the most common social needs that you become aware of? How do you become aware of these needs?
3. Tell me how you include what you know about a patient’s social needs into your nursing assessments and plans for the patient.
 - How do you share information about patient social needs with other members of the health care team?
 - Tell me about how your care team discusses and communicates about patient social needs
 - Are patient social needs routinely discussed at care team meetings?
 - Who on the team usually knows the most information about patient social needs?
 - Tell me how you document information yourself or find information in EPIC about your patient’s social needs.
 - What kinds of things do you do for these patients? Patient education, referrals to community resources, etc.
4. What opportunities do you see in your care setting for nurses to be more involved in helping patients meet social needs?
 - What resources would you need to help you to do this?
 - What are some of the barriers to caring for patients with social needs?
 - Tell me about about some of the larger problems in our society that you think impact your patients.
 - Tell me about any involvement you may have with any community or advocacy groups or professional organizations that work to address some of these issues? Any voluntary work, perhaps with CHA, in working within communities.

5. Can you tell me about an experience caring for a patient in which you felt good about having helped them with getting resources for complex care or social issues?

