INCORPORATING HEALTH LITERACY INTO FAMILY NURSE PRACTITIONER PRACTICE: AN INTEGRATIVE LITERATURE REVIEW

by

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PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING: FAMILY NURSE PRACTITIONER

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

August 2012

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ABSTRACT

In Canada, primary health care (PHC) has been endorsed by numerous reports and health care researchers as a mechanism for improving the health and well-being of all Canadians. The family nurse practitioner (FNP) plays an important role in the provision of PHC in Canada. As relatively new providers of primary health care, FNPs have struggled to demonstrate how their patient-centred focus can contribute to positive patient outcomes. The Canadian Nurses Association describes competencies that ensure that FNPs employ a patient-centred focus, but missing is a conceptualization of a framework that offers up a way for FNPs to describe and measure those competencies that allow them to practice in a way that is patient-centred. The concept of health literacy offers a means to address this gap.

An integrative literature review was conducted to examine how FNPs can incorporate health literacy into their practice in order to demonstrate their patient-centred competencies and thereby make an impact on patient outcomes. The review of the literature revealed that working from a framework of health literacy promotion offers opportunities to describe and better provide the value-added, public health component of FNP practice, how this component relates to patient-centredness, and how by employing this framework, FNPs can impact patient outcomes.

While there is not yet consensus within the literature as to what health literacy frameworks and strategies are most applicable to practice, this in itself presents important opportunities for FNPs to contribute to an emerging body of knowledge.
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ACKNOWLEDGEMENTS

VIHA and Northern Medical Trust, for their financial support of my endeavor;

With thanks to Dr. Martha Macleod, Ph.D. and Erin Wilson, MSN, NP(F)

To the innumerable people who helped me in the process of writing this project – I hope to thank you all adequately in person.
CHAPTER ONE: INTRODUCTION

In Canada, primary health care (PHC) has been endorsed by numerous reports and health care researchers as a mechanism for improving the health and well-being of all Canadians (British Columbia Ministry of Health, 2007; Canadian Nurses Association, 2005; Lewis, 2004; Romanow, 2002; World Health Organization, 2008). The Canadian Nurses’ Association (CNA) describes PHC as the first-line clinical services of primary care that also incorporate social determinants of health, health promotion and prevention, engagement of clients as true partners in their care, and collaboration with community agencies for the benefit of the client (CNA, 2005). PHC has been endorsed as the goal of an overall health care reform strategy designed to improve the health outcomes of Canadians through the implementation of measurable competencies. Examples of these competencies include the dimensions of whole person care and interpersonal communication as described in A Results-based Logic Model for Primary Health Care by the Centre for Health Services and Policy Research (Watson, Broemeling, Reid, & Black, 2004), and health equity and people-centered health systems, as described by the World Health Organization (WHO) (2008). These competencies serve as indicators that systems and providers are delivering PHC, and thus describe what needs to be done in order to practice from a PHC perspective.

The family nurse practitioner (FNP) plays an important role in the provision of PHC (CNA, 2010; Health Canada, 2007). The Canadian Nurse Practitioner Core Competency Framework (CNA, 2010) describes the competencies that FNPs should possess in order to be able to provide PHC. These competencies include professionalism, skill sets of health assessment, diagnosis, and therapeutic management, and skills in health promotion and prevention of illness and injury (CNA, 2010). Embedded within these competencies is the expectation that FNPs practice in ways that are patient-centred, a core tenet of PHC. For
example, Competency 3.3 states that the FNP “determines care options... in collaboration with clients...”, Competency 3.5 notes that the FNP “supports, educates, coaches and counsels clients regarding...self-management”, Competency 3.6 addresses the promotion of client self-efficacy in navigating the health-care system, and Competency 3.16 requires the FNP to “collaborate with clients in monitoring their response to therapeutic interventions and in adjusting interventions...” (CNA, 2010). However, what is missing is a conceptualization of a framework that demonstrates how FNPs can practice from this perspective. It is difficult to measure FNP competencies in collaboration, coaching of patients towards self-management, and promotion of client self-efficacy (CNA, 2010) without the development of a framework that illustrates how FNPs can do so. This framework should enable FNPs to describe, measure and evaluate their ability to practice in a manner that is patient-centred. Lewis (2009), in an attempt to address the need to measure whether patient-centred care is being practiced, proposes that health care providers use specific indicators. These indicators include quantitative measurements, such as time to next appointment and percentage of patients with access to an electronic health record, and qualitative measurements such as patient surveys that measure perceptions of their care as respectful, clear, convenient, empathetic, responsive, and encouraging of independence. These indicators parallel FNP competencies in outlining essential components of patient-centred care; however, they do not go far enough as they do not address the mechanisms by which providers can ensure the care they provide is clear, respectful, and supportive of patient self-management.

This difficulty in measuring how to achieve the above competencies and thus ensure that the care that FNPs provide is patient-centred drew me to critically investigate what is available in the literature to address this gap. I was exposed to the concept of health literacy while attending the annual general meeting of the American Public Health Association in
2006, and was intrigued by the possibilities of health literacy promotion as a mechanism to
develop a framework to demonstrate how FNPs are meeting their competencies in patient-
centred care, and thereby make a positive impact on patient health outcomes. This
integrative review proposes that working from a framework of health literacy can promote
both the visibility and the understanding of FNP practice, particularly in regards to the
competencies of patient-centred care.

The concept of health literacy will be further discussed in later sections of this review.
However, it is first necessary to provide a definition of health literacy. Health literacy is
defined as “the ability to access, understand, evaluate and communicate information as a way
to promote, maintain and improve health in a variety of settings across the life-course”
(Rootman & Gordon-El-Bihbety, 2008, p. 11). Various authors and researchers have
proposed health literacy as a mechanism for improving health outcomes through the view
that each patient’s understanding of his own health and health care decisions is a critical
factor in improving health. What remains unclear, however, is how health literacy can be
incorporated into everyday FNP practice. An integrative review was undertaken to answer
the following question:

How can FNPs incorporate health literacy into clinical encounters with individual
patients in order to ensure that FNP practice reflects the competencies of patient-
centred practice in PHC, and thereby improve patient understanding of their own
health and the potential each patient possesses to improve their own health?

To begin it is important to first provide a background and context for PHC and for
health literacy, as the intersection of these two concepts provides a potential starting place for
the development of a framework for guiding the delivery of patient-centred care by FNPs.
The principles of PHC will be described briefly, as will how these principles relate to
conceptualizing FNP practice. The concept of patient-centred care will be examined, with the understanding that it is beyond the scope of this review to examine all levels of health care users. For the purpose of this review, patient-centred care means to focus on the needs of the individual patient seen in primary care settings. A description of health literacy within the patient-centred paradigm of PHC, and how health literacy differs from health education, will then follow.

A critique of the nursing, medical, and social science literature relating to health literacy will be outlined and will culminate in presenting strengths and weaknesses in viewing FNP practice through a health literacy lens. Finally, based on the literature critique, an exploration of how FNPs can demonstrate that they are meeting their patient-centred competencies by integrating a framework for the promotion of health literacy into their practice will be presented.
CHAPTER TWO: BACKGROUND AND CONTEXT

The FNP role in Canada is intended to be one of providing primary health care (PHC) (CNA, 2009; Health Canada, 2007). In order for FNPs to distinguish this care provision from that of primary care, a clear understanding of the principles of PHC is necessary. In this section, PHC as it relates to FNP practice will be discussed.

Defining Primary Health Care

Despite PHC figuring prominently in literature surrounding health care reform, finding a consistent definition is challenging. As Lewis (2004, p. 3), in his synthesis of the proceedings of The National Primary Health Care Conference, notes: ‘...like beauty, [PHC] is in the eye of the beholder. Officially everyone embraces it, but there is no consensus on what ‘it’ is”.

In their report to the Senate Standing Committee on Social Affairs, Science and Technology on behalf of the CNA, Calnan and Rodger (2002) note that in order for PHC to be relevant in different contexts, there can in fact be no “cookie-cutter” definition. That being said, in order for PHC to be operationalized, some consistency in terms and concepts is necessary. The CNA (2005) definition – first-line clinical services combined with health education, health promotion, community development, and consideration of the pre-requisites for health - reflects the definitions offered by the British Columbia (BC) Ministry of Health (2007), Health Canada (2006), and WHO (1998). From a practice-based perspective, this definition provides the opportunity to marry two streams of services: primary care and public health. This definition also facilitates common ground between the two concepts, in that PHC creates opportunities to impact public health outcomes through the initiatives that occur within primary care. In turn, public health initiatives can impact health
outcomes of patients seen in primary care. The concepts of primary care and public health will be further explored in the next sections.

Primary Care

Primary care is an important part of primary health care. It constitutes the first-line services that serve as the main entry to the health care system (CNA, 2005). The definition of primary care is as much up for debate as that of PHC (Hogg et al., 2007), however common themes in conceptualizing primary care include health care that is delivered as close as possible to where people live and work (Thomas-MacLean et al., 2008), the “daily provision of service to people, some sick, some worried, some with simple needs, some with complex problems” (Lewis, 2004, p. 11), and the element within PHC that focuses on “…health care services, including health promotion, illness and injury prevention, and the diagnosis and treatment of illness and injury” (Health Canada, 2006, p. 1). For the purpose of this integrative review, primary care will be understood as a combination of the above definitions: health care services that are delivered as close as possible to where people live and work and that focus on individual interactions with patients for the purposes of diagnosis, health promotion, and the prevention, and treatment of illness and injury.

From a FNP perspective, primary care refers to the advanced clinical skills that FNPs are able to bring to the nursing role. Several competencies in the Canadian Nurse Practitioner Core Competency Framework (CNA, 2010), address primary care skills. For example, competencies 2.1 to 2.9 address performing health assessment in order to reach a diagnosis, and competencies 3.1 to 3.17 refer to therapeutic management of diagnoses. It is by practicing under the umbrella of the above competencies that FNPs differentiate themselves from registered nurses, including those with advanced practice skill sets. It is the graduate level of knowledge that is required by FNPs that enables them to meet the above
competencies and allows them to independently practice in a way that supports the development of primary care skills. This multilayered combination of both clinical skills and critical thinking ensures that FNPs are well suited to work within a primary care model.

FNPs, however, also have a role to play in providing care that addresses societal conditions that affect people’s ability to achieve health (CNA, 2010). This type of care commonly falls under the umbrella of the second constituent of PHC: public health. The next section will describe public health, and how it relates to FNP practice.

Public Health

Koplan et al. (2009) describe public health as a concept that emerged from the social reform movements of the mid-1800s. This movement towards social reform, coupled with the growth of knowledge regarding causation and management of communicable disease, resulted in a shift in approaches to the management of health and illness by health professionals. While definitions of public health vary, Koplan et al. note four factors common to most definitions of public health:

1. Decision-making based on data and evidence
2. Focus on populations rather than on individuals
3. Goals of social justice and equity

Other definitions of public health that are of interest to this integrative review are “the science and art of promoting health, preventing disease, and prolonging life through the organized efforts of society” (WHO, 1998, p. 3); health services that have a mission to “[fulfill] society’s interest in assuring conditions in which people can be healthy” (Koplan et al., 2009, p. 1993); and “…efforts…directed to the maintenance and improvement of the health of all the people through collective or social action” (Koplan et al., p. 1993). These
definitions provide the foundation from which public health approaches to health care delivery arose. For the purposes of this integrative review, the focus will be on the goals of social justice, equity, and the promotion of health as it relates to FNP practice.

The Role of FNPs

Providing care through a lens of social justice and equity is an integral part of the FNP role in Canada. This lens of care is reflected in the competencies expected of FNP practice. Competency 1.3 in the *Canadian Nurse Practitioner Core Competency Framework* (CNA, 2010), for example, includes the incorporation of social determinants of health in providing care. Health promotion and prevention of illness is also a central focus of FNP practice (CNA, 2010). FNPs, as registered nurses first, do not leave health promotion behind as they gain primary care clinical skills as nurse practitioners. Rather, FNPs enhance these public health components of FNP practice by bringing a graduate level of critical thinking, knowledge, and awareness of the social determinants of health into clinical practice.

However, these aspects of the FNP role, which has been termed the "value-added role" of the FNP (Browne & Tarlier, 2008) have been the most difficult part to describe, enact, and evaluate. For the purposes of this integrative review, the term value-added will refer to the components of FNP practice that include attributes commonly ascribed to public health: health promotion, consideration of the social determinants of health, social justice, and equity. To fully understand why the value-added components of FNP practice have been difficult to demonstrate, it is first necessary to begin with an examination of how the role of the FNP was introduced in the province of BC.

When the government of BC introduced a new role in the form of FNPs into the health care system, it made sense for FNPs to begin where there was the greatest need: increasing access to primary care. The first wave of funding for FNPs in BC went to health
authorities to hire FNPs to provide access to primary care, preventive screening, and early disease detection while also providing health information, health education, and counseling (DiCenso et al., 2007). DiCenso et al. found that most FNPs in Canada work in community health centres and primary care practices with physician colleagues who are salaried or paid through capitation. My clinical practice experiences as an FNP student have exposed me to FNPs working in both these settings. In addition to their clinical practices, the FNPs I have worked with have also taken on roles as instructors, mentors to FNP students, contractors to non-profit agencies, and developers of new programs. Many of my FNP mentors expressed a growing frustration in finding the time to be able to participate in the public health aspect of their PHC role or to fully evaluate the impact of their clinical encounters with patients.

Burgess, Martin, and Senner (2011) found the same: while most FNPs they interviewed had the role autonomy to design their practice according to their client needs, many had clinic schedules that left little time for research, care innovation, health promotion programming, and evaluation.

What has come to light from the implementation of FNPs into the primary care setting in BC is that the value-added role of the FNP is difficult to capture, implement, measure, and evaluate. Burgess et al. (2011) describe the difficulty in evaluating the efficacy of FNP practice in terms of patient outcomes, perhaps because of the difficulty in identifying the public health component of their practice. Browne and Tarlier (2008) note that the absence of tools with which to measure the value-added contributions of FNPs adds to the difficulty. Yet without these measurements, FNPs run the risk of being evaluated as physician replacements. Browne and Tarlier propose that this does not bode well for the sustainability of the FNP role. In fact, as they note, this may have been part of what led to the demise of the FNP in the 1970s – as physician numbers increased, the perceived need for
FNPs decreased. This argument adds some urgency for the development of a framework to guide FNP practice in a way that brings forward and highlights the public health component of FNP practice. I propose that this is where the utilization of health literacy has a part to play. Health literacy has the potential to enable FNPs to demonstrate how they work in patient-centred ways to address both the primary care and public health components of PHC, with the end result being improved health outcomes for patients and better FNP practice.

Before discussing the concept of health literacy further, however, it is important to discuss another aspect of the FNP role, an aspect with significance to both the primary care and public health domains of PHC: patient-centred care.

Patient-centred Care

PHC is based on a number of key elements (Calnan and Rodger, 2002; College of Registered Nurses of British Columbia, 2005; WHO, 2008). Of interest to this integrative review is the element of increased public participation in health care. This has systems-level as well as individual-level implications. However, while recognizing that individual health outcomes impact population health outcomes, because FNPs work in a clinical role with individual clients, it is the latter that will be the focus of this integrative review. Several concepts have relevance to FNP practice in partnership with patients, such as self-management, shared decision-making, and patient-centred care. Patient-centredness is the concept that best captures the spirit of providers meeting patients where they are at, and fits within the social justice aspect of the FNP role. Patient-centredness also reflects the FNP competencies of collaboration with patients, coaching, and promotion of patient self-efficacy. As well, the concept of patient-centredness highlights the mechanisms within health literacy that impact patient outcomes. For these reasons, patient-centredness is the concept chosen to provide the underlying foundation for this review.
To understand what patient-centred care is, it is first important to understand how it is connected to PHC. Health care reform is on the agenda of most industrialized nations, and Canada is no exception. The current system is struggling to meet the needs of Canadians – a reflection of changing demographics in patients and in providers, the surpassing of acute health conditions by chronic health conditions, and uncertain economic times. Against this backdrop, health care reform in the form of primary health care seeks to deliver services more effectively with improved outcomes for systems, for providers, and, most importantly, for the patients served. An integral part of this reform is the process of inviting the users of health care to participate more fully in their own health care.

The concept of patient-centered care has perhaps been best championed by the Picker Institute in the United States: “understanding and respecting patients’ values, preferences and expressed needs is the foundation of patient-centered care” (Picker, n.d.). As a call for health care reform, patient-centered care is based on a foundation of health care being a service industry, with the focus on meeting the needs of those using the service, not on the people delivering the service. Lewis (2009) calls this a transformative change, with repercussions throughout the continuum of health. McQuillen (2009) concurs, noting that involving patients as partners improves patients’ experience of care, population health, and per capita cost of health care. Evaluation of the impact of patient-centered care links it to reduced hospital stays, increased provider and patient satisfaction, and promotion of self-care (Lewis, 2009). Patient-centered care notably also forms an integral part of the Primary Health Care Charter developed by the BC Ministry of Health (2007), as well as the health care strategies of other provinces in Canada.

The quality of being patient-centred is integral to nursing practice, and is in fact enshrined in nursing’s code of ethics (CNA, 2008). As such, FNPs, who are nurses first,
have been educated in and have been practicing in a culture of patient-centred care. However, one of the challenges of transforming the health care system to one that is patient-centered is that it depends on patients’ ability to identify and articulate their values, needs, and preferences against a backdrop of what is possible, both in the current system and in an individual encounter with a provider. The current system has evolved to a point where the locus of power is not with the patient, but with the system itself, with nurses acting as patient advocates. Without an understanding of how to speak the language and understand the context of health care, barriers are created and it is difficult for patients to be true partners in their care. The process of inviting patients back into a relationship with the system, with their health, and with their health care will involve skill-building before it can be considered to be truly patient-centered. Health literacy has a role to play in assisting FNPs to work with patients to develop the skills and tools with which to participate in an authentic partnership.

The final section of this background chapter will describe what is known about health literacy and proposed definitions from the current literature for the concept of health literacy. As health literacy is a concept that overlaps with health education, a delineation will be made between these two concepts.

Health Literacy

Prior to exploring proposed definitions of health literacy, it is important to consider the context of what led to development of health literacy as a concept. In this section, there will be a discussion about the historical context of health literacy, proposed definitions of health literacy, and what is currently known about health literacy.

The concept of health literacy began to gain momentum in the early 1990s (Rootman & Gordon-El-Bihbety, 2008; Speros, 2005). Although the impact of literacy on health was established before that time (Rootman & Gordon-El-Bihbety; Speros), the explosion of the
information age brought to light that health literacy is more than simply the ability to read and to use numbers (Zarcadoolas, Pleasant, & Greer, 2006). Health literacy also involves skills that include navigating the health care system and interpreting health information in order to make decisions that produce positive health outcomes. In 1998, the WHO introduced the term health literacy in its Health Promotion Glossary (WHO, 1998), which to some extent indicates evidence of the acceptance and importance of this concept.

Health literacy is extrapolated from the concept of literacy (Kickbusch, Wait, & Maag, 2005; Zarcadoolas et al., 2006), which the United Nations Educational, Scientific and Cultural Organization (UNESCO) (2006) describes as being complex, dynamic, and evolving. The understanding of literacy has evolved from a “simple process of acquiring basic cognitive skills” to “using these skills in ways that contribute to socio-economic development” and further to “developing the capacity for social awareness and critical reflection as a basis for personal and social change” (UNESCO, 2006, p. 147). Literacy has deep roots in social justice and empowerment. Connor, Ling, Tuttle, and Brown-Tezera (1999) discuss how literacy can empower marginalized groups to gain insight into their experiences and use that insight to transform the world for themselves and others. Health literacy has the potential to parallel literacy in its implications for social justice and increasing equality. This promotion of a concept to promote empowerment and social justice fits within the paradigm of PHC and within FNP competencies.

Much of what is known about health literacy comes from extrapolations from data measuring literacy and its impacts on health. The studies addressing the impact of health literacy on health outcomes come from two streams: primary care and public health. The primary care stream tended to extrapolate data from individual patient encounters to build a more specific picture of health literacy as it relates to various clinical diagnoses. The public
health stream examines the impact of health literacy on a population level, and notes trends in levels of health literacy.

The Canadian Council on Learning (CCL) (2007) used results from the International Adult Literacy and Skills Survey in their report *Health Literacy in Canada*. The CCL report identified that more people in Canada have low levels of health literacy (60% of the population) than of literacy (45% of the population), and that some populations are at greater risk of low health literacy (seniors and immigrants). The CCL findings of an inverse relationship between health literacy and diabetes (increased prevalence of diabetes with decreased levels of health literacy) is supported by Higgins, Begoray, and MacDonald’s (2009)’s findings that health literacy skills are an effective predictor of health status and outcomes. Numerous studies have been able to demonstrate a correlation between low health literacy and poor health outcomes: difficulty in qualifying for kidney transplantation (Grubbs et al., 2009), increased all-cause mortality and cardiovascular death in the elderly (Baker et al., 2007), and ineffective self-management of hypertension (Williams et al., 1998), asthma (Williams et al., 1998), diabetes (Kim et al., 2004; Schillinger et al., 2002; Williams et al., 1998) and HIV (Kalichman & Rompa, 2000).

Even though the concept of health literacy has its roots in literacy, the two are not necessarily interchangeable. Kickbusch (2001) notes that literate people can have low health literacy (a university professor, for example, who has difficulty interpreting his choices when faced with an elevated prostate specific antigen), while Zarcadoolas et al. (2006) note the reverse – people with low literacy can have high health literacy (a mother with a tenth grade education who can manage her daughter’s cystic fibrosis). Other qualities of health literacy proposed by various authors are that health literacy occurs on a continuum and is generative (Rootman & Gordon-El-Bihbety, 2008; Zarcadoolas et al., 2006) and that it is context


specific (Pleasant, 2009; Speros, 2005). Speros, in her concept analysis of health literacy, notes that in order to have health literacy, one must have had exposure to the language of health through a health-related experience, and a cognitive framework to process that health information. Pleasant notes that health literacy “...involves skills and abilities that are often applied in very specific health contexts...by very different individuals...with, at times, very different goals” (p. 17). This quality of being context specific is an important one, but, as becomes apparent in considering definitions for the concept, further complicates the process of creating some consensus around a definition.

With the realization that there is a specific type of literacy that applies to processing health information, and that utilization of this concept with patients can impact health outcomes, scholars began to attempt to define just what health literacy is. The next section will describe proposed definitions of health literacy.

**Defining Health Literacy**

In considering definitions of health literacy pertinent to this integrative review, it is important to keep in mind the context of PHC, FNP practice, and patient-centredness. Given that the intersection of these concepts provides the foundation for this review, it is important to build a clear understanding of health literacy. It is through understanding health literacy that further directions for FNP practice can start to be developed.

Because health literacy is a rapidly evolving field, finding a consistent definition of it is a challenge. The review of the literature reveals a circular paradox: as more is learned about health literacy, this knowledge adds to what defines the concept...as the definition evolves and is infused into the health literacy discourse, further findings add dimensions to the concept that are not adequately reflected in the current definition, thus further refinement continues. Health literacy has been defined as a capacity (Peerson & Saunders, 2009), an
asset (Nutbeam, 2008), an outcome (of health education, Nutbeam, 2000), an ability (Simson, 2007), and a set of skills and competencies (Zarcadoolas et al., 2005).

One of the challenges in defining health literacy lies in defining what constitutes “health”. The WHO (1998, p.1) definition of health is useful: “health is a resource for everyday life, not the object of living. It is a positive concept emphasizing social and personal resources as well as physical capabilities”. Health is considered to be a process rather than a product, and involves the development and use of resources by both individuals and populations to productively regenerate itself. Many authors, however, consider health literacy as a concept suited solely to the management of acute or chronic illness. While this is an integral part of PHC, to consider health literacy exclusively in the context of illness management is in keeping with neither the WHO definition of health, nor the definition of PHC.

One of the approaches to defining health literacy comes from research on patient-provider interactions. Pleasant and Kuruvilla (2008) describe this approach as coming from health care providers whose aim it was to help patients better understand and adhere to treatment regimens. Nielsen-Bohlman, Panzer, and Kindig (2004) uses a definition that is perhaps the best example of this line of thought:

The degree to which individuals can obtain, process and understand the basic health information and services they need to make appropriate health decisions (p. 32).

Although this definition brings the concept of health literacy out of the realm of theory and into practice, this definition does not reflect patient-centredness, nor does it reflect what health literacy has to bring to the full spectrum of PHC. Use of the terms “appropriate” and “basic” emphasize a power imbalance that implies that health care providers are the only ones who can understand complex health information, and that they will be the ones to
decide what is an appropriate decision. As Pleasant and Kuruvilla (2008) and Rootman and Gordon-El-Bihbety (2008) note, the definition used by Nielsen-Bohlman et al. comes from a philosophy of provider-centredness rather than of patient-centredness.

Several authors (Coleman et al., 2008; Pleasant, 2009) acknowledge the merit and applicability of both the primary care and public health approaches to defining health literacy. Two definitions stand out in this regard. The first one is by Kickbusch et al., (2005):

\text{The ability to make sound health decisions in the context of everyday life – at home, in the community, at the workplace, in the health care system, the marketplace and political arena. It is a critical empowerment strategy to increase people’s control over their health, their ability to seek out information and their ability to take responsibility. (p. 8)}

This definition reflects applicability to both primary care and public health, and references the social justice and empowerment pieces central to FNP practice, and speaks to greater patient participation in health. Its use of the word “sound” in describing health decisions, however, does not necessarily lend itself to patient-centredness. It is not clear who determines what a sound decision is.

The second definition is the one most applicable to this integrative review. It was commissioned by the Canadian Public Health Association (CPHA):

\text{the ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course}

(\text{Rootman & Gordon-El-Bihbety, 2008, p. 11})

The authors clarify that “ability to access” is meant to capture more than just availability of information and services – it includes mediators on several levels: patient (education, culture,
language), professional (communication skills, education, culture, language), and systems
(nature of message and settings where health-related services are provided). These mediators
provide potential foci for assessment and intervention when considering health literacy
promotion. In addition, the authors note that the definition speaks to the ideas of health as a
resource for everyday living in a variety of settings, health as a dynamic concept that changes
over a life-course, and health literacy as an empowerment tool (Rootman & Gordon-El-
Bihbety). This definition encompasses all aspects of PHC by using health promotion, health
maintenance and improvement, and social justice as well as by linking to the WHO definition
of health. This definition also has within it the potential for patient-centredness because it
reserves judgment of who decides what the outcome of health literacy should be. It is this
definition that is most appropriate for this review. However, before moving forward in a
review of the literature on health literacy, it is first important to briefly explain how health
literacy differs from the concept of health education.

*Health Literacy and Health Education*

Health education, or “...consciously constructed opportunities for learning involving
some form of communication...” (WHO, 1998), is a critical component of the interaction
between health care providers and patients. Health education’s goal is to improve health
literacy, specifically by increasing knowledge and developing life skills conducive to health,
and tends to occur on an individual, behavior-oriented basis (Nutbeam, 2000; WHO, 1998).
There is debate in the literature regarding whether health education is a concept suited to
being a tool that can inform all facets of health literacy, specifically whether health education
can help patients to address determinants of health, mobilize them to action on social issues,
and lead them to advocacy for others. Some would argue that these public health skills come
more under the umbrella of health promotion (WHO, 1998). This argument may support
Krieger’s (2008) call for a new way of thinking about health whereby health education, using communication strategies, is one way to build health literacy on multiple levels. For the purposes herein, health education is one of the communication strategies used by FNPs in their everyday practice in order to promote health literacy. A more in-depth discussion of other strategies will occur later in this review.

At this point in the discussion, it is time to look towards a critical analysis of what the literature has to say about each of these concepts and the potential for FNP practice, considering what has been reviewed above in the background and context of PHC, FNP roles, and health literacy. To begin, the methodology of the literature review will be addressed.
CHAPTER THREE: LITERATURE SEARCH APPROACH

Health literacy is a relatively new and evolving concept, thus assessing how it is addressed in literature provides some challenges. First, health literacy is not a concept exclusive to the health field. Indeed, some of the most useful literature encountered came from the education, social work, and psychology fields, and the concept of health literacy has applications in a variety of fields, including gender studies, marketing, kinesiology, and international development (Peerson & Saunders, 2009). A second challenge is that many studies and commentaries on topics relevant to health literacy may not actually use that term. For example, a study that examines how self-management of asthma is improved by learning how to use and interpret a peak flow meter may be promoting health literacy without actually using that term. Finally, as the term health literacy continues to become part of the discourse of researchers, practitioners, and the public, the number of studies increases exponentially. Peerson and Saunders note that their search of PUBMED in 2007-2008 produced 659 articles using “health literacy” as a key phrase; my own search in February of 2011 yielded 4,594 with 809 of those articles having been added since January 2010.

As this review took place over a period of almost a year, the challenge has been to stay on top of the information. That being said, the keywords, search terms, and themes remained relatively constant during the course of the review. The initial review took place in January and February of 2011; subsequent explorations of the literature centred more specifically around the themes that had developed from the initial search.

In order to create a systematic, comprehensive, and relevant search strategy, the following outline was created.
Keywords/Search Terms

The key words and search terms used, individually and in combination, were:

- Health literacy/assessment/strategies/evaluation
- Health promotion/health education
- Self-management/self-care
- Self-efficacy
- Nurse practitioner/British Columbia/Canada
- Primary care/public health/primary health care
- Health care reform/strategies

Inclusion/Exclusion Criteria

In order to use the most relevant literature, inclusion and exclusion criteria were developed. My rationale for the inclusion and exclusion criteria is that such criteria cast a wide enough net to capture the most current, pertinent information without becoming too overwhelming. It helped to refine the search and keep the concepts of primary health care, patient-centredness, and FNP practice at the forefront.

Inclusion criteria:

- Published in English, or translated from French in the case of Canadian studies
- Published between 1990 and 2011
- Addressed the nurse practitioner role in Canada
- Was published in a peer-review format including primary studies and/or literature reviews/concept analyses
- Was a published or unpublished governmental, academic, and/or organizational document
• Comments from experts in the themes discussed
• Addressed the key words and search terms identified above.

Exclusion criteria:
• Published in a language other than English
• Addressed the nurse practitioner role in countries other than Canada
• Was not published in a recognized governmental, academic, and/or organizational document.

Four methods were used to search for contributions to this project. As mentioned earlier, my first experience in health literacy came about because of attendance at the American Public Health Association Annual Meeting in 2006. Bibliographies from literature accessed during this conference helped to develop the question of interest to this project, as did other conference proceedings.

Electronic databases were then used to search for peer reviewed primary studies, literature reviews, and concept analyses. The databases used were through the University of Northern British Columbia and Vancouver Island Health Authority, and used Medline with full text, ERIC, PsycINFO, and SociNDEX with full text.

An internet search was conducted for published or unpublished governmental, academic, and/or organizational documents. This included the use of Google and Google Scholar to search for the work of some of the most prominent authors encountered in reading about health literacy, the Canadian Public Health Association (CPHA) health literacy portal, and the Canadian Council on Learning (CCL). Lastly experts in the themes noted below were consulted via email to ensure that any unpublished literature was not missed.
A total of 147 resources that met the inclusion criteria were reviewed. A quick scan of the documents was performed to separate descriptive literature from scientific studies. Given that the purpose of this review is to address how FNPs can incorporate health literacy so that their practice is reflective of the patient-centred tenet of PHC, the descriptive literature obtained was then resorted into themes that emerged from the initial scan, with a mix of descriptive and research literature in each theme. The literature was sorted into two streams:

- Applications of health literacy
- Moving forward with a health literacy agenda.

The 95 resources that are included in this project are those that contributed to the development of health literacy as a concept with relevance to FNPs in their roles in PHC. The resources were chosen because they represented the discussion of some of the leaders in the exploration of health literacy (20 resources), they represented a nursing voice in the discussion with relevance to health literacy (8 resources), or they were government or agency documents (23 resources) that reflected the current thoughts about concepts relevant to this review. One of the results of dividing the literature search into descriptive and scientific literature was the discovery that health literacy within a PHC paradigm has not yet been conceptualized to the point where it can be measured and tested. This resulted in much of the scientific literature being excluded from critical analysis. The 33 scientific studies that are included in this project are included as examples of related rather than exemplary cases of health literacy.

Given the variety and nature of the emerging literature, I felt it necessary to seek input on how to undertake a comprehensive review. Melnyk and Fineout-Overholt (2005)
suggest considering why a study was done, and how the results of a study fit in with previous research in that area. Much of the literature I appraised did not consist of research, but I felt these factors to be critical nonetheless. Using these factors in framing my literature analysis enabled me to see how the discussions helped move the relatively new concept of health literacy along in its development. In order to ensure that the purpose of this integrative review was met, I also added three more factors to consider: was the question being asked patient-centred, was health literacy being presented as a concept with validity to primary health care, and were there clinical implications for FNP practice in what was being presented.
CHAPTER FOUR: LITERATURE ANALYSIS

The overall impression that resulted from the literature search for this integrative review was one of somewhat chaotic excitement. Health literacy as a concept seems to resonate with many fields—clinicians, academics, public health, education, social justice, and health administrators, to name but a few. While it is interesting to see health literacy present within so many fields, the result of this variety within the literature is a lack of consensus among the fields. A limitation of this review was the difficulty in pulling together the discussions, studies, unpublished documents and plans for program development evident in the literature into any common themes. After applying the criteria to assist with appraisal as outlined above, the following themes emerged: 1) the application of health literacy as a conceptual framework, as an assessment tool and in strategies for promoting health literacy, and 2) how health literacy relates to PHC, patient-centredness, and FNP practice. From the analysis of these themes and concepts, comes a framework for future practice. To begin, it is first important to understand how health literacy has been applied within the various health and social fields.

Applications of Health Literacy

As noted earlier in this integrative review, health literacy is a relatively new concept experiencing tremendous growth, often in divergent directions. In the often quoted group process of “forming, storming, norming, performing” (Tuckman, 1965), health literacy proponents seem to be in the storming phase of development. In considering the literature on how health literacy may be applied in a clinical setting, three sub-themes became apparent: conceptual frameworks for health literacy, assessment tools for screening health literacy, and strategies for the promotion of health literacy. Each of these sub-themes will be examined in this section.
Several scholars have identified a need to develop a conceptual framework for health literacy that will then allow health literacy to be a testable, measurable concept (Mancuso, 2009; Nutbeam, 2000; Pleasant, 2009; Rootman & Ronson, 2005; Ross, Culbert, Gasper, & Kimmey, 2009; Speros, 2005; Zarcadoolas et al., 2005). Ross et al. note that developing a testable theory or framework leads to being able to use a concept in program planning and modification, adds to knowledge about the concept, and creates opportunities to plan and conduct evaluation. Pleasant (2009) more simply notes that theory should guide measurement of health literacy—and that measurement leads to attention, which leads to funding, which can then lead to change. Pleasant, McKinney, and Rikard (2011) go on to note that a theoretical framework from which to consider health literacy is essential in order to base possible tools for measurement, strategies for health literacy promotion, and tools for evaluation.

Three conceptual frameworks were selected for this integrative review. While numerous authors attempted to describe health literacy as it relates to other concepts, only the three frameworks were selected because they created a description of health literacy with the potential to be testable and measurable. The authors of the chosen frameworks, which arose out of the social science literature, have made significant attempts to address health literacy as a framework that considered the unique context of the individual, and in doing so have begun to link the concept of health literacy to the concept of patient-centredness. By creating this link, these three frameworks have the potential to build an understanding of health literacy and how it can be utilized in FNP practice. In order to assist in assessing the proposed frameworks, the factors identified earlier in this chapter were returned to: whether
the framework lends itself to FNP clinical practice, whether it applies to use in a PHC context, and whether the framework is patient-centred.

The first health literacy framework considered was that offered by Nutbeam (2000). Nutbeam proposes that health literacy be considered as an outcome of health education, with a goal of promoting greater independence and empowerment. His model posits three levels of health literacy, and describes health education strategies and outcomes for each level: functional health literacy, interactive health literacy, and critical health literacy. By stating the goal of empowerment and independence, this framework starts off from a patient-centred focus, and Nutbeam's discussion supports this focus. Nutbeam's framework emphasizes the health promotion aspect of PHC. It is a model that would be very useful if the focus of one's service is as a public health provider. The weakness of Nutbeam's framework is that it remains at the level of public health and does not encompass the broader clinical knowledge and skills required to be a primary health care provider. Given that the FNP role is one of delivering clinical care with knowledge to promote health and social justice, this framework, while providing enormous opportunities for reflection and adaptation of FNP practice, does not provide a concrete enough model to apply to the discussion of FNP competencies in patient-centred care, and how those competencies might impact patient outcomes.

Another health literacy framework is that proposed by Higgins et al. (2009). In their descriptive study of influencers of health literacy in adolescents, Higgins et al. propose a theoretical framework that places health literacy in a social ecological framework. The authors developed three levels of influence on the health literacy of adolescents: micro, meso, and macro. As with Nutbeam's (2000) model, Higgins et al.'s framework has wonderful potential for use in a public health context. When attempting to influence behavioural change in partnership with the population in which one is hoping to create the
behavior change, it would be very important to consider the influencers of health literacy of
that population. FNPs work in a clinical role, however, and with individual patients. While
the consideration of influencers of behavior change remains important, the opportunities for
FNPs to directly impact influencers other than on a micro level are limited. Like Nutbeam’s
framework, Higgins et al.’s framework has less to offer to the discussion of how FNPs might
demonstrate their patient-centred competencies in primary care encounters than the third
framework considered does. The discussion of that third framework, by Zarcadoolas,
Pleasant, and Greer (2006) follows.

The framework for health literacy that has the greatest applicability for this
integrative review, and thus for FNP practice, was that proposed by Zarcadoolas et al. (2006).
This framework divides health literacy into four domains: fundamental, scientific, civic, and
cultural health literacy:

1. Fundamental literacy, which includes the cognitive skills of reading, writing,
speaking, and numeracy. Health education in this domain addresses these
basic skills, with an application to a health setting – ensuring a patient is able
to calculate the correct dosage of medication for their child, for example, or is
able to follow pre-operative instructions.

2. Scientific literacy, which makes reference to the ability to understand and use
science and technology. Zarcadoolas et al. (2006) make the point that this has
to include some awareness of the scientific process – including that there is
uncertainty inherent in science, and accepted science can change quickly.
Health information is constantly changing and often contradictory (CCL,
2008) and without the ability to interpret and make sense of this information,
it is difficult to self-manage health. Examples of patient presentations where
health education would be directed towards building scientific health literacy include patients coming in to discuss weight loss methods they had learned about on TV, a patient who took advantage of receiving lab results electronically but is unsure how to interpret them, a patient who underwent full body ultrasound screening while traveling in the United States and now was unsure what the results meant, and another who read on the internet about a medication’s list of side effects and was frightened enough to consider discontinuing taking the medication.

3. Civic literacy refers to the ability to see a “bigger picture” in making decisions about health. Zarcadoolas et al. (2006) believe civic literacy “refers to abilities that enable citizens to become aware of health issues through civic and social channels and become involved in the decision-making process”. The authors place social capital as an inextricable concept within health literacy, particularly in regard to influencing people to act with a collective good in mind. Examples of civic literacy skills were evident during the H1N1 pandemic process, for example, in the ability of patients to understand how priorities for immunizing were created. Other examples of civic health literacy include the ability of patients to understand surgery wait lists, or why some medications are covered under Fair Pharmacare in BC and others are not. Civic health literacy facilitates participation in finding solutions to issues such as the most effective allocation for health care resources. Civic health literacy is perhaps the most difficult piece of health literacy to consider in the lens of clinical practice, but as will be discussed shortly, has implications for the value-added component of FNP practice.
4. Cultural literacy involves an appreciation that people come from different backgrounds and worldviews, and includes the ability to recognize that in interpreting and acting on information (Zarcadoolas et al., 2006). The authors are firm in their belief that cultural literacy needs to be bilateral. While much has been written about the necessity of health professionals to be appreciative of patients’ worldviews, less has gone into the education of patients about understanding that their health care providers come with their own culture and worldviews, as do the organizations for which they work. Cultural health literacy helps to explicate the recognition that health education comes with context, both on the part of the patient and on the part of the provider. Examples of opportunities to address cultural health literacy in FNP practice include explaining to patients how the FNP role differs from that of a physician, or health education directed towards confidentiality and duty to report before engaging in a clinical encounter with a youth in youth clinic, as well as acknowledging that practitioners come to the table with their own biases in how they approach their practice.

This framework provides a comprehensive description of health literacy that fits within the paradigm of PHC, with applications in both primary care and in the public health aspects of FNP practice.

The application of Zarcadoolas et al.’s (2006) framework will be discussed at greater length in the next chapter; however it is useful to note that it has been applied in practice. Zarcadoolas et al.’s (2009) study applied the framework in the creation of an educational website about HPV vaccine. Information about the vaccine was framed in three of the proposed components of health literacy: cultural health literacy (‘protecting the woman my
daughter will become"), civic health literacy ("personal female responsibility"), and scientific health literacy ("progress in cancer research/vaccine research). Evaluation of their project demonstrated that over 77% of participants in the study felt their opinion of the vaccine was more positive after viewing the website. While this is not necessarily an example of clinical practice, it does provide an example of targeting health education to specific types of health literacy.

For the purpose of this review and the pending discussion, Zarcadoolas et al.’s (2006) conceptual framework offers the most relevance to PHC and FNP practice, in that it offers a way for FNPs to describe and measure those competencies that allow them to practice in a way that is patient-centred. Zarcadoolas et al.'s conceptual framework for health literacy also served to help create some order in sorting through the literature relating to the assessment and promotion of health literacy. The next section will examine literature pertinent to the assessment of health literacy.

**Assessment of Health Literacy**

As awareness grows that low health literacy is correlated to poor health outcomes, (Baker et al., 2007; Grubbs et al., 2009; Kalichman & Rompa, 2000; Kim et al., 2004; Passche-Orlow et al., 2005; Schillinger et al., 2002; Williams et al., 1998), many scholars and researchers have been attempting to develop tools that could identify low health literacy in patients. Numerous articles and resources were found that either referenced an assessment tool or provided an assessment tool, although perhaps not for use in clinical practice. The most widely used tool, the Test of Functional Health Literacy for Adults (TOFHLA) (Nurss, Parker, Williams, & Baker, 1995) measures the ability of patients to read, comprehend, and act on medical instructions given to them by health providers related to their specific conditions given. The TOFHLA was used, for example, to demonstrate that patients with
low health literacy experienced poorer health outcomes such as ineffective self-management of chronic diseases (Baker et al., 2007; Grubbs et al., 2009; Kalichman & Rompa, 2000; Kim et al., 2004; Passche-Orlow et al., 2005; Schillinger et al., 2002; Williams et al., 1998).

Other tools that were developed to assess levels of fundamental health literacy included Newest Vital Sign (Weiss et al., 2005), the Simplified Measure of Gobbledygook (McLaughlin, 1969), Health Literacy Environment Review (Rudd & Anderson, 2006), the Short Assessment of Health Literacy for Spanish Adults (Lee, Bender, Ruiz, & Cho, 2006), the Rapid Estimate of Adult Literacy in Medicine (Davis et al., 1993), the Brief Estimate of Health Knowledge and Action (Osborn, Davis, Bailey, & Wolf, 2010), and the Medical Terminology Achievement Reading Test (Hanson-Divers, 1997).

Prior to delving into the literature addressing the assessment of health literacy, it is important to return to the criteria established in the previous chapter with which to analyze the literature: clinical implications, applicability to PHC, and patient-centredness. In terms of the clinical implications of health literacy, it is first necessary to undertake a discussion of the difference between assessment tools for the purpose of screening, and assessment tools for the purpose of measurement. Pleasant (2009) notes that tools used for screening purposes tend to be short and easy to use, and have a goal of identifying patients who may have a problem – in this case, that of low health literacy - while tools used for measurement have a goal of advancing knowledge. For assessment tools to be relevant to clinical practice, it is important to consider that the clinical setting tends to be a busy one. A screening tool would therefore have the most utility in a clinical setting. In this review, it is important to note that most of the tools encountered in the literature were assessment tools applied for measurement purposes.
In terms of applicability to PHC, only two health literacy assessment tools measured more than basic cognitive skills. The Health Literacy Environment Review (HLER) (Rudd & Anderson, 2006) assessed the navigability of a health care environment, while the Brief Estimate of Health Knowledge and Action (BEHKA) (Osborn, Davis, Bailier, & Wolf, 2010) assessed the decision-making abilities of HIV patients based on numeracy and reading ability. No tool presented in the literature was able to fully reflect an assessment of health literacy in a way that addressed the full scope of PHC. This lack of applicability to the full scope of PHC may be reflective of the conceptual development of health literacy as a biomedical construct (Pleasant, 2009). Under a biomedical approach, low health literacy becomes a problem that needs to be tested for and then treated. A biomedical approach does not allow for individual context, nor broader social determinants of health to factor into health outcomes. The view of health literacy as a biomedical construct explains why much of the research about health literacy addresses fundamental cognitive skills of reading comprehension, word recognition, and numeracy (Mancuso, 2009). These cognitive skills are the most concrete portion of health literacy to measure and on which to make an impact.

None of the tools reviewed took into consideration the social determinants of health, nor the individual patient’s ability to adapt and compensate to meet the demands of their own context.

A review of the literature revealed a significant gap within the tools used to assess health literacy. The lack of comprehensiveness found in the assessment tools for screening and for measurement demonstrated a lack of connection to a patient’s broader health context and social determinants of health. It was difficult, however, to dismiss out of hand the information these tools provided. By viewing the assessment of health literacy through the lens of the Zarcadoolas et al.’s (2006) framework, these assessment tools can be seen to
provide some valuable information about one domain of health literacy – the fundamental, or basic cognitive skills, domain. Zarcadoolas et al.'s framework enables the FNP to keep in mind, however, that there are other domains that are equally important in assessing health literacy.

In terms of patient-centredness, even though the objective of identifying patients with low health literacy is to better meet these patients’ needs, the impact of screening on the patient’s emotional wellbeing, and on the relationship between patient and health care provider was not well addressed in the literature. What was evident was that the assessment tools used tended to be more for the benefit of the provider than the patient in that they provided the health care provider with information about the patient but did not take into account any impact on the patient. Parikh, Parker, Nurss, Baker, and Williams (1996) note that shame plays an important role in how patients with low literacy interact with their health care providers, making it particularly difficult for these patients to admit that they do not understand what their provider is telling them. In that light, some of the screening methods encountered in the literature did not fit well within a patient-centred context. Andrus and Roth (2002), for example, describe handing a patient a brochure upside down and noting whether the patient turns it right side up. The Medical Terminology Achievement Reading Test (Hanson-Divers, 1997) asks patients to read medical terms written in small font on labels on a prescription bottle – with a glossy finish over it, in order to make the labels realistic. Examiners in the latter case are instructed to explain to the patient that the label is difficult to read, “...in an effort to make this test less intimidating” (Andrus & Roth, p. 285). None of these examples of assessment tools fits well in a patient-centred context, where patients are partners in care, but rather reflect again a biomedical approach where health
literacy is a cognitive problem to identify and treat. This lack of patient-centredness represents a significant gap within the health literacy literature.

Also missing in the literature was consideration of how engaging in patient-centred care could contribute to the assessment of health literacy and to the improvement of health outcomes. For example, Osborn, Cavanaugh, and Kripilani’s (2010) study addressed how low levels of fundamental health literacy affected patients’ ability to manage their diabetes. Missing in this study was a consideration of other aspects of health literacy that could be impacting results, both from a patient and practitioner point of view. The study did not consider whether the patient was receiving conflicting advice from peers or the internet, for example, or whether the patient understood why self-management of their illness was important, or whether the patient’s life was so chaotic that managing blood sugar was not the priority for them that it was for the health care provider. The study also did not consider any factors that may impact how the practitioner engaged with the patient including cultural sensitivities and the clinic environment.

Other authors in the health literacy field, recognizing the existing gaps, have begun to address the issue of patient-centredness. Weiss (2007) responds to concerns about offending patients by noting that health care providers discuss many potentially invasive topics with their patients, and education and literacy should not be treated any differently. Weiss further references a practice-based study by Ryan et al. (2006) which demonstrated that when a group of individual family practice patients in medical practices were asked if they would be willing to have their literacy assessed, 98.3% agreed to do so, and that participation in screening did not decrease these patients’ satisfaction. Ryan et al.’s study, however, explicitly invited patients to participate in having their health literacy assessed. That being said, Ryan et al.'s study did not provide patients with any context to why their health literacy
was being screened, nor did it address any component of health literacy beyond the fundamental/cognitive dimension.

Paasche-Orlow and Wolf (2008), in their discussion paper, recommend that in the current absence of effective screening tools, "there is fair evidence to suggest that possible harm outweighs any current benefits; therefore, clinical screening for literacy should not be recommended at this time" (p. 102). Mancuso (2009), in her integrative review of health literacy assessment measures, offers a way forward in using screening tools in clinical practice. Mancuso recommends that a screening tool for measuring health literacy in a clinical setting should be used like other screening tools, and should include a thorough discussion with the patient so they can give informed consent to be screened. Mancuso also recommends always considering the patient’s perspective when addressing health literacy, including the patient’s anxiety, stressors, mental status, state of illness, and possible shame or embarrassment.

While these attempts show growing awareness of the gaps within the health literacy literature, concerns continue. Other than in Mancuso's review, the discussion of patient-centred care remains superficial. Only Mancuso, an advanced practice nurse, speaks to how a practitioner can incorporate and evaluate health literacy strategies to ensure that the clinical encounter remains patient-centred. It can be argued that the majority of the studies reviewed do not go far enough to address patient-centredness. This includes the impact that health literacy assessment can have on the individual patient and the relationship between patient and provider and the subsequent influence this relationship can have on patient health outcomes.

The implications for FNP practice of assessing health literacy levels will be discussed in the next chapter. At this point in the analysis, it is time to move away from the literature
addressing the assessment of health literacy and turn now to how health literacy is used to promote health. An analysis of literature addressing strategies to promote health literacy follows.

**Strategies to Promote Health Literacy**

Most of the research that addressed strategies to promote health literacy relied on being able to measure health literacy pre and post intervention. As addressed in the above section, the tools used to measure health literacy address largely the fundamental cognitive aspects of health literacy rather than the social determinants and contexts that also influence health and health decision-making. As can be expected then, most of the strategies encountered in the literature search for this integrative review also focused on the fundamental domain of health literacy. There is at least, however, a growing awareness in the literature that in order for any significant impact to be made in health literacy promotion, strategies need to address more than fundamental health literacy promotion.

One very encouraging study demonstrated this growing awareness addressed promotion of health literacy with a definition that included more than fundamental aspects. Renkert and Nutbeam (2001) examined whether reframing the focus of prenatal classes from preparation for childbirth to one of developing skills and confidence in having a successful pregnancy, childbirth, and early parenting could be achieved by taking a health literacy promotion approach – an approach that included skill building in knowing where to go for further information, and how to examine information critically. The authors conducted focus groups of antenatal educators, expectant mothers, and new mothers to ascertain what their priorities were for topics in antenatal classes, their interest in parenting information rather than solely childbirth preparation, and timing of participating in parenting skill-building classes. While cautioning that their study results came from a small group of “highly
motivated” participants, the authors note that the concept of health literacy is what offers an opportunity to make a subtle shift from knowledge transfer to empowerment and skill building. Although this study targeted a group of prenatal parents, it offers possibilities for the potential of health education to impact more than fundamental health literacy in other types of patients as well. The examination of whether the literature offered targeted or universal applications of strategies was another consideration in examining possibilities for strategies to promote health literacy.

**Targeted Health Literacy Promotion Strategies**

An examination of the literature on strategies to promote health literacy revealed that several specific tools have been developed to promote health literacy in clinical encounters—all in relation to chronic disease management (Paasche-Orlow et al., 2005; Rothman et al., 2009; Wolff et al., 2009). These studies developed individualized educational strategies to help patients understand and manage their chronic condition and were able to demonstrate positive health outcomes. The Diabetes Literacy and Numeracy Education Toolkit (DLNET) (Wolff et al., 2009) in particular is garnering positive attention in the literature (Osborn et al., 2010; White, Wolff, Cavanaugh, and Rothman, 2010). DLNET was developed by a multidisciplinary team, including diabetes clinicians, educators, and psychologists, and features 24 modules that can be used as a package or singly, depending on patient needs. Two trials demonstrated the efficacy of DLNET participation in lowering A1C levels compared to a control group that did not participate in DLNET. However, the effect was not sustained once the three-month teaching sessions were concluded.

While the DLNET study is just one example of a targeted strategy, it highlights the potential that this type of strategy can have. The limitations of this study were evident in that it demonstrated a lack of sustained impact on patient outcomes. Nutbeam (2000) notes that
public health campaigns that focussed only on information transmission and didn’t take into account individuals’ social and economic circumstances did not achieve the expected impact on health behaviors. In that vein, further research is needed to determine whether strengthening other areas of health literacy beyond the fundamental aspects would correlate to sustainable positive health outcomes.

The other approach to the promotion of health literacy takes a more universal approach. These are strategies that seek to promote health literacy independent of a patients’ individual knowledge deficit but rather are ones that work on a more global scale.

*Universal Health Literacy Promotion Strategies*

Numerous discussion papers in this review examined the communication process between physicians and patients, how this process impacted patients’ health literacy, and recommendations based on that examination. These papers made recommendations that could be used in any clinical encounter.

Oates and Paasche-Orlow (2009) in their exploration of the links between health literacy and chronic disease management, recommended using plain language, limiting the amount of information discussed in one visit, using multiple forms of communication, being specific in helping patients create a plan, helping patients ask questions, and confirming comprehension by using a technique called “teach back”. Safeer and Keenan (2005) encouraged slowing down and being respectful, caring and sensitive. Osborn et al. (2010) suggested asking open-ended questions to assess comprehension and encouraged involving other providers and family members in supporting patients with low literacy. Barrett and Puryear (2006) suggest that even small measures such as providing patients with a pencil and paper before a clinical encounter so they can write down questions and take notes can make an impact.
Of interest was a study that addressed how people access health information, and how to capitalize on these methods to more effectively deliver health education. Ahlers-Schmidt et al. (2010) successfully used texting as a means to increase parental health literacy regarding childhood immunizations. The authors surveyed 200 parents of children under 6 to see if they were interested in receiving text reminders of immunizations, and if they were interested, what specific information they wanted to receive. This study highlighted the importance of an approach to promoting health literacy that was patient-centred and met patients where they were at in terms of their communication needs. In today’s technologically advancing world, this approach of delivering health information in a format that works for parents of young children demonstrated the best of patient-centred care.

Other literature incorporating a universal approach revealed a discussion of communication strategies between providers and patients in examining the different ways that people learn. The educational literature discusses different learning styles, and how to tailor presentations to meet the needs of learners. Friedman (2008), for example, describes four types of learners and how best to reach them: visual learners, auditory learners, read-write learners, and kinesthetic learners. Two articles incorporated learning style or types of learning. Rosenfeld et al. (2009) examined the relationship between aural literacy and asthma management, illustrating a correlation between low aural literacy and having less success in managing asthma—the authors recommend greater attention be paid to the oral exchange between health care providers and patients. Day (2009) discussed the use of storytelling to promote health literacy.

Several other studies offered tools with which to assess whether the client was able to understand the information relayed in a provider-patient encounter. While targeted strategies to promote health literacy, such as the DLNET (Wolff et al., 2009), had an evaluation
component as part of the toolkit, only two tools were found that had universal applications, and could thus be used in any clinical encounter. These tools again largely addressed the fundamental aspect of health literacy, and tended to reflect a somewhat paternalistic view of the clinical encounter, with the provider as an expert helping the patient overcome a problem.

The first of these two tools was Clayman, Pandit, Bergeron, Cameron, Ross, and Wolf’s (2010) AURA (Ask, Understand, Remember Assessment). This tool measures patient communication self-efficacy with their provider. The authors cite literature that demonstrated an increased prevalence of “inadequate question-asking, misunderstanding, and poor recall of health information” (p. 73) in patients with low health literacy, and sought to create a tool that evaluated patients’ self-efficacy in obtaining, understanding, and recalling information from their physicians. Patients were asked to fill out a four question survey that gauged their ability to perform tasks necessary in order to participate in their health care: were they able to ask their doctor questions, were they able to ask for help if they did not understand, did they understand their doctor’s instructions, and were they able to remember these instructions. The study pre-supposes that the inadequate question-asking should be addressed with their provider, and does not take into account other sources of information and a patient’s ability to interpret that information. In this century, where information is readily available through the internet, patients may not be choosing their health care provider as their primary source of health information. Britigan, Murnan, and Rojas-Guyler (2009), for example, note that many Latino patients turn first to the internet for information when they are ill, finding it easier to navigate than the provider-patient relationship.

The second tool, the AskMe3 tool (National Patient Safety Foundation, 2003), is one to be used proactively by patients, so they can ensure their provider has explained adequately
to them the basic information in a typical visit. It encourages patients to ask their health care providers three essential questions as part of each interaction:

1. What is my main problem?
2. What do I need to do?
3. Why is it important for me to do this?

While the AskMe3 tool was widely promoted by the National Patient Safety Foundation, I was only able to find one study regarding its efficacy. Galliher, Dickinson, Brown, and Pace (2010) found that it made no difference to outcomes for the patients recruited to participate in the study, but admit that their population was perhaps patients already used to asking questions of their providers.

Both the AURA and the AskMe3 tools seek to provide concrete universal strategies to help patients become more active participants in their care. When viewed through this integrative review’s analytic frame of relevance to FNP practice, applicability in PHC, and patient-centredness, the tools do have some relevance. In regards to utility for FNP clinical practice, both tools provide a means to assess if the knowledge transfer component of health education in a clinical encounter has been successful. In considering Zarcadoolas et al.’s (2006) framework for health literacy, both the AURA and the AskMe3 tool address fundamental health literacy, with the AskMe3 coming closer to addressing other components of health literacy with its final question of “why” is it important for the patient to carry out the actions prescribed by their provider. Neither tool, however, capitalizes on the opportunity to address other aspects of health literacy in a clinical encounter, and thus only have partial relevance to being used in a PHC context. In terms of patient-centredness, both tools have the potential for patient-centred practice: as noted earlier, both tools have an objective of increasing patient participation in their care. However, neither tool goes far
enough in setting the stage for how patients are to use their question-asking. Neither tool clarifies, for example, whether the questioning is to reflect what providers think their patients should take home from their visit, or whether in fact they are tools for patients to identify and ask questions around issues they believe are relevant to the clinical encounter.

At this point in the analysis of the literature, it is time to turn away from the specific examination of the health literacy literature and look more globally at how health literacy as a concept relates to PHC and its tenet of patient-centred care and FNP practice.

Health Literacy in the Clinical Encounter

The final section of this chapter is an examination of the health literacy literature as it relates to the bigger practice environment in which FNP practice exists. Through an exploration of the literature related to the concepts of patient-centred care and FNP practice, it becomes possible to set the stage for a deeper discussion on the way forward. First, though, it is necessary to see where the literature is moving the concept of health literacy.

Moving Forward with a Health Literacy Agenda

With increasing knowledge of the impact of literacy on health outcomes, an awareness of the lack of consensus about a health literacy conceptual framework, and the limitations of assessment tools, various authors and researchers have attempted to move the health literacy literature forward and address the gaps identified in the previous sections. One area of focus has been to examine health outcomes and how health literacy does or does not improve individual patients’ health. Various studies focused on the impact of low health literacy on health outcomes, but as Pleasant (2009) notes, “... no one can tell us how health literacy causes improved health. As of yet, there has been no causal link established between health literacy and improved health outcomes” (p. 9). However, what is arising out of the literature is the importance the part of self-efficacy has to play. Self-efficacy, or the belief in
one’s ability to organize and carry out the actions needed to achieve a goal (Lorig & Holman, 2003), shows promise as a link between health literacy and improved health outcomes. Self-efficacy has been identified as a determinant of health behavior change (Holloway & Watson, 2002) and researchers have been attempting to assess whether there is a link between promotion of health literacy, increased self-efficacy, and behavior change.

Torres and Marks (2009) examined the relationship between health literacy, self-efficacy and decision-making in postmenopausal women as it related to the intent to take hormone replacement therapy. They were able to demonstrate a positive relationship between health literacy and knowledge about hormone therapy, and also between health literacy and self-efficacy regarding hormone therapy. The nature of the relationship between the three concepts was not established in this study, specifically whether there was a stepwise relationship between health literacy, knowledge, and self-efficacy (Torres & Marks). Sarkar, Fisher, and Schillinger (2006), in their study of health literacy, self-efficacy and self-management in diabetes, demonstrated a positive relationship between self-efficacy and self-management. Further study is needed, however, in addressing the determinants of self-efficacy and what role health literacy may play in relation to self-efficacy (Sarkar et al., 2006). Osborn, Cavanaugh, Wallston, and Rothman’s study (2010) was the first study encountered that demonstrated that by taking measures to increase health literacy, it was possible to increase self-efficacy (in diabetes self-management, in this case). Osborn, Paasche-Orlow, Bailey and Wolf (2011)’s study was able to demonstrate a stepwise relationship as well: by increasing health literacy, they were able to build knowledge which in turn led to increased self-efficacy. Increased self-efficacy, in this study, led to increased physical activity and then positive health status change.
What the above literature reveals is a movement past the fundamental cognitive aspects of health literacy and a growing awareness of health literacy as a concept with potential for improving health outcomes. It also begins a consideration of health literacy as a social construct rather than a biomedical one. As noted earlier in this integrative review, much of the exploration of health literacy as a concept has come from a biomedical approach. Exploring health literacy as social construct offers intriguing possibilities, as will be discussed in the next chapter. Pleasant (2009) advocates for a switch to considering health literacy as a social construct with biomedical implications, and Higgins et al. (2009) place health literacy into a social-ecological context. In regards to the role health literacy may have to play in self-efficacy, both the Canyon Ranch Institute (2011) and Ross et al. (2009) believe that health literacy belongs within behavior change theories.

The implications of this line of enquiry are only beginning to be explored in the literature. However, self-efficacy, and the role that the promotion of health literacy has to play in increasing self-efficacy, offers exciting possibilities for further research. Supporting self-efficacy is also one of the competencies, as noted earlier, of FNP practice.

The explosion of literature referencing health literacy, the continued debate over different aspects of the concept, and a growing urgency to move forward in promoting health literacy creates a confusing environment for clinicians wishing to promote health literacy within a primary health care paradigm. The final section of this chapter reflects literature that addresses FNP practice and the use, or lack thereof, of health literacy tools and strategies.

**FNP Practice**

Despite some forward movement in the health literacy research, there remain significant gaps in the literature. The lack of causal links between the health literacy, clinical
practice and improved health outcomes has raised more questions than answers. What is also not clear is whether or not health care providers are even aware of the concept of health literacy. As noted earlier, of the 95 resources considered for this integrative review, only 8 were in the nursing literature. Mancuso (2009) found the same, noting that “very little substantive research exists in the nursing literature about health literacy…” (p. 87). Finally, although the literature reflected the investigation of health literacy as a means to improve patient outcomes, what was missing was a consideration of the application of health literacy as a means to measure and evaluate FNP practice.

What is evident from an analysis of the existing literature is that this lack of clarity and consensus in the literature has translated into a lack of clarity in practice. FNP practice is evidence-informed (CNA, 2010), and without evidence of how working from a health literacy framework can demonstrate patient-centred competencies and impact patient outcomes, it has been difficult for FNPs to understand, advocate for, and incorporate health literacy promotion into practice. Despite the demonstrated limitations of the literature and lack of clarity, room for forward movement and direction does exist. The intersection of health literacy as a concept and as a focus for health education within FNP practice, as well as the implications of health literacy on patient-centred care provides a path forward. The next chapter will move the discussion beyond an analysis and look at the implications and recommendations for how FNPs can incorporate health literacy into their practice. In doing so, a space is created not only for the improvement for patient health outcomes but for a means in which FNPs can measure and evaluate the value-added, public health competencies of their practice.
CHAPTER FIVE: DISCUSSION

The question this integrative review sought to answer is how FNPs can incorporate health literacy into clinical encounters with individual patients in order to ensure their practice meets the competencies of patient-centred care, and how this can improve patient health outcomes and FNP practice. As noted earlier, FNPs’ capacity to address health promotion, social justice, and equity as they provide primary care through a patient-centred lens can help to demonstrate the value-added role they bring to PHC. However, this literature analysis reveals a lack of clarity around health literacy and how it should be incorporated into practice. This chapter’s objective is to provide guidance regarding how health literacy can be better integrated into FNP practice, and thus highlight how FNP practice is meeting the competencies of PHC and impacting patient outcomes.

In order for FNPs to incorporate health literacy into their clinical encounters with individual patients, three factors need to be considered: a conceptual framework for health literacy that can be applied to PHC; an ability to assess health literacy levels in both patients and providers; and strategies to promote health literacy that will both improve patient outcomes and demonstrate evidence that FNPs meet their competencies in PHC. Each of these factors will be discussed in this section, as will implications of practicing within a health literacy framework for FNP practice.

Conceptual Framework for Health Literacy

If FNPs are truly going to incorporate health literacy into their practice in a viable way, then health literacy first needs to be understood as a conceptual framework. Only then will assessment tools and strategies take on any sort of meaning. It is through a conceptual framework that health literacy can become part of the foundation of FNP practice. As discussed in the analysis of the literature for this integrative review, Zarcadoolas et al.’s
The (2006) conceptual framework is best suited to FNP practice because it is comprehensive and applicable in a PHC setting, and lends itself as well to both to clinical practice and to patient-centred care.

By dividing health literacy into four concrete domains, the framework lends itself to use in clinical practice by creating opportunities for a practitioner to use health education to address whatever component of health literacy is relevant to a specific clinical encounter, while leaving open the door to possibilities for further skill-building in future encounters. In addition, by using concrete language for each of the domains, it facilitates the use of terms that can be incorporated into patient care plans. The last two qualities also lend themselves to patient-centredness, in that the framework provides a language with which to discuss the concept of health literacy and partner with patients to assess both the skills patients already possess, and what health education is needed to help patients move towards improved health outcomes.

To better understand how Zarcadoolas et al.’s (2006) framework can be applied in FNP practice, I offer the example of how FNPs can use civic health literacy to promote patient health as well as measure their own practice. Civic health literacy is chosen because it is the most difficult to conceptualize in a clinical context, however, it has significant potential to improve patient health outcomes. To understand the potential of civic health literacy promotion, it is useful to return to and consider Nutbeam’s (2000) conceptual framework. Although Nutbeam’s framework had less applicability to clinical practice than that of Zarcadoolas et al., Nutbeam’s description of “critical health literacy” can inform the understanding of Zarcadoolas et al.’s description of civic health literacy.

The emphasis Nutbeam places on the public health implications of health literacy helps to explicate the value of Zarcadoolas et al.’s civic health literacy to clinical practice.
Nutbeam notes that the potential for health education to support awareness and action in regards to social determinants of health is underestimated: “disappointingly, the potential of education as a tool for social change, and for political action has been somewhat lost in contemporary health promotion” (p. 265). In their role as PHC providers, FNPs work to address issues of social justice and equity as they relate to health. For example, by considering the domain of civic health literacy, an FNP may learn that a patient’s hypertension continues to be uncontrolled because that patient is homeless, and prefers not to take her diuretic as finding a bathroom is problematic, particularly as the shelter the patient uses is closed during the day. A FNP working with this client, using the domain of civic health literacy, would work with the client to address the issue. This may mean helping the client to identify safe bathroom facilities during the day while looking at the larger picture of stable housing. Nutbeam notes, however, that much of the work that has been done in addressing social determinants of health has been in the form of interventions “on behalf” of people...rather than ‘by’ or ‘with’ people” (p. 265). By targeting health education to promote functional, scientific, and cultural health literacy, FNPs can help patients to increase their capacity to understand health information, to use the health system, and to act independently in seeking out and using knowledge. As well, by recognizing opportunities to promote civic health literacy, FNPs can facilitate empowerment within their patients so that patients can build capacity to take on advocacy and action independently.

Admittedly, this may be a long-term investment with the patients FNPs work with, but the outcomes of civic health literacy are perhaps those with the biggest impact on health. Due to the longitudinal relationship FNPs have with their patients, this long-term investment in health literacy promotion has the potential to create outcomes that not only improve individual patients’ health, but also impact broader social determinants of health. To
illustrate the potential of civic health literacy, I offer two examples from my clinical practice. The first is from my experience of working in a youth clinic for the past twenty years. In addition to offering reproductive care services, the youth clinic also carried out peer education programs that delivered health education in community schools. Although the clinic has not had the opportunity to formally evaluate the programs carried out, what has been noted is a significant difference in the type of interactions the clinic now has with patients. At first, patients accessed services that were reactive – emergency contraception, pregnancy testing, and STI testing. Gradually, what has been noted is that patients now come in proactively, with a high level of independence in deciding what services they are seeking. Looking back through the lens of health literacy promotion, it can be seen that the youth clinic clients have developed a high level of health literacy as it relates to reproductive health. They have functional health literacy when they demonstrate they are already aware of how to take birth control pills, for example; they have scientific health literacy when they present to discuss methods of birth control they have researched on the internet or heard about in class; they have cultural health literacy when they present already aware of our confidentiality policy; and they have civic health literacy in knowing their right to consent to their own care and in successfully advocating for services such as school-based clinics and condom depots at various stores and community organizations around town. The youth clinic services have evolved because youth were able to verbalize and advocate for services to meet their needs.

The second example is from a family physician's office at which I had a practicum as an FNP student. The physician is a methadone prescriber for a fairly large geographic area, which entails some of the most marginalized clients having to travel over 100 km in order to access his services. By working with them individually, he was able to mobilize these clients
to advocate for methadone prescribing to be available locally, with the result that a clinic is in
the process of being built in their community.

What can be seen from the above examples is that health literacy when used as a
framework for promoting health can result in improved patient health outcomes. FNPs
practicing in ways that facilitate empowerment and promote independent advocacy amongst
patients can influence the ways in which patients interact with health care services. While
this is significant, what is of equal value is the way that the incorporation of a conceptual
framework, namely that proposed by Zarcadoolas et al. (2006), can influence how FNPs can
measure whether or not they are meeting their patient-centred competencies.

The FNP competencies most relevant to that of providing patient-centred care are
those that address working in collaboration with patients to determine care options and
monitor responses to interventions, supporting self-management, and promoting patient self-
efficacy. Zarcadoolas et al.’s (2006) framework helps to highlight FNP competencies by
tyling together patient-centred care, the principles of PHC, and a mechanism to develop health
education that enhances FNPs’ ability to collaborate meaningfully with patients and support
patient self-management and self-efficacy.

As noted in the introduction to this section, having a framework of health literacy
from which to work provides a direction for the development of health education plans with
patients with a goal of the patient being a partner in their care, and able to self-manage
independently. For example, as illustrated in the above example of a homeless woman with
hypertension, because her issues are complex, a framework of health literacy provides a FNP
working with this woman a starting place from which engage this client. The issues are
looked at holistically within all four domains of Zarcadoolas et al.’s (2006) framework and
the client is at the centre of her own care. The goal of health education and the goals of FNP
competencies are congruent. However, in order to consider the promotion of health literacy as a means to evaluate FNP competencies, it is important to consider measures of whether patients need health education to further their health literacy, and the implications of using strategies to promote health literacy in practice. What this requires is a means by which to assess health literacy.

Assessment of Health Literacy

What the literature revealed about the assessment of health literacy is that health literacy has historically been linked with the biomedical construct of an assessment or screening tool rather than as a way of interacting with a patient. This has resulted in a lack of clarity and confusion within the health literacy literature, and has hampered incorporation of health literacy promotion in clinical practice.

The solution to incorporating health literacy assessment into the clinical setting is threefold. The search of the literature for assessment tools relevant to FNP practice revealed that there was no one tool suitable for use in assessing health literacy levels. The assessment strategies found addressed only fundamental health literacy, were too lengthy or awkward to use in clinical practice, or at best paid only lip service to being patient-centred. Some authors, in fact, advocate against clinical screening for literacy (Paasche-Orlow & Wolf, 2008). Yet with an awareness of the impact low levels of health literacy has on patient outcomes, it is difficult, if not unethical, to avoid making any effort to assess whether patients have the skills to manage their health.

A solution to the dilemma of having inadequate assessment tools but still needing to understand a patient’s level of ability to manage their own health is to shift how health literacy assessment is viewed. First, shifting how FNPs view health literacy has important implications. As noted earlier in this integrative review, Pleasant (2009) suggested that
health literacy is currently seen as a biomedical construct with social implications. Seeing it as the opposite – a social construct with biomedical implications – opens up new possibilities. Thinking of health literacy as a social construct takes the emphasis away from needing formal assessment tools, in that the FNP can then concentrate on the medical issue that brought the patient into the clinical encounter rather than focusing on formal assessment of literacy which is what current assessment tools do. This then shifts the clinical interaction to one in which the needs of the patient become the priority. Health education to promote health literacy becomes one of the tools in the FNP toolbox with which to work with the patient to achieve their health goals. This way of viewing health literacy also fits with the conception of health literacy being on a continuum, and not an entity that one either has or doesn’t have – there will always be room to promote health literacy.

The second strategy is for FNPs to continue to focus on the patient-centred components of their practice, and move beyond the superficial assessment of an individual’s health needs to a more contextual one. Just as FNPs collaborate with patients to determine care options and support self-management and self-efficacy with clinical conditions, they are also able to do the same with health literacy. Nutbeam (2000) challenges health care providers to “communicate in ways that invite interaction, participation and critical analysis” (p. 264). With this in mind, and operating from Zarcadoolas et al.’s (2006) framework, assessment strategies may be as simple as asking patients if they feel they are able to self-manage as well as they would like to. In a clinical encounter, this may apply to functional health literacy (“are you confident you can figure out the Tylenol dosages for each of your children?”), scientific health literacy (“do you ever use the internet to get health information?”), cultural health literacy (“how comfortable are you in accessing the services
I've referred you to?"), and civic health literacy ("what do you see as barriers for you in accessing health services, what do you think you need to address these barriers?"). What these assessment strategies do is provide a contextual understanding of the whole patient which provides the FNP the opportunity to address not only immediate health concerns but to work towards a broader, more optimal level of health within all of the social determinants of health.

The final proposed strategy is to bring health literacy out of the realm of academia and into the realm of practice by making it part of the discussion FNPs have with each other and with patients. While there is a need to address health literacy on a macro level through social marketing and other strategies, that is beyond the scope of the FNP in clinical practice. What is needed is to bring health literacy into the realm of the commonplace. It needs to begin at the level of FNP educational programs and continue to the individual patient. By ensuring a common understanding of health literacy and how it can be incorporated into clinical practice, FNPs build an approach to patient care that is patient-centred and that invites interaction, participation, and critical analysis. This approach would allow for discussion within any clinical encounter of the concept of health literacy and how it impacts health. It builds capacity and a common language for patients and providers to use to enable patients to tell their providers about their health needs and whether those needs are being met, and for providers to check in with their patients in order to ensure that the FNP's practice is meeting patient needs. By engaging in conversation with patients about what health education is needed, FNPs remain patient-centred and acknowledge patients are partners in all components of their health care.

These strategies provide a way forward for FNPs. The strategies move health literacy beyond its current inception as predominantly a biomedical issue to a living, interactive
concept, and a way of working with patients to improve health and health outcomes. In creating an understanding of health literacy for both FNPs and patients and providing a common ground from which to begin a clinical encounter, a space is created for patient-centred care that does more than just pay lip service to the concept of health literacy. The final section of this chapter now moves the discussion to strategies to promote health literacy that will both improve patient outcomes and demonstrate evidence that FNPs meet their competencies in PHC.

Strategies to Promote Health Literacy in FNP Practice

In order to discuss strategies to promote health literacy and how to incorporate these strategies into FNP practice, it is first useful to have a clear idea of what the goal is for doing so. Viewing health literacy as a social construct with biomedical implications facilitates this discussion. Rather than considering the outcomes of health education and health literacy promotion only through biomedical indicators (improved blood glucose management, for example, or decreased hospitalizations for asthma recurrences), the addition of social indicators provides a way to approach strategies to promote health literacy that looks at the whole context of the patient, including the relationship between patient and provider. These social indicators include, for example, whether the patient feels they have the ability to self-manage their care, whether they can access help if their self-management falters, and whether they have the confidence to participate and advocate in processes influencing their health and the health of others. It also captures the value-added, public health role of FNP practice. Rather than practice only to cure and prevent illness, FNP practice in PHC focuses on the promotion of health, in whatever way “health” is described by their patients. FNP practice undertaken through this value-added lens then works to promote health literacy and helps patients to achieve their health goals.
Several authors describe or allude to the outcomes of health literacy promotion being social constructs. In their conceptualization of health literacy, Kickbusch et al. (2005) describe health literacy as a compass on a journey to health; Rootman and El-Bihbity (2008), in the definition of health literacy endorsed by this integrative review, describe the improvement, maintenance and improvement of health as the goal of health literacy. Nutbeam (2000) proposes that the goal of health education is to empower and build independence. In that vein, Nutbeam goes further and proposes some outcomes of health literacy, including both individual (improved knowledge of risks and health services, for example, and improved capacity to act independently on knowledge) and social outcomes (increased participation in population health screening programs, improved capacity to influence social norms and interact with social groups). With these outcomes in mind, FNPs can use strategies for health literacy promotion to help patients move towards goals that impact more than the use of biomedical indicators would allow. Returning to the above example of the homeless woman, the goal is to address more than just her hypertension. Strategies for health literacy promotion would create the potential for this woman to learn to advocate for herself. This may include her advocating for a change in medication that does not require her to have to use the bathroom as frequently, or for her to develop a plan in which she accesses a shelter which may be more accommodating to her needs. She may also start to build an understanding of the lifestyle changes such as access to healthy food and exercise and seek out opportunities that provide her with these things.

The strategies examined in this integrative review reflect tools that while lending themselves to clinical practice and giving some consideration to patient-centredness, did not cover more than the fundamental domain of health literacy. If FNPs are to use strategies to promote health literacy in their practice in PHC, the strategies they use for fostering health
literacy need to apply to more than just fundamental health literacy. That is not to say, however, that the strategies examined have no utility to FNP practice, but rather that the promotion of health literacy needs to be discussed in light of a greater context. Two components of this greater context are whether health literacy promotion should be applied as a targeted or universal intervention, and how strategies for health literacy promotion can help FNPs evaluate their practice to ensure it is patient-centred.

Targeted or Universal Strategies

Working from Zarcadoolas et al.’s (2006) framework helps to facilitate the discussion around whether health literacy promotion should be a targeted or universal intervention. What the literature revealed is that there is value to both targeted and universal strategies to promote health literacy, but that no one tool has thus far been developed that can address all domains of health literacy in either a targeted or universal manner. I propose that health literacy promotion should be offered to all patients. Targeted strategies such as the Diabetes Literacy and Numeracy Education Toolkit (Wolff et al., 2009) have a part to play, particularly in addressing the fundamental domain of health literacy as it relates to diabetes self-management. However, even in this instance, it is important for the FNP to consider that other domains of health literacy have a part to play in successful self-management. One area of consensus in the literature is that health literacy is a concept that occurs on a continuum, is generative, dynamic, and context-specific. Much like assessment of health literacy, there is always room for promoting it further, or ensuring that the patient is able to meet the demands of the context they are in during any particular clinical encounter. Just as employing Zarcadoolas et al.’s framework can assist in assessing health literacy in collaboration with patients, so can the framework guide health education strategies to ensure all domains of health literacy are addressed.
The second component of the context of health literacy promotion in FNP practice is the implication for FNP evaluation of their practice. This will be discussed in the final section of this chapter.

Implications for FNP Practice

It is time at this point to return again to the question this paper sought to answer: how FNPs can incorporate health literacy into clinical encounters with individual patients in order to ensure their practice meets the competencies of PHC, especially that of patient-centred care, and the potential health outcomes for patients from doing so. There is support in the literature for the importance of health literacy in achieving positive health outcomes in patients. However, there is little discussion around how practicing from a perspective of health literacy promotion and within a health literacy framework can help FNPs demonstrate that they are providing patient-centred care, and how that impacts patient outcomes.

FNPs practice in ways that are patient-centred by collaborating, promoting self-efficacy, and supporting self-management (CNA, 2010). By incorporating a framework that addresses all the domains of health literacy, FNPs have the opportunity to demonstrate how their practice seeks to collaborate with patients, promotes patient self-efficacy, and supports patient self-management. Using Zarcadoolas et al.'s (2006) framework and focusing on the outcomes of improved health and independence in patients can provide a guide to everyday FNP practice. I am reminded of advice from a mentor early in my nursing career: “we should always be trying to work ourselves out of a job” (E. Pace, personal communication, n.d.). Simple advice, yet powerful enough to set a philosophy of patient-centred care and the goal of the health education FNPs can provide.

As of yet, there are no formal studies tying health literacy promotion to FNP patient-centred care. Rather than allowing this to create a barrier for moving forward, this represents
an opportunity for FNP leadership. As Mancuso (2009, p. 87) notes, “nurses are at the forefront of educating patients and are vocal advocates for vulnerable groups...[and] nursing must continue to evolve and incorporate health literacy”. FNPs have the capacity to develop evidence supporting a conceptual framework for health literacy promotion. While formal studies and research projects are needed, FNPs also have the ability to begin to use health literacy frameworks such as that of Zarcadoolas et al. (2006) in their everyday practice to promote patient-centred care. By embracing the concept of health literacy and utilizing frameworks and strategies suggested, FNPs can begin to understand and view the effects of working from that framework on patient outcomes. The final chapter of this review provides recommendations and a way forward for FNP practice.
CHAPTER SIX: RECOMMENDATIONS AND CONCLUSION

By practicing in ways that promote health literacy, FNPs are presented with two opportunities. First by utilizing a health literacy framework, such as the one suggested by Zarcadoolas et al. (2006), FNPs have in their toolbox a mechanism for describing FNP practice in a way that demonstrates how they are meeting their patient-centred competencies. This demonstration of patient-centred care is significant because it brings forward the value-added components of FNP practice such as health promotion and social justice, and legitimizes these components as being as important as the clinical care component. The demonstration of patient-centred care also supports the argument for role sustainability for FNP practice within the health care system. By highlighting how FNPs use health literacy promotion to support patients to effectively collaborate as partners in their health, as well as feel confident in self-managing their health, FNPs can make evident the comprehensive benefits of their practice to both the individual patient and the larger health care system.

The second opportunity that promoting health literacy creates is that by practicing from a health literacy framework, FNPs can then demonstrate the impact that clinical encounters can have on individual patient outcomes. By ensuring that FNP practice is in keeping with the four domains of Zarcadoolas et al.’s (2006) framework, FNPs can practice in a way that addresses the whole context of an individual’s health and in doing so can keep the patient at the forefront of the clinical encounter. The potential result of this way of practicing is improved patient understanding of their own health and in turn improved health outcomes. In order to practice in a framework of health literacy promotion, however, the literature search undertaken for this integrative review reveals some changes that need to occur. What has been highlighted is that change is needed on three levels: patient, provider, and system.
Patient Level Recommendations

As the focus of health care changes, patients are increasingly being called upon to self-manage and engage in their health care. But in order to do so, they must be able to speak the language of health and health care. In their everyday clinical practice, FNPAs have an opportunity to empower patients to become meaningful partners in their health and health care. FNPAs can use a framework such as that offered by Zarcadoolas et al. (2006) to frame health education so that patients are effectively able to self-manage their health and have improved health outcomes. In order to do so, the outcomes under consideration must include not only those that reflect illness prevention and management, but also those that reflect health goals particular to the context of the individual patient. This will in turn necessitate FNPAs becoming a voice in PHC of creating new measures of patient well-being. For example, a patient with impaired glucose metabolism may not identify a goal of lowering her hemoglobin A1C; however, she may identify a goal of meeting new people by joining a neighborhood walking group. Her goal is socializing – in pursuit of that goal, a lower A1C may well be an ancillary benefit, but it was not what drew her to increasing her exercise level. This examples highlights that by keeping patients at the center of their own care, FNPAs can facilitate and empower patients towards improved health outcomes regardless of what those outcomes may be.

Provider Recommendations

Practicing in ways that promote health literacy offers potential for FNP evaluation of the value-added role they play in the Canadian health care system. A precursor of this practice, however, is an awareness of the concept of health literacy, as well as its implications for FNP practice. Health literacy needs to become part of the discourse of undergraduate and graduate education for FNPAs, as well as the continuing education of FNPAs.
once they have graduated. Including Zarcadoolas et al.'s (2006) book as required reading is a start, as is participating in journal clubs and conferences that include a broader spectrum of topics than clinical care considerations.

One of the impressions resulting from this integrative review is the lack of consensus in health literacy around conceptual frameworks and how to practice in ways that promote health literacy. Family nurse practitioners have an opportunity to take a leadership role in contributing to health literacy research by choosing a conceptual framework, and moving forward in testing and exploring the use of that framework. In participating in this exploration, research, and discussion, FNPs should remain cognizant of the potential for health literacy promotion to impact not only patient outcomes, but the description of their practice as well.

It is important for FNPs to enter into the discussions surrounding health literacy because they are well situated to move the concept of health literacy forward as a social construct and not just a biomedical approach. FNPs can do this by participating in research studies that test and refine a framework such as that offered by Zarcadoolas et al. (2006), and by making conscious attempt to utilize a health literacy framework in clinical practice. By doing so, FNPs have the opportunity to become leaders in promoting health literacy within the clinical context of PHC.

System Recommendations

Finding opportunities for FNPs to significantly impact system level awareness of health literacy practices can be daunting. However, this does not mean that change cannot begin to occur. FNPs, by acting as advocates for both patients and their own practice, have the opportunity to impact social justice issues and health care equity. What this requires, is for FNPs to have a clear working understanding of all levels of health literacy, especially
civic health literacy amongst themselves and their patients. With this knowledge, FNPs can empower patients to act on their own behalf and as Nutbeam (2000) notes, create opportunities to advocate with, rather than for patients. Earlier in this review, two examples were offered of clinical encounters that contributed to increased health literacy among two different populations: youth seeking sexual health services, and adults seeking methadone treatments. These examples illustrate the potential for many small interventions to lead to larger and sustainable impacts measurable on a bigger scale. In order to reflect the potential impact of individual clinical encounters occurring under an umbrella of health literacy on the larger health care system, it would be useful to have a way of capturing this data. FNPs can work with their employers to develop policies and practices that are designed to measure the impact of FNP practice on patient outcomes. One example would be for FNPs to use the teach-back method in which patients are asked to teach the health information presented back to the FNP. An encounter code could be created to record all patients with whom this method was utilized. This in turn would give FNPs and their employers measurement data about the effectiveness of the clinical encounter. This could be significant in the long term for the support of FNP practice.

Conclusion

The context for much of this integrative review has been the changing face of the Canadian health care system, particularly in regards to a move to primary health care, increased participation by patients in their health and health care, and the introduction of a new role in the form of the family nurse practitioner. This integrative review has highlighted the ways in which health literacy can be utilized by FNPs to improve not only FNP practice but patient health outcomes as well. One author notes: “what if the role of the [primary care provider] changes from the go-to resource for all things health-related to more of a consultant
who oversees patients who take care of themselves?" (McMullen, 2011, para. 6). By working in ways that promote health literacy, FNP's have the potential to help move the health care system in precisely that direction.
REFERENCES


