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Dimensions of Quality in Well Child Clinic Services: A Comparison of Community Health Nurses' and Mothers' Perceptions'

by

Carol Shemanchuk 

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment

of the requirements for the degree of Master of Science

Medical Sciences – Public Health Sciences

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ABSTRACT

This qualitative study explored the construct of quality in Well Child Clinic services, a core program of public health. Focus group discussions were held with mothers and community health nurses to discover what mothers and nurses believe are important components of this service. Nine dimensions of quality emerged from content analysis of the focus group data. Use of Donabedian's (1980) structure, process, outcome model confirmed that quality care is a mix of structure and process components of the service. A high degree of congruence was evident among the service features important to both nurses and mothers. The findings of this study offer a framework to monitor the quality of nurse client interactions, and identify outcomes that can be attributed to these interactions. Using perceptions of mothers and nurses regarding service quality, this study has addressed gaps in existing knowledge and has important implications for well child clinic services and for future research.

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CHAPTER 1

INTRODUCTION

Four years after a system wide sense of urgency for restructuring, the priority in Alberta's health system now seems to be on stabilization, with quality improvement and cost reduction high on the agenda (Provincial Health Council, 1998). Fiscal restraints, accountability for health care spending, and restructuring for continuous improvement in the health system has resulted in an emphasis on costs and patient outcomes as performance measures of efficiency and effectiveness (Irvine, Sudani, & McGinnas-Hall, 1998). As health regions face these challenges, community health nurses and other health providers are being asked to demonstrate the quality and health benefit of care provided to clients (Griffiths 1995; Sidani & Braden, 1998). Consumers, although generally assumed to be unable to assess the quality of their health experience due to a lack of clinical knowledge (Proctor, 1997), have also called for the monitoring of quality of health services. Their interest, driven by the important and personal nature of health care, is to ensure that spending reductions do not mean reduced access to quality health services (Liberton, Kutash, & Friedman, 1997). As a result, within Alberta's accountability framework to guide respending, consumer perceptions of quality care are now considered a significant determinant of confidence in, and credibility of, the restructured system (Alberta Health, 1998).

The philosophy underpinning health service delivery and evaluation in the restructured system is moving away from the traditional "scope of professional practice" (Provincial Health Council, 1998) to one that has a strong customer service culture

focused on delivery of quality care (Capital Health Authority, 1999). The central thrust in this recent model of service delivery is that consumers are at the centre of personal care decisions and service planning. Health providers therefore must work in partnership with consumers towards providing quality health services that are cost effective and responsive to the needs of individuals and communities (Proctor, 1997). This collaboration between users and providers is essential if client needs and desires are to be considered in all aspects of service and resource provision (Rosenbaum, 1997).

In light of Alberta's emphasis on satisfying consumers' perceptions of quality, it is important to understand the degree to which provider and consumer perceptions related to quality services are congruent. Otherwise, as research has shown, it is likely that service delivery will reflect provider perceptions of quality, which may not be aligned with perceptions of those receiving the services. This would be contrary to the core business of the provincial government to "ensure delivery of quality health services" through a consumer driven system (Alberta Health, 1998).

The emergence of consumerism and the emphasis on cost and outcomes in the current health environment magnify the need for community health nurses (CHNs) to address issues of quality, outcomes, and cost effectiveness in all aspects of community health nursing service delivery. Nurses however have historically been identified as being naïve in issues outside the immediate sphere of patient care, adding to the challenges of identifying outcomes that nurses can be held accountable for (Antrobus & Brown, 1997). These challenges are based on evidence that outcomes are not only affected by the care provided by nurses, but also by factors related to the client, the interpersonal aspects of care, and the settings in which care is provided (Brooten &

Naylor, 1995; Wilson, 1998). Consequently little progress has been made in achieving clarity in the definition of quality in community health nursing, and in unravelling the relationship between quality in service delivery and effectiveness/positive health outcome (Macleod Clark, Franks, Maben, & Latter, 1997).

The Study

This study explores the construct of "quality' in "well child clinic" (WCC) services, a core program in public health, as a first step in understanding how clinic services can be organized to improve the quality of services offered. Using a qualitative approach, the perceptions of mothers who use WCC services in a large urban-rural health region, and the perceptions of CHNs who deliver these services, are studied. This approach is supported by the work of quality of care theorist, Donabedian (1980). Donabedian (1980) stresses that in endeavouring to define and assess the quality of health care, it is particularly important to accurately elicit the preferences of patients. Bowers, Swan and Koehler (1994) agree, and stipulate that managing consumer perceptions of quality in health care requires the development of instruments to "tap the opinion of the customer", who is a key agent in the delivery of health care services (Paaviilainen & Astedt-Kurki, 1997). According to Wilson (1992), despite this recognized value of patient experience to quality of care, one of the central weaknesses in current efforts to assess the quality of care is the continued silence of the client or patient (Wilson, 1992).

The Context for the Study

Well child clinics, a voluntary service designed for health promotion and preventive purposes, are delivered by community health nurses to approximately 10,000

parents yearly in a large urban/rural health region in Alberta, Canada. In the WCC setting CHNs assess preventive and health promotion needs of children between two months – five years of age, and identify and implement strategies to address these needs. The clinic setting provides CHNs with an opportunity to offer health education, counselling, screening, referral, service co-ordination, and immunization. Decision-making, intervention, and follow-up is focused on altered health maintenance or health seeking behaviours (Collado, 1992). Participation in well child clinics is voluntary and parents have a significant choice in whether they attend routine WCC with their infants/children.

Community health nurses delivering WCC services function in an independent role compared to the predominately dependant role of nurses who work in acute care/physician led settings (Heater, Becker, & Olson, 1988). This independent role concerns the responsibilities for which only CHNs are held accountable for and which do not require a physician's order. Immunization is the only component of WCC services mandated and monitored by the provincial government. Through the years, the value of nurse-led health promotion clinics to achieve health benefits has been clearly recognized (Gibbins, Riley, & Briimble, 1993; Cowley, 1996).

Community health nurses provide health services within a primary health care context. The principles of primary health care include an emphasis on health promotion, interdisciplinary and intersectoral collaboration, access to resources essential for health, and community participation in addressing inequities (Stewart, 1995). In CHN practice, the term "client" is used rather than "patient" to denote that users of CHN services are generally "well" and do not require medical care for ill health or disease.

Statement of the Problem

Research evidence suggests that it is the processes involved in the patient or client contact that are critical in determining the quality and effectiveness of a health intervention (Dahl, 1995; Olds, Henderson, & Kitzman, 1997). This premise points to the need for an understanding of both the clients' and professionals' perceptions of these processes to evaluate the quality (Rosenbaum, 1997) and outcomes of care (Paaviilainen & Astedt-Kurki, 1997). The voluntary and interactive nature of the well child clinic service encounter makes it clearly necessary to examine the perceptions of both consumers and caregivers to enhance understanding of service quality (Proctor, 1997).

Purpose of the Study

The purpose of this study is to:

1) identify an initial set of quality indicators of the nurse client interaction in the delivery of well child clinic services as perceived by mothers and community health nurses,
2) compare the perceptions of mothers and CHNs about what constitutes quality in "well child clinic" services, and
3) identify factors that influence CHNs' capacity to deliver quality services in WCC.

The longer-term goal of this study is to develop a framework to measure and demonstrate quality in WCC services.

Significance of the Problem

To date, the results of quantitative research have clearly demonstrated the cost effectiveness and efficiency of WCC services related specifically to the immunization component (Sadoway, Plain, & Soskolne, 1990). Cost effectiveness is a key element in

current service delivery in order to justify expenditure on nursing staff, equipment and other facilities (Griffiths, 1995). Highly visible "show-case" returns like excellent immunization rates demonstrate immediate returns from a high profile expenditure of health resources (Cowley, 1996). While these measures provide information about the number of client contacts, they do not assess quality of the nurse client interaction or illuminate the wider spectrum of health outcomes associated with these interactions (Macleod Clark et al., 1997).

Difficulty in assessing quality and benefit of care in WCC services also lies in describing or articulating the concepts involved in the other components of the clinic intervention (e.g., education, counselling, and screening) given that results are difficult to capture with traditional research methods. In practice the holistic nature of the clinic service, which incorporates elements of health education, health promotion, and social work, is not easily reduced to isolated and standardized strategies (Hayward, Ciliska, Mitchell, Thomas, Underwood, & Rafael, 1993b). All of these components of care merge during the service encounter.

Adding to the struggles of describing the effects of nurse client interactions to measure these interactions, is the traditional reliance on biomedical health outcome measures to demonstrate quality and effectiveness of health services. It is known that the use of conventional outcomes and targets such as reductions in morbidity and mortality (Mant & Hicks, 1996) fail to account for the immense scope of short-and medium-term behavioural outcomes that are associated with health promotion interventions as WCC services.

Attempts to understand the concept of quality of nursing services in WCC requires breaking fairly new ground. Therefore this study will have important implications for community health nursing practice by providing data that can be used to design quality interactions that meet parents' priority health needs. To date there has not been an appropriate framework or model to achieve this. Ultimately the results of this study may present an exciting opportunity to contribute to core business of Alberta Health by providing evidence of the delivery of quality health promotion and preventive services by community health nurses, who are key health service providers in the community.

Research Question and Objectives

Understanding quality in nurse client interactions from the view of professionals and consumers is necessary to enhance understanding of service quality (Proctor, 1997) in the delivery of well child clinics. Therefore, the question that will guide this study is: What are the dimensions of quality in well child clinic services provided by community health nurses as perceived by mothers and community health nurses?

This study seeks to address the three research objectives identified in Table 1.

Table 1: Research objectives

1. Clarify the concept of quality in well child clinic services in a public health setting,
2. Develop knowledge regarding similarities and differences in perceptions of quality between CHNs and consumers (mothers), and
3. Identify CHNs' perceptions of factors that are perceived to influence the achievement of quality in nurse-client interactions in the delivery of WCC services.

CHAPTER 2

LITERATURE REVIEW

The definition and specification of attributes characterizing quality in health care is complex and ambiguous (Donabedian, 1988). Although evidence of any systematic inquiry into understanding quality of community health nurse-client interactions in the delivery of well child clinic services was not found, studies of quality in health care which were relevant to the context of this study were reviewed. Therefore, literature dealing with definitions of quality of care, quality indicators in nurse client interactions in various health settings, patient satisfaction, consumer - provider perceptions, and health care quality management was examined.

Definitions of Quality of Care

Quality is a multifunctional and multidimensional concept. Sidani and Braden (1998) describe health care quality as the delivery of care that results in the best health outcomes for clients. Donabedian's tripartite model of quality is used in most approaches to evaluating quality in which achieving quality is seen to be dependent on a three domain paradigm: structure, process, and outcome (Donabedian, 1980). The basic concept that appears to underlie use of this model is that quality in health care can be examined by assessing any one of these three components. Evaluation of quality however is reliant on the measurement of two underpinning principles: the quality of technical care and the quality of interpersonal care.

Structure refers to "the relatively stable characteristics of the providers of care, of the tools and resources they have at their disposal, and of the physical and organizational

settings in which they work" (Donabedian, 1980, p.8). Findings of recent research support the view that quality services are determined by a mix of professional and organizational factors, highlighting the need to overcome infrastructural barriers on professional practice to address health needs (Macleod Clark et al., 1997). The categories deemed to be important in assessing the quality of service structure include characteristics of the provider, client, institution and community, and access.

Process focuses primarily on treatment processes. In a nursing context, the nursing process is a strategy that integrates all nursing activities (data collection and analysis, diagnosis, planning, intervention, and evaluation) including interpersonal factors and technical skill in the delivery of services (Smith & Maurer, 1998). The interpersonal process, which is key in nursing, refers to the therapeutic relationship and rapport, communication, information sharing, and shared decision making that occur as part of the intervention. Technical skill involves knowledge of intervention techniques; the ability to assess which intervention best matches the client's problems or diagnosis, and the skill to effectively deliver the best matching interventions.

The last component of quality is *outcome*, which Donabedian (1980, p.82) defines as "a change in the patient's current and future health status (symptoms and functioning) that can be attributed to antecedent health care". Patient views about treatment, such as patient satisfaction, health-related knowledge, and behavioural changes in areas that contribute to health problems are included. Outcomes specific to nursing are defined as a general patient state, behaviour, or perception resulting from nursing interventions (Johnson & Maas, 1997).

Based on Donabedian's structure-process-outcome model, quality in health promotion interventions as WCC refers to the structure and processes underpinning the nurse-client interaction leading to a health benefit. Support for use of this model in other CHN practice settings is suggested by the results of a study of client's views of a health visiting service provided by community health nurses (Cowpe, Maclachlan, & Baxter, 1994). "Approachability", a process variable and "clinical expertise", a structure variable were among the most commonly quoted characteristics of service quality. Lewis (1994) agrees that the most valued skill emphasized by consumers, but least recognized by health providers, is interpersonal and technical skill.

Within the context of Donabedian's model, Griffiths (1995) cautions that we must bear in mind that process or structure measurement may only be a valid indicator of quality if there is a proven relationship to outcome, as outcome data are more difficult to collect. The causal chain between care or service and outcome, which is often difficult to establish, will necessitate description and measurement of both process and structural variables. The quality of nursing therefore can not be improved without an understanding of the relationship between outcome variables and process variables (Irvine et al., 1998).

Evidence of Donabedian's approach is found in Alberta Health's (1998) proposal of six quality dimensions that are related to the delivery of health services: appropriateness, effectiveness, safety, efficiency, accessibility, and acceptability. Other studies also identify a similar list of monitorable dimensions: expected efficiency, practical efficacy, technical competence, and appropriateness (Maxwell, 1994; Colicelli, 1996). According to Redfern and Norman (1994), the identification of these quality

dimensions highlight the point that quality health care is predominately influenced by social values. Ultimately quality care is a social construct negotiated between the service providers, recipients (patients or clients, and their families), and those who control the resources (managers, planners, and government). Clearly all have a role to play. This view implies that to benefit the clients' health, the care planned and implemented by professionals should be based on an understanding of the client's problems, the mechanisms through which the services or interventions resolve the problem, and the expected outcomes of the interventions (Donabedian, 1992).

Quality Indicators

A quality indicator is defined as a marker of aspects (or characteristics) of quality which improve health outcomes (Wilson, 1992; Macleod Clark et al., 1997). Indicators are also described as variables that can be used to design or to measure the success or failure of a programme. Indicators of quality link the processes of a nurse-client interaction with the structure necessary for them to take place and the benefits or health gains that result. A recent study in Britain (Macleod Clark et al., 1997) provided an evidence-based framework of key quality indicators and measures of effectiveness in the health promotion work of primary health care (PHC) nurses. The health promotion role of primary health care nurses in this study is similar to the role of community health nurses in WCC with exception of the commissioning nature of PHC nursing services in the United Kingdom. The indicators, which emerged from interviews with clients and PHC nurses, supported findings from other quality and outcome studies (Redfern & Norman 1994). The indicators included: choice and accessibility of service for the client, sufficient time, skilled assessment of health needs, an informed and credible practitioner,

an individualized, non-judgemental client centred approach to service delivery, continuity of care, advocacy for the client, and liaison and collaboration with community partners. Based on these findings, Macleod Clark, et al. (1997) suggested the need to shift outcome measurement towards process and the quality of care, away from quantitative measures of longer-term biomedical outcomes. Findings of this research (1997) also confirmed the view of other researchers that a key determinant of quality in the process of promoting health and delivering health care is the interaction between the client and nurse.

According to Macleod Clark, et al. (1997) the importance of the nurse client interaction highlights the need to identify and evaluate the role of nurses in influencing health benefits. To achieve this objective, it is necessary to make the activities of nurses more explicit and measure the impact of these activities. The development of the "nursing role effectiveness model" (Irvine et al., 1998) supports this recommendation by using this model to demonstrate that patient and cost outcomes that nurses are held accountable for are dependant on the roles that nurses assume in health care. This model focuses on nurses' capacity to engage in their nursing role function specific to the health care setting, the individual and organizational factors that influence role performance, and the relationships of each to patient outcomes. Use of the nursing role effectiveness model to monitor the quality of nursing care is also supported by Wilson (1992) who stresses that activities designed to monitor quality of care must be anchored to the principal functions of nursing care.

Proctor (1997) more specifically identified quality indicators in maternity services, comparing the perceptions of childbearing women and midwives. The results

demonstrated areas of shared understanding between mothers and nurses, as well as key differences that had implications for improving the service quality for both users and providers. The 10 global dimensions of quality identified include continuity of carer, environment, information, access, relationship, outcome, carer attributes, choice, control and care, and treatment.

Nurse Client Interaction

The nurse client interaction is the foundation of community health nursing practice (Cox, 1982; Macleod Clark et al., 1997; Smith & Maurer, 1998). Quality of the nurse/client relationship established during health clinic visits is central to quality care, forms the basis for services provided, and has a direct effect on the success of health care services to promote health (Hayward et al., 1993b). Without an understanding of the processes of the nurse client interaction, one can not begin to improve the quality of nursing care in WCC (Sidani & Braden, 1998). It is known that a mother's perception of a health program's value to her and her infant, and the quality of her previous interactions with health providers will influence whether she will continue to access health services (Barnes-Boyd et al., 1996). Several authors have identified that a critical feature of interventions which contribute to positive family health outcomes is the development of a close therapeutic relationship that fosters client competence between the nurse and mother (Cox, 1982; Zerwekh, 1991; Kitzmann et al., 1997). In a study of high-risk mothers who received home visits, Olds et al. (1997) report that this relationship enables both the mother and nurse to participate in and understand one another's worlds. This therapeutic relationship was also believed to strengthen the power

of the home-visiting program to produce significant shifts in the life course development, and care-giving abilities, of home visited women.

Some studies however portray the nurse's role as being prescriptive, with nurses having little regard for their client's specific perceived needs and wants (Chalmers, 1992). This controlling aspect of a "top down" approach observed in nursing practice is a concern, as studies have shown that consumers reject an authoritative approach (Foster & Mayall, 1990). Several researchers (Coombes, 1991; Macleod Clark et al., 1997; Proctor, 1997) confirm that a non-judgemental and facilitative approach focusing on client needs, rather than a prescriptive approach, is important to consumers. Clients are more likely to be actively involved in and comply with health care recommendations if they are acknowledged as equals, and if their own experiences and perspectives are considered in care planning (Kendall, 1993). Nurses are therefore increasingly encouraged to develop partnerships with clients to enhance client competence for health rather than assuming a more dominant role (Reutter & Ford, 1997; Zerwekh, 1991). In this context, listening to patients not only promotes good patient care, but it is a skill useful to improve quality of care (Wilson, 1992). This implies that in addition to addressing technical skills such as communication skills, nurses also need to address their professional values and attitudes (Kendall, 1993).

Despite the importance of the interpersonal process, most clinical research and quality care studies continue to examine "medical" and "technical" outcomes rather than investigating the "care giving process". The "Measure of Process of Care" is a recently developed tool designed to examine what parents experience in their interactions with

care givers, and measures the extent to which service delivery meets family needs (Rosenbaum, 1997).

Patient Satisfaction

In the last decade, patients have become the focal concern of both health care delivery and quality assurance efforts. Considerable research (primarily empirical) has documented the widespread recognition that patient's judgements about the quality of their care are closely linked to their satisfaction with that care (Lewis, 94; Maciejewski, Kawieecki, & Rockwood, 1997). The attributes that determine patient satisfaction have served as the foundation for recent quality improvement efforts, and today researchers continue to measure satisfaction as an indicator of quality of care (Bowers et al., 1994). Conversely, it has been suggested that quality health care may be more than the consequence of consumer satisfaction as consumer's expectations may be low and their knowledge limited (Redfern & Norman, 1990). Some studies have described patients as being incompetent to judge technical ability, and therefore only able to make judgements based on interpersonal aspects of the intervention (Lewis, 1994). Hall and Dornan (1988) challenged this description of patients as incompetent. They cited studies demonstrating that whether patients are regarded as competent judges of their care, they still make judgements which influence their perceptions of the encounter, and are demanding a more active decision making role in their care. As a result, much attention continues to be devoted to seeking accurate ways to reflect patients' perceptions of care received.

In 1975, Ware and Snyder pioneered one of the most elaborate investigations that focused on the discovery of attributes that determine patient satisfaction with physician

services in hospital care (Ware, Snyder, & Wright, 1994). The attributes identified included availability of care, continuity, convenience, and financial accessibility. A second stream of research emerged in the 1990's with the development of generic attributes of service quality that were developed for services outside of health care, but thought to be sufficient for health care (Parasuraman, Zeithaml, & Berry, 1990). This effort was known as SERVQUAL, the "services quality" research stream, referring to an instrument that was developed to measure service quality dimensions that were posited to be antecedents of satisfaction. Studies to test the generalizability of the SERVQUAL instrument provided evidence that generic quality dimensions do not completely capture the consumer's definition of service quality. Bowers, et al. (1994) found that patients define health care quality in terms of empathy, reliability, responsiveness, communication, and caring which are dimensions beyond the generic attributes of SERVQUAL. In particular, Bowers, et al. (1994) emphasized that communication and caring were important determinants of health care quality.

Other researchers (Forbes & Neufeld, 1997) also stress that while there is an abundance of satisfaction research, methodological difficulties exist. These difficulties include disagreement about the definition and dimensions of the determinants of client satisfaction, and the absence of reliable and valid measurement tools. Similarly in 1990, Redfern and Norman criticized that research has failed to provide methodological insights for clinical nurses. As a result, nurses have been pushed to rely on generic hospital based measures of quality that attempt to translate complex nurse-patient interactions into scores and items untested for validity and reliability, limiting the opportunities for nurses to improve the quality of their nursing practice. More work is

therefore necessary to develop measurement techniques for a wide range of nursing care that reflects the complexity of health service delivery (Griffiths, 1995). Pouton (1996) agrees that the development of tools that discriminate across different dimensions of health providers is needed to better represent the concepts of quality they purport to measure, and which reflect the multidisciplinary nature of primary health care and the multitude of factors influencing health.

Current research relating to quality in health services continues to focus on physician-patient contacts in acute care settings (Scott & Smith, 1994; Ross, Stewart, & Sinacore, 1995; Schauffler & Rodriquez, 1994). As Fitzpatrick (1991) points out, these studies are likely to include generic quality and satisfaction dimensions that are relevant to services in general, but which neglect patient views. People are seldom asked what they think quality of health care or satisfaction with that care means. Typically they are asked in more indirect terms such as "what is a good doctor, nurse, or clinic?" As a result the researcher's views of the boundaries and the content of the concept of quality are imposed on the participant, and the participant's responses are influenced by the interpretation of the language in which the choices are presented (Donabedian, 1992). According to Kembhavi (1998), satisfaction surveys used to assess the quality of care often do not provide any information about the specific behaviours of the health professional, the services, or client perception of quality. If service providers are to meaningfully ascertain the perceptions of patients and their experience of health care, research must first be conducted to identify the ways and terms in which patients perceive and evaluate the service (Williams, 1994). In essence, not asking patients which

survey variables matter most to patients elicits management driven, not patient driven data, and will only provide an illusion of consumerism (Wilson, 1992).

Aharony & Strasser (1993) agree that despite an abundance of research, a simple, direct correlation between patient satisfaction and quality of care and improved health outcome has not yet been found. In fact, many researchers believe that the interest in patient satisfaction for quality assurance purposes has outpaced advances in the development of "good" satisfaction measures that capture the patient's perspective in terms that are meaningful to patients, and which lend themselves to comparison across clinical settings (Carey & Seibert, 1993). These conclusions are of relevance to the practice of nursing as Hayward, et al. (1993b) have identified that nurse's perceptions of health outcomes that are most relevant to quality of care often do not match those of other stakeholders.

Perceptions of Consumers and Caregivers

In maternal child health services, studies comparing the beliefs of women and nurses/physicians have tended to focus on perceptions of the education needs, or lifestyle choices during pregnancy and childbirth, rather than on service needs or quality of care received (Brown & Schwartz, 1989). Most published studies have used physicians as the sole group of providers (Freda, Anderson, Damus, & Berkatz, 1993) with little research focused on the role of the nurse or other health providers (Beger & Cook, 1998). A study by O' Connor, Shewchuk, and Carne (1994) is one of a few that acknowledged the roles of other hospital staff in addition to doctors in a comparison of patients', doctors', administrators', and patient-contact employees' expectations in a large multidisciplinary clinic. Differences were found between doctors' perceptions of patients' expectations,

and patients' expectations of the services. The perceptions of staff groups were also different than those of patients' expectations, but less so than the doctors' perceptions. Although this study addressed only expectations, not perceptions of the service, it is important in its recognition of other health provider roles, and the importance of managing customer expectations of performance, which may not reflect providers' perceptions. In an adolescent prenatal clinic, Levenson, Smith and Morrow (1986) found similar results. Their study compared physician-patient views of teen prenatal information and found significant differences in perceived interest on various topics between the teens and physicians. Freda, et al. (1993) also found significant differences between clients' interests and the providers' perceptions of their interest in prenatal clinics. With this gap, clients are less likely to achieve their desired health outcomes or have their priority needs met (Freda et al., 1993).

Another study of maternity services compared the perceptions of obstetricians, midwives, and postnatal mothers regarding service features that were important to women during labour and postnatal care (Drew, Salmon, & Webb, 1986). Using a multi-item scale, the study did not report that perceptions of midwives were closer to those of mothers than perceptions of obstetricians. More recent research by Proctor (1997) demonstrated the presence of areas of shared understanding between mothers and midwives with respect to some important aspects of maternity services. Key differences were also found that related to other aspects of the service. These differences were viewed to potentially adversely affect the relationship between mothers and their midwives, and women's future use and willingness to recommend the services of a midwife. Based on information about these gaps, Proctor (1997) suggests a paradigm

shift is needed from professional dominance to an integrated collaborative service where the views of practitioners and consumers are acknowledged and applied in providing health services.

Evidence of this shift in nursing practice has been demonstrated with the emergence of significant changes in maternity care being reported in the Russian Federation as the result of an education program for health providers between 1994 and 1997 (Chalmers, Muggah, & Samarskaya, 1998). Traditionally health interventions during labour, birth, and the postpartum period have been rigidly enforced against women's wishes. These practices are influenced by health care providers' beliefs that mothers can not provide adequate care to their infants without significant assistance from health providers. In addition, neither mothers nor their babies are allowed to determine their own health needs. Some softening of these attitudes were observed prior to the end of the four year study. The authors of this study conclude that if women's voices are heeded and relayed to responsive caregivers, positive service delivery changes may be introduced for childbearing women in the near future, improving the health of women and children.

Health Care Quality Management

Even though numerous articles have been written about quality and quality assurance in health care, few address the issues of the overall impact of quality management activities (Williamson & Moore, 1991). Current methods of quality management focus on changing specific structure or process elements, and make the "inductive leap" that outcomes will be improved. Williamson and Moore (1991) suggest that a more comprehensive approach would be to focus on specific outcomes and work

back deductively to identify those processes or structures whose change might result in improved benefits of care. In this way, quality management efforts would be applied where there is the greatest potential for effecting improvement in health care outcomes.

Literature Review Summary

Professional and client perceptions of quality health care have been reviewed in the literature. Among a substantial body of research which exists about Canadian community health nursing interventions in parent-child health, quality of professional care is among the categories receiving the least attention (Hayward et al., 1993a). In particular, research on quality of care in well child health services in public health is conspicuously missing even though these services have historically been a central component of community health services and continue to consume a significant portion of their resources (Hemmelgarn, 1992). This may be related to the complexities of quality measurement in community health nursing care, which have been recognized for years. Defining and standardizing interventions and controlling variables are among the problems of design and measurement in community health nursing interventions as nurses "incorporate not only the productive function of health care, but also the communitarian and caring functions of society" (Hayward et al., 1993a).

The research evidence suggests that the processes in the nurse client interaction are key in determining the quality and effectiveness of health interventions provided by nurses. More specifically researchers have determined that the nature of the nurse client interaction has a fundamental influence on whether or not the client derives a health benefit from contact with nurses in health promotion interventions. The existing literature emphasizes that it is imperative that nurses develop reliable and valid

approaches to measure quality in nurse client interactions. Nurses must also assess the extent to which their services comply with the shifting paradigm of developing partnerships with clients that foster greater client control, and more importantly, their clients perceptions of their service delivery (Kembhavi, 1998). In recent nursing studies, quality indicators describing effective nurse client interactions have been successfully developed to measure and demonstrate the quality and health benefit of the health promotion work of nurses practising in a similar role as community health nurses (Macleod Clark et al., 1997; Proctor, 1997).

CHAPTER 3

METHODOLOGY

In this section, the design and methods used in this study are discussed. Sample criteria and selection, data collection and analysis procedures, and ethical considerations are also addressed.

Research Design

Because little is known about what mothers perceive to be important in the well child clinic setting in public health, a *descriptive exploratory design* was used for this study. A qualitative method was selected as the most appropriate because the purpose of the research was directed toward discovering or uncovering new insights, meanings, and understandings which cannot be fully explored using more traditional scientific methods (Brink & Wood, 1989). An emic perspective, from the point of view of both nurses and mothers (Field & Morse, 1985), was used to gain as much insight as possible about the meaning of quality in their well child clinic experiences. This approach also allowed the researcher to triangulate the data from these different sources to look for convergence in the emerging findings.

Focus groups were conducted with mothers and nurses to understand mothers' and nurses' perceptions of quality in CHN-mother interactions in WCC services. A focus group is a carefully planned discussion designed to obtain a maximum amount of data about perceptions on a defined area of interest in a permissive, non-threatening environment (Krueger, 1988). Strengths of group discussion identified by nurse researchers who have successfully used this method of study include the informal

atmosphere, and the inclusion of peer participants which can positively influence confidence in expression of personal views and opinions (Proctor, 1997). Synergy of the group has the potential to uncover important constructs in participant's own words and create a fuller, deeper understanding of the phenomenon being studied (Kingry, 1990). Researchers argue that these processes are often untapped by closed-ended questionnaire items and other attempts to obtain rigidly measurable information (Folch-Lyon & Trost, 1981).

In total, four focus groups were formed including three groups of six to eight mothers and one group of 12 community health nurses. Focus groups usually include four-12 participants (Krueger, 1994) which allows everyone to participate while still eliciting a range of responses. The greatest amount of new information, ensuring that all aspects of the phenomenon have been studied, usually occurs in the first two groups with considerable repetition of responses after that (Morse & Field, 1995). Therefore, the number of focus group interviews initially suggested was three. After the second focus group interview, it became clear that saturation was achieved within and between groups.

An important feature of this research was to elicit multiple perspectives about the phenomenon under investigation (i.e., indicators of quality within nurse client interactions in WCC). Comparison of mothers' and nurses' perceptions has extended the dimension of this study by incorporating an investigation of the differences between mothers' and nurses' perceptions and experiences. The results of this comparison have clinical significance for the delivery of client centred services as the existence of considerable differences between nurses and mothers negatively influences service utilization by mothers (Wilson, 1992; Rovers & Isenor, 1988). Factors that inhibit nurses

from incorporating quality into their practice such as inadequate time to respond to expressed client needs were also identified through this comparison.

Pilot Study

A pilot study to test the feasibility of the proposed study procedures was only partially conducted due to the unavailability of mothers for the pilot study. The sample for the pilot study was originally designed to consist of two volunteer community health nurses in one group, and three volunteer mothers in the second group. Nurses and mothers for the pilot study were to be recruited from among those who volunteered to participate in the research study. It was only possible to secure feedback from two community health nurses about the length of time it would take to complete the nurse's focus group, clarity of the instructions, questions, and overall procedures.

With eight people in a focus group in one hour, it is typically possible to ask no more than 10 major questions (Patton, 1990). It was recognized that the interview questions appeared ambitious, and may have needed to be restructured after the pilot study, or in this case, the first focus group with mothers. After the successful first focus group with mothers, restructuring of the questions for future group discussions proved to be unnecessary.

Access to Research Sites

Use of "clinic attendance reports" which track the number of parents attending clinics in each Health Centre was requested from the participating health region to estimate participation rates (Capital Health, 1998a). Within the last year in the same health region, less well attended clinics have experienced difficulty in securing parent participation to collect data about barriers to clinic attendance. A $20 recruitment

incentive proved to be very effective in increasing participation rates in that study. Clinics with higher rates of parental attendance have been more successful in collecting data about clinic attendance in the same time period without a financial recruitment incentive.

Access was requested and gained to three "high attendance" health centres. All of the health centres were located within the urban area of the large urban-rural health region. The areas served by these three health centres varied in size and demographics, and are described in Table 2. The health centres will only be known as A, B, or C for the purpose of this study, as comparative analysis across the sites was not an objective of this research. All health centres employ community health nurses with a variety of community health nursing experience, resulting in a range of expertise among nurses.

Table 2: The Research Sites (3 urban public health centers)

	HEALTH CENTER AREAS		
	A	B	C
Staff numbers approximately: CHNs (mix of full and part-time)	14	11	14
Service features: Number of births * (1998b):	1300	545	820
Demographic features of the local community: Income** compared to regional median	below	below	below
Age of community**	young	young	mature

*Capital Health (1998b) **Capital Health (1997)

Sample

The population for this study was a volunteer sample of three groups of mothers, and one group of community health nurses. Volunteer sampling involves relying on participants with the desired experiences (e.g., attendance at well child clinics) to identify themselves to the researcher (Morse, 1989). Each group of mothers was drawn from one of the three health centres in the selected areas (north, central, south) in the urban-rural health region. The one group of nurses was drawn from the population of nurses providing well child clinic services across the health region. The profiles of the CHN group and all mothers groups appear in Table 3 and 4.

Table 3: Profile of Community Health Nurses

COMMUNITY HEALTH NURSES N=12 (1 group) Recruited from the 14 Public Health Centres in the health region	
Age range:	26-56 years (median-43 years)
Education:	
Diploma in CH Nursing	1
University degree (BScN or BN)	11
Length of Well Child Clinic Experience (range):	2-18 years (median-12 years)

Table 4: Profile of Mothers

	MOTHERS (n=21) (3 groups)
Age range:	21-37 years (median-28 years)
Education:	
College/university	7
Partial college/university	4
Grade 12 or less	10
Family Income:	
$10,000 or less	5
$25-$40,000	7
Over $40,000	9
Number of Children in Family	
One	21
Two-four	10
Age of Children in Family	
≤12 months	15
>12 months – 6 years	16
Mothers Employed	
Yes	8
No	13

Although the groups of mothers and nurses do not constitute a random sample, the inclusion of health centres from across this urban/rural health region was designed to enhance the potential generalizability of the study findings.

Sample selection and the start of data collection took place during the month of April after the regional and local management of the health region granted permission. The researcher met with the local health centre managers and receptionists to explain the study including the sampling and data collection procedures, and to outline the role of each person. This was a busy time for health centres, as several programs begin to "wind

down" for the school year, and CHNs begin to take vacation. During this time period there was also the threat of a province wide nursing strike. Both these situations affected the availability of CHN and mother informants.

Community health nurses. Volunteer or solicited sampling (Morse, 1989) was used to recruit 12 nurses with experience in delivering well child clinic services among the 14 regional public health offices in the region. Nurses were provided with information about the study through a written information letter sent to all nursing staff, and asked to contact the researcher directly if interested. Twelve community health nurses responded and were requested to participate in one focus group event.

Mothers. Volunteer sampling was also used to recruit mothers for this study. To enlist knowledgeable informants, three groups of mothers were selected from the population of mothers who attended well child clinics in each of the three selected areas of the health region, and asked to participate in one focus group. On designated days, receptionists at the selected sites who check parents into the well child clinic were asked to provide all parents with an information sheet explaining the study. Receptionists were also asked to collect the names and phone numbers of parents wishing to volunteer for the study and be contacted by the researcher after reading the information sheet. The researcher made a follow-up phone call to mothers who volunteered within 48 – 96 hours to ascertain eligibility; to answer questions or provide additional information as requested by the mother. Mothers often were not home when contact was first made, and therefore in some cases it took up to 96 hours to contact mothers about the study.

Recruiting mothers for the focus groups was a more difficult and lengthy process than expected for two reasons. The first related to the busy schedules of most mothers,

making it a challenge to find enough mothers who could meet at the same time. The second reason was competition with other health centre questionnaires that mothers were asked to complete. These questionnaires dealing with health centre programs understandably took priority over the need to provide mothers with information about this study.

Criteria for Selection

Mothers. The objective in the selection of women was to seek diversity of experience, perceptions and expectations rather than limiting the inclusion of mothers to any specific group (e.g. first time mothers attending clinic) who attend well child clinics across the health region. Eligibility criteria for mothers participating in this study included that they would:

- be at least 18 years of age;
- have attended a routine well child clinic a minimum of one time (e.g., at the two month visit);
- be the parent of an infant between 2 months and 24 months old;
- be willing to make the time commitment to participate in the focus group event;
- be willing and able to share their clinic experience;
- have the ability to speak English; and
- have attended clinic in the last 6 months.

Exclusion criteria included mothers under the age of 18 years based on the legal complexities of obtaining consents, and the special needs of this group of young mothers. Women who did not speak English were also not eligible. In the city where the study

took place, members of ethnocultural minorities form approximately 14% of the population (Statistics Canada, 1996). Among this population, linguistic and cultural barriers have typically produced a protracted response in seeking "mainstream" health services, explaining their low participation rates in mainstream research (Masi, Mensah, & McLeod, 1996). This limits the findings of this study to the sample of English speaking "adult" mothers who utilize well child clinic services. Other selection criteria which may have influenced the potential range of mothers' experiences for this study, are discussed in the last chapter under "Limitations of the Study".

Community Health Nurses. Nurses with at least two years experience in well child clinic service delivery were eligible to participate. Knowledge and skill in providing services ensured that nurses were aware of the wide range of situations and activities characteristic of the clinic setting. In the recent past, nurses have expressed interest in the subject matter of this research.

The key principle of forming a focus group is homogeneity determined by the purpose of the study (Kingry et al, 1990). All participants in this study had experience as a user or provider of well child clinic services.

Data Collection

Four focus groups (three mothers groups, one CHN group) were conducted between April and May 1999. Each nurse and mother attended one group interview through participation in the focus group.

Interviewing Mothers. The focus group discussions with mothers lasted one to one and half hours, and were held in the public health office in the mothers' neighbourhood to reduce travel inconvenience. Ensuring the mother's comfort and

convenience is believed to have facilitated communication, as well as impacting the response rate and availability of data. A recruitment incentive of $20 was offered to mothers in the information letter, and given to mothers just prior to the focus group event. Although providing a financial incentive to participate in focus group discussions is common practice, it is not known if offering mothers this incentive influenced the sample or their responses.

Interviewing Nurses. CHNs met at a central health center to decrease travel time. Nurses who attended represented the 14-health center sites in the health region. They drew on their wide range of experience to participate in a lively discussion about a variety of quality issues in well child clinic. CHNs had clear and consistent views. The twelve CHNs who volunteered to participate were very accommodating despite their busy schedules, and were eager to share their ideas and beliefs.

Instruments

Demographic profile questionnaire. These data (age of infant, mother's age and education, number and ages of other children, clinic site attendance, and socio-economic status) were collected from mothers to assist in the description of the sample, after they agreed to participate in the focus group (Appendix F). Nurses were also requested to provide information about their educational background, experience in providing services in WCC, and age after they agreed to participate in the group discussion (Appendix G).

Interview Guide. A 10-question interview guide adapted from Proctor (1997) was developed by the researcher to assess CHN and mother perceptions of the quality of WCC services. The interview guide questions appear in Appendix A (nurses), and Appendix B (mothers). A review of the literature pertaining to quality, and quality

indicators (Donabedian, 1980; Macleod Clark et al., 1997; Proctor, 1997) were useful both in developing the interview questions, and serving as a reference point from which to analyze the findings that emerged from the data.

Each group of mothers was asked the same questions which differed slightly from the questions that CHNs were asked. For mothers, short, semi-structured, and sequenced questions were used to elicit responses about their recent experiences in the well child clinic, what mattered most to mothers during their service experience, and their perceptions of good or poor quality well child clinic services. The interview guide for CHNs was very similar. It also consisted of a series of short descriptive questions that explored CHNs' perceptions of important WCC service dimensions, and their perceptions of factors that influence their ability to deliver quality care.

Three major types of ethnographic questions provided the researcher with essential data for analysis (Sorrell & Redman, 1994). Descriptive questions were open ended and referred to as "grand tour" questions which gave the interviewer a general view of mothers' and CHNs' perspectives on quality in WCC services. Structural questions provided more specific information about how mothers and CHNs organized their knowledge. These questions were asked concurrently with the descriptive questions. Contrast questions helped to discover the meanings of words about the mothers and CHNs experiences, which allowed the researcher to describe the experiences, rather than interpret them. Probing questions were used to help mothers and CHNs discuss contextual details important to meanings embedded in the narrative.

A professional facilitator, who was skilled in group process, accompanied the researcher to encourage and "manage" the participation of all group members, and also

assist participants to articulate their thoughts. With written permission of the nurses and mothers, the focus group interviews were audio taped and transcribed verbatim. The researchers' observation notes about the non-verbal behaviour and interaction between the participants supplemented these transcripts.

Data analysis

Preliminary data analysis began concurrently with group interviews to allow validation during subsequent group interviews. The unit of analysis selected for investigation was each focus group discussion. The rationale for this was that it was mothers' and nurses' perceptions of quality shared during the group discussions that constituted the central phenomenon under investigation- quality in nurse client interactions in the delivery of WCC services. The analysis process began with compiling demographic information and other notes about the participants, the audio tape recordings and transcripts, and the researchers and facilitators' notes during and after the sessions. The tape-recorded data was transcribed verbatim, and verified with field notes. Donabedian's (1980) model of quality was used as a framework to initially organize the data. Content analysis was then used to identify broad themes, such as whether the comments related to structure, process, or outcome aspects of WCC services. Separate analysis was initially conducted with the group interview data received from the nurses and from the mothers. Cross case analysis was made between the different mothers groups. Nurses' and mothers' data was also examined to identify similarities and differences in quality indicators between nurses and mothers that emerged from the data. The data was analyzed with assistance of a computer program designed for qualitative data storage, indexing, and theorizing (Qualitative Solutions and Research, 1997).

Content analysis is a research method that provides a systematic and objective means to make valid inferences from verbal, visual, or written data in order to describe and qualify specific phenomenon (Downe-Wamboldt, 1992). Content analysis is concerned with meanings, intentions, consequences and context, and was used to provide knowledge and understanding of what determines quality of well child clinic services from the data generated. Because of its focus on human communication, content analysis is particularly well suited to research involving the practice and education of helping professionals such as nurses (Downe-Wamboldt, 1992). This type of analysis initially involves generating a list of key ideas, words, phrases, and actual quotes that reflect the sentiments of the focus group. *Category schemes* were then formulated to generate knowledge and increase understanding of the phenomenon based on the research questions, the interview data, a review of previous research, literature and the data. Ideas and quotes that fit most appropriately to substantiate the category were placed under each category. Although previously established category systems relating to well child clinics in public health were not found in the literature, categories of service quality relating to maternal nursing care (Proctor, 1997), and nurse-client interactions (Macleod Clark et al., 1997) were useful to guide this process.

Descriptive codes, grounded in the data, were attached to relevant sections of data, and eventually sorted and resorted using additional explanatory codes to gain an understanding of the relationship among the various categories of data (Miles & Huberman, 1994). Coding ended when it was believed that all sections of transcribed data were adequately captured within the categories that emerged. The categories and subtopics were then clustered into themes. Once identified, themes appeared to be

significant concepts that linked substantial portions of the interviews together. These themes led to the development of a taxonomy describing the critical attributes of the quality dimensions of clinic services, and distinguishing the similarities and differences between mothers' and nurses' perceptions. This taxonomy representing the structure of nurses and mothers perceptions of what is important in well child clinic services was constructed, and is presented in the "Findings" section of this report.

In the next stage, a *small sample of text was pretested* to determine if the rules for classification were clear or ambiguous. Samples of text that were not easily classified or which represented exceptions provided insights for revisions to the scheme. Moving back and forth between the text and the output of content analysis allowed for progressive refining and validating of the category scheme. Other strategies used to validate the categories included: clarifying ideas with other researchers; constant comparison of items in the data; rephrasing questions to overcome barriers to perceptions; thinking of like and unlike cases, and withholding finding judgements as long as possible.

Memos and diagrams. Written capsules of the analysis were completed to keep an ongoing record of the analytic process throughout the entire study. They served to capture and store the ideas generated by the researcher about the data. Gradually an outline emerged from sorting memos about the categories and coded data, which served as the basis for the development of a taxonomy describing the quality service dimensions reported to be important to both mothers and nurses. Further trimming, consolidating, and diagramming refined the taxonomy.

The primary instrument during the research was the researcher. The researcher's professional education, community health nursing background, and practical experience in the provision of well child clinic services assisted with establishing credibility, rapport, and gaining trust among the informants. The depth of analysis was also increased by the availability of University of Alberta thesis committee members, who are all highly regarded and recognized for their knowledge and skills in qualitative research.

Rigor

In any research, the ability of researchers to demonstrate credibility is critical to the value of the findings (Field & Morse, 1985). The issues of rigor specific to this study and steps taken to ensure rigor are outlined.

To elicit multiple perspectives about the phenomenon under investigation, i.e. the indicators of quality in well child clinic services provided by community health nurses. Qualitative research is based on the premise that there are multiple realities rather a single view that represents "truth" (Sandelowsi, 1993). It was therefore important to interview nurses and mothers in order to understand and report their perspectives on the meaning of quality within the well child clinic interaction. This approach allowed the researcher to triangulate data from these different sources to gain an understanding of the relationship among the various categories of data. Triangulation involves the utlization of more than one method or data source to examine a phenomenon and is a well-recognized method of enhancing validity in qualitative research (Downe-Wambolt, 1992).

Latent and manifest content analysis. Using both latent and manifest content analysis provided more meaning and insightful results than using one approach alone.

(Field & Morse, 1985). Coding the underlying meaning or *latent content* of each passage of text focuses on the tone or implied feelings. Coding the *manifest content* describes only the visible, surface, or obvious components of communication.

Pre-tests of coding schemes. Systematic checks of accuracy of coding were completed throughout the analysis process to minimize human error due to fatigue, personal biases and previous perceptions related to quality in WCC services.

Validating the outcome of the data analysis was done through consultation with the thesis supervisor and advisors. The thesis supervisor assisted with developing appropriate interview techniques, and with data coding and analysis. Themes were established by agreement between the researcher and thesis supervisor. Another committee member working with the researcher was also consulted.

Notes describing ongoing researcher self awareness in a field journal were established to provide a means by which to monitor the adequacy of decisions, personal biases relevant to the study, and strategies used to identify and maintain personal neutrality. A major threat to truth-value of qualitative research is the closeness of the investigator-informant relationship (Sandelowski, 1993). The researcher's direct service experience with mothers in the well child clinic setting was originally perceived to possibly create a perception of biases favouring nurse perceptions of quality service, but did not raise any concerns in any groups. Careful and detailed explanations of the purpose of the study and the role of the researcher were reinforced at the onset of each group discussion with mothers.

Multiple interviews, data collection over time, and informant review of the data are usually strategies to enhance credibility of qualitative research (Field and Morse,

1985). These strategies were not appropriate for this study, as the primary focus of this research was the single group interview event through focus group participation. Analytic challenges may also be created by informant review of the data. It is known that research participants often change their stories from one telling to the next as new experiences and the very act of telling itself cause them to see the nature and connection of the events in their lives differently (Sandelowski, 1993). Gaining and comparing the perspective of both client and provider regarding what is important in the delivery of quality services is a strategy to contribute to the credibility of the study (Robertson & Boyle, 1984).

Several strategies to *maintain appropriate documentation and recording* for the audit trail were used as outlined by Rodgers & Cowles (1993):

- being descriptive with outlines, and summaries for future uses;
- using a notebook and tape recorder, with a comprehensive recording system;
- requesting a fellow research student or faculty member be available after interviewing to debrief and clarify thoughts with if needed; and
- synchronising as many notes as possible with other study data.

Ethical Considerations

A number of procedures were employed to protect the rights of participants. Ethical approval was obtained from the Health Sciences Ethics Review Board. Permission to recruit mothers and community health nurses was requested and granted from the Regional Manager of Community Health Services in the participating regional health authority, and from the Site Managers of the three public health centre offices.

An information letter was provided to mothers (Appendix C) and nurses (Appendix D) which described the study and outlined the conditions and any risks or benefits of their participation. Both mothers and nurses were asked to sign the consent (Appendix E) required by the Health Sciences Ethics Board, which included an understanding that the participant may withdraw from the research at any time. Nurses and mothers were advised that although their voluntary participation was valued, their refusal to participate or withdrawal would not create any negative consequences. Mothers who participated were offered a $20 recruitment incentive. Consents were signed, and the $20 recruitment incentive was personally given to mothers just prior to the beginning of the focus group event. Nurses were not offered a financial incentive.

Confidentiality and anonymity is important for the well being of all study participants. Participants were assured that only the researcher and thesis supervisor would have access to the raw data. There is not any identifying evidence such as names on cassettes, or printouts. The Regional Health Authority and all participants will remain anonymous in the final report.

All data collection forms and transcripts are secured in a locked file cabinet. Consents will be kept in a separate locked file. Lines of communication have been established through the participating regional health authority for reporting the findings of the study. The *final report will honour and respect* the informants without compromising the dissemination of findings. A final report reflecting an accurate description of the findings and presented within context will be available for all informants requesting this information.

This chapter has presented the methodological and practical factors that have informed this qualitative study. Focus group discussions were held with three groups of mothers to explore what matters most to mothers during their WCC experience. One focus group was also conducted with CHNs to explore their perceptions of what was important in the delivery of WCC services. Content analysis was then performed on these data to identify and categorize indicators of quality in WCC services.

CHAPTER FOUR

FINDINGS

In this chapter, the results of the research conducted with mothers and community health nurses are presented, starting with a description of the indicators of quality from the data. The major portion of the results relates to the: 1) perceptions of mothers and community health nurses regarding elements of quality in well child clinic services, and 2) factors that community health nurses believe to influence the achievement of quality CHN-mother interactions. These factors were entwined in nurses' comments about the supporting professional and organizational structures necessary to provide a quality service during well child clinic.

4.1 Indicators of Quality: Perceptions of Mothers and CHNs

Nine indicators of quality emerged from analysis of the focus group data. These indicators are presented in Table 5 and represent CHNs and mothers perceptions of quality in nurse client interactions in WCC services.

The data from both CHNs and mothers were combined to categorize the indicators because of considerable consistency across all mothers' groups, and CHNs. There was some divergence in mothers' and CHNs' views as illustrated in Figure 1 (perceptions of mothers), and Figure 2 (perceptions of CHNs). For several indicators, specific attributes (sub-themes) were described which were unique to mothers or CHNs. These are shown as shaded boxes in each figure.

Table 5: Indicators of quality from the data

1. **Client centered/family approach**
2. **Adequate time**
3. **Skilled assessment of health need**
4. **Acceptable environment of service**
5. **Knowledgeable and experienced CHN**
6. **Access**
7. **Individualized and non-judgmental approach**
8. **Continuity of care**
9. **Providing appropriate health information**

The results will be presented by considering each indicator with a description of the key issues raised by mothers and CHNs relating to each indicator. Each indicator will also be illustrated by quotes taken from the interviews, which help to illuminate the support for and relevance of each indicator to both CHNs and mothers. Some indicators overlap with others. Possible reasons for this are addressed in the next chapter. Descriptions of each indicator are presented in Table 6.

Figure 1
Indicators of Quality: Perceptions of Mothers

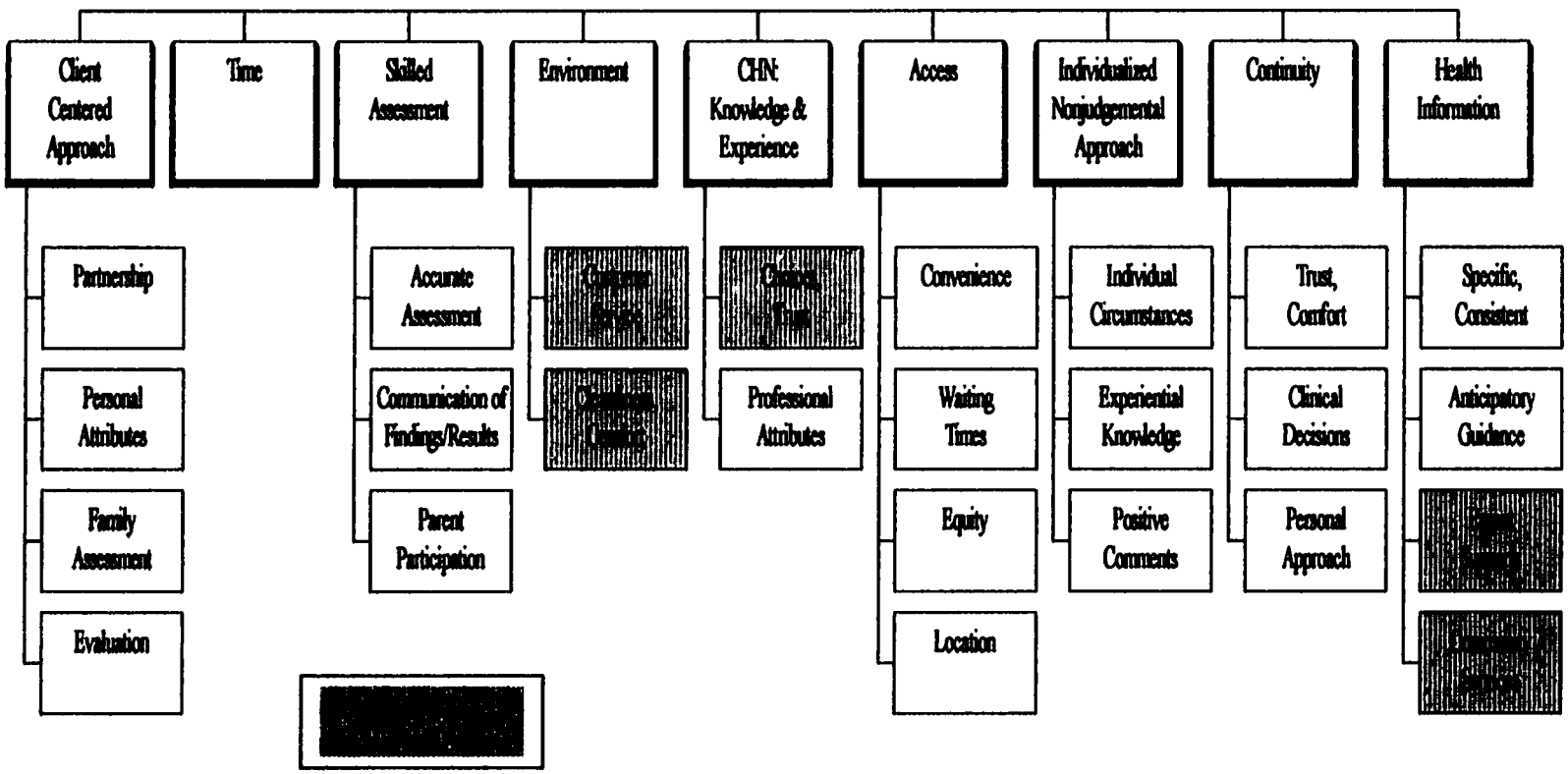


Figure 2
Indicators of Quality: Perceptions of CHNs

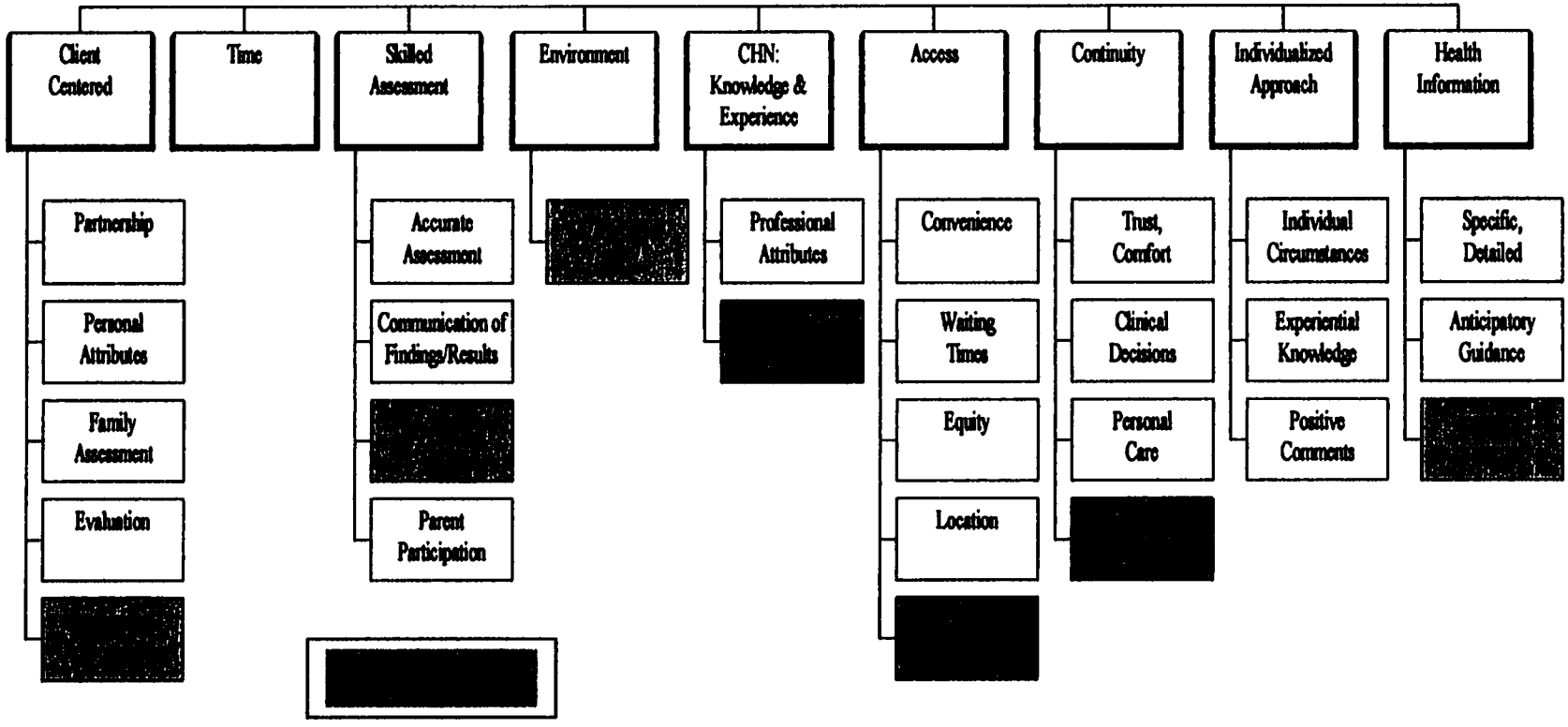


Table 6: Description of Indicators from CHNs and Mothers

1. *Client centered/family approach*: The direction of the nurse client interaction is wholly determined by the client not the CHN, recognizing and valuing the central role of the family in the child's life in the planning and provision of community health nursing care.
2. *Adequate time:* The availability of the CHN, and amount of time spent with clients. Also refers to whether the CHN was available/offered care at the appropriate or right time to meet client needs.
3. *Skilled assessment of health need*: The systematic and continuous collection of data about the child's/family's health status during WCC interventions.
4. *Acceptable environment of service:* Physical surroundings in which services are delivered.
5. *Knowledgeable and experienced CHN:* Level of acquired competency in professional community health nursing practice based on a specialized body of knowledge, the continuous updating of this knowledge, and the critical application of this knowledge in WCC services (CNA, 1998). Community health nursing practice is evidence based.
6. *Access:* Factors associated with arranging to get health care services.
7. *Individualized and non-judgmental approach*: CHNs capacity to consider the distinct characteristics and circumstances of their clients, and to effectively communicate tolerance of differences without imposing expectations during the nurse client interaction.
8. *Continuity of care*: Delivery of community health nursing care by the same CHN.
9. *Providing appropriate health information*: The nature and content of information given to mothers/parents during WCC interventions to facilitate decision making about health.

Indicators of Quality Identified by Mothers and CHNs

Indicator 1: Client Centered/Family Approach

Mothers' comments

Of all the issues raised by mothers and CHNs, the largest proportion of comments related to the importance of providing a client centered approach in the care planning and delivery of services in well child clinic. All mothers groups emphasized the need for a partnership where the CHN and nurse worked together to meet the health needs of mothers. The clinic visit should therefore focus not only on issues identified by the CHN but also on issues identified by the mother. To effectively facilitate this client-centered approach to helping, mothers identified that CHNs must possess specific personal characteristics/attributes. The data regarding mothers' comments included personal attributes of the CHN, elements of a client centered /family approach, developing a partnership with mothers, and evaluation of the CHN's ability to provide a client centered approach.

Personal attributes of the CHN. Mothers wanted nurses to have a 'flexible attitude" and remember that "everyone is an individual". They commented on the importance of interacting with "friendly, kind, caring, and cheerful" nurses who were "patient, pleasant, and easy to talk to". Listening to mothers and being "sincere, willing to answer questions, and genuinely concerned about children" made mothers "feel more confident" about the care they received from CHNs in WCC. Mothers wanted CHNs to be "empathetic, supportive and understanding", have an "open mind", "be respectful", and

not be "judgmental or condescending". They also valued positive comments that helped them to "build on things we are doing right".

"Parents need to hear that it is okay, that you're doing the best you can".

Client Centered Approach. Mothers wanted the focus of the nurse client interaction to be on their concerns first, and not based on "what the nurse wants to know". Mothers were resistant to being viewed as a "passive" recipient of health advice during the clinic visit. They were more likely to trust the CHN and share personal experiences if the CHN "listened" and accurately perceived the mother's need, and responded objectively and specifically to meet these needs.

> *"Not just brushing you off, like 'No, I don't know the answer to your question', and leaving it at that... that doesn't help".*

When providing health advice, mothers believed that it was necessary for CHNs to consider mothers within the broader context of their skills, experience and circumstances. Mothers were critical of advice that was stereotyped, directive or opinionated. Mothers believed this type of approach indicated that the nurse was more interested in following her own "agenda" than discussing the mother or child's health needs.

> *" I want them (CHN) to listen to what I have to say, and give me feedback... but don't criticize me".*

Partnership. It was also important that CHNs develop a partnership with mothers to address the child's needs based on recognition that "mothers know their child best" and that mothers can provide accurate information about their child's health needs. Mothers also wanted nurses to be able to "pick up" sensitive health issues not identified by the mother, as some mothers might not be comfortable to "automatically share their feelings...but they still need help".

"Check him (baby) out...and then make sure that everything is okay with me (mother)... pay more attention to my wellbeing".

Evaluation. To ensure that nurses providing services in WCC were characterized by these attributes, mothers suggested that CHNs' job performance be "evaluated" to ensure they were able to "do the job".

"Nurses have to go into this type of job with an open mind, as much as is humanly possible. Even if they do have certain little glitches (unprofessional attributes), that's something you express outside your job, not with mothers. Nurses should be evaluated to see if they are good for this job".

Mothers suggested that organizational directives or mandates might influence the "nurse centered" approach to service delivery characteristic of some CHNs.

"The higher ups, maybe they're not in touch with the needs of women...it's the direction that the nurses are getting from above, being told to do this, do that, just teach this, whereas that has nothing to do with what we really want or need".

Family Assessment. Mothers stressed that CHNs must recognize the central role of the family in the child's life. To help the mother promote the health of her child, make healthy decisions and follow through, mothers believe CHNs need skills related to family assessment including changes in roles, responsibilities, and competencies for effective parenting. This would create opportunities for fathers to be involved in preventive health care activities, and increase their knowledge about infant development and promote their parenting skills.

"It is (WCC visit) always directed at the moms. The dad has a lot of input and insight into what's going on as well".

"Dads are pretty much left out of everything. We need to let them feel that they're important as well".

" My husband is terrified of holding him...they just need to know it's okay to feel that way and that babies aren't going to break".

Mothers suggested that "child friendly" clinics with childcare available for other children in the family would make it easier for them to attend clinics or other health center programs as parent support programs.

> *"They have the program for new mothers. I am not welcome to come with her (the new baby) because I need to bring him (toddler son). Just to know he's not welcome... it's an insult – I can bring one child, but not the other... I am not going to pay a babysitter to come here to class".*

Nurses' comments

CHNs were passionate about the need for "client centered" care in well child clinic services. They did not single out personal characteristics of CHNs but spoke about these attributes within the "approaches used by CHNs" in their interactions with mothers in the clinic setting.

Professional attributes/skills. CHNs shared their beliefs about the skills necessary to positively influence an effective helping relationship with the mother.

> *"It's about making the situation as good as you can. Knowing how to pace it (the appointment) will make the visit more pleasant for the mother".*

Nurses identified that skillful communication is essential to establish a cooperative relationship with the mother. " Listening to discover the mother's priority concerns and interests without imposing expectations about what the nurse wants" enabled nurses to effectively support mothers in their own efforts to address health issues or concerns. CHNs also stressed that encouraging mothers to tell their stories "in their own way" is central to a client-centered approach.

> *"Listening to a mother and reassuring her that she is doing a great job so she feels supported in her parenting is very important when mothers come to clinic".*

Other strategies CHNs believe are important to provide client centered care include:

1) Displaying positive regard in interactions with mothers by being "accepting, and supportive;

> *"...When parents come to clinic... It's the way you handle the situation and validate their concerns, and basically support them".*

2) Not pressuring mothers with persistent questions or information-giving to signal the mother is in control of the interaction;

> *"It's matter of asking the right questions to find out what they really want".*

> *" ...Finding out what they want, or don't want. That's key. Sometimes it is more about what they don't want than what they want".*

3) Matching the services provided by the CHN with the expressed choice or needs of the mother.

> *"It's knowing who your clients are...tailor the visit to what they're after, what they want in that visit...contracting".*

Nurses also highlighted the need to be aware of their own non verbal behavior (body language) such as posture and tone of voice, which could be interpreted by mothers to reflect an uncaring attitude or dominance over the mother.

Partnership. Nurses were committed to working in partnership with mothers to help them develop the knowledge and skills needed for decision-making, and gain a sense of confidence with their parenting within their life situation. "Gone are the days" where the professional, including nurses, "knows best". Without a mother's cooperation or trust, nurses stressed that their expertise would not be effective.

Advice to enable mothers to achieve healthy lifestyle targets must be relevant to clients and easy to adopt. These factors must be considered in order to influence change.

> *"Knowing what she (the mother) can handle...is realistic for her circumstances".*

This is exemplified in the case of a young mother who revealed her inability to follow a CHNs recommendation to use a breast pump to resolve a feeding problem.

> *"...Like breast pumps...I needed one. They're not accessible to people who can't afford it. You pay big money".*

"Tailoring the visit" to a mother's wants and needs and "contracting with the mother" to seek agreement about the issues that would be addressed during the appointment was also viewed by CHNs to be time efficient.

> *"When I see a mom who goes to the doctor every single week, that person only wants immunization...spend a little extra with the next person who comes in and really needs it".*

Professional responsibilities. Contracting is an agreement between the CHN and the mother that describes the nature and content of the interaction, and implies that the client participates in setting goals, and evaluating effectiveness of CHN interventions (Sundeen, 1994). These goals may be changed in view of new information that emerges during the course of the visit. New goals are then established if specific concerns are identified. Contracting to meet parents needs came however with a caveat that "the contract goes two ways". Nurses stressed that it was sometimes a challenge to balance their professional responsibilities to provide service based on WCC program standards and policies with a focus on parent issues. In some cases focusing only on "what parents say they are concerned about" created concerns related to the health and safety of the child. For example parents may be unreceptive to injury prevention messages resulting in higher risks of injury for the child. In other examples shared by nurses, mothers may "deny" that there are developmental or behavior concerns resulting in missed opportunities for the child to receive the benefits of early intervention.

"If the parent doesn't express a concern and there is a concern, there could be repercussions... (for the child and the nurse)".

The clinic appointment also involves practical professional activities and CHNs see their job as "getting the work done" – filling out the checklists". Nurses commented that use of recording tools and guidelines influences the content of their interactions with mothers in WCC, restricting their ability to use more of a client centered approach. This results in more of a "task orientated" interaction with the mother than a client-centered approach. "Not always filling out the checklist" also raised job performance issues for CHNs:

"If we don't address every single box, is that fine... if the mom says, 'I really just want to talk about development... I don't care about anything else'- is that fine?"

It was also particularly important to acknowledge each "mother's choice to attend WCC and provide health information voluntarily". If a mother is distressed or dissatisfied with the interaction or is uncomfortable sharing information, mothers could choose not to return for routine WCC appointments.

"Do we have the right to impose what we want to know... what we think they need... when the mother comes to clinic? What if she doesn't come back, we have lost our opportunity to help or support her".

Family Assessment. CHNs recognize that health and social issues are strongly interrelated, making it necessary to view the child within the context of his or her family and community, and not with an approach driven by "what *the book says... instead of discussing with her (the mother)... her life situation*". Nurses also have experienced that it is necessary to look beyond issues with the infant that originally brought the mother to the clinic.

"It's not just the baby, but how the mother and family are coping. Sometimes when you ask that question, that's when the flood (of tears) comes".

Evaluation. CHNs believe a method to evaluate their own nursing care in WCC is important and stressed that measures to understand client satisfaction and service effectiveness are needed. This would enable CHNs to identify and concentrate on services where quality and effectiveness was a "problem". They also believe that health promotion work in clinic must be recognized by data systems in addition to numerical data (number of contacts in clinics). Until then, it will continue to be difficult to demonstrate the important outcomes achieved in WCC, or measure contributions such as identifying the early onset of postpartum depression in mothers.

Nurses recognized the need to link their nursing actions driven by client needs to health outcomes or benefits. Without this knowledge, nurses believe they are not well positioned to advocate for clinic changes based on client needs or to demonstrate outcomes achieved through well child clinic services.

> *"I'd love to get some feedback from moms... if they were satisfied with the service".*

> *"If there was a way to find out about what moms thought... so you got a sense of how you did... you would know whether you were meeting their needs or not".*

Nurses also believed that a mechanism to obtain feedback from mothers about nursing care that met parents needs and expectations in WCC would be useful to provide positive reinforcement to individual nurses or groups of nurses.

> *"They were doing some questionnaires recently... some mothers added in their own notes about what they thought the clinic visit was like... those notes were handed back ... so you got a sense of how you did. 'That nurse took the time to address my needs' or whatever it was... that was very nice... You knew whether you were meeting their needs or not".*

This indicator overlaps with an individualized approach (indicator seven) and a skilled health assessment (indicator three) which is concerned with active listening to the expressed needs of mothers.

Indicator 2: Adequate Time

Mothers' comments

Mother's identified that good listening skills were essential for nurses' understanding of mothers' health needs. An important factor in being able to do this effectively was that the CHN must have adequate time. As viewed by one mother:

"Nurses here spend time to listen, and treat you like a person".

Mothers expressed appreciation that CHNs took time with mothers so that they were able to talk about their health concerns and have their questions answered:

"If we had a question, they (CHN) would take the time out to explain it. They were truly concerned".

Mothers were critical when they felt "rushed through" without an opportunity to fully understand "what would happen" during the clinic appointment, or when their health concerns appeared sidetracked by lack of time or a focus on CHNs' priorities.

Nurses' comments

In practice, meeting the health needs of mothers in a clinic setting was dependent on the amount of time the CHN was able to spend with the mother. Nurses commented that heavily booked clinics often made it difficult to consistently provide even the minimum level of care required by program protocols and guidelines.

"... You just have to incorporate it all into the time slot that you have".

Although nurses believe that mother's needs and priorities should "drive" the clinic visit, in reality, *"sheer numbers of people in the waiting room shape the visit"*. As explained by one nurse:

> *" There's a limit to which it (clinic visit) can be totally client driven otherwise we may never have the time to complete clinic and see all the mothers"*.

"Fast flow" clinics (an abbreviated visit) for busy "drop in" days, and scheduling time with parents outside of the clinic appointment were suggested by CHNs as alternative strategies to meet parents' identified needs when time was limited in the clinic.

> *"You can't do a regular visit on a busy or drop in day. It's a reality of any clinic that's backed up and is busy. Sometimes, what you are supposed to do, and what you end up doing, are two different things, just because of time"*.

When balancing efforts to "provide quantity of time, and quality of time" with a client, nurses expressed concern with "missed opportunities" to deal with challenges faced by some parents.

> *"If a mother has lots of concerns, you can offer her follow-up afterwards, but sometimes you kind of loose the flow. It's just not the same. Things are forgotten"*.

Nurses were also clear that unless the interaction is client focused, having more time during the clinic would not ensure the interaction was more beneficial for the mother.

> *"Spending more time with the client. If it is not client-driven or focused, it isn't necessarily better. You could spend twice as long and actually make a visit worse"*.

It was suggested that "administrative tasks and procedures" related to WCC protocols and recording procedures could be more "time efficient". Nurses believed that their time should be prioritized to address mother's concerns rather than spending time with task

related matters such as a "head to toe" health assessment during each scheduled clinic appointment.

> *"We should tailor what we do with the kids... we should be doing a very good job. That's why being client centered is so important, because you don't have the time. If we could get rid of the stuff (completing the checklist) you don't have to do with each child... that is a time saver too".*

Indicator 3: Skilled Assessment of Health Need

Comments about a skilled assessment of health need were categorized as relating to accurate assessments, communication of results, and parent participation in the assessment.

Mothers' comments

Accurate assessments. Mothers spoke of the need for CHNs to perform valid and reliable assessments to select clinical information that is predictive of health problems/concerns, and the need for CHNs to interpret this information accurately.

> *"He (baby) doesn't have a soft palate inside his mouth. I had no idea what that was... They (CHNs) told me it was genetic... they explained it to me but it was hard for me to understand... first child you don't know what to expect. They told me it might be "Down's Syndrome' (global abnormalities) ... I was shocked!"*

In another example, it was important that physical assessments of an infant/child be performed by a CHN with the necessary skills to *accurately* detect possible physical abnormalities or concerns such as a "dislocated hip" and adequately explain the assessment results to the mother.

> *"I was really glad she brought it (hip creases) to my attention. She (CHN) pointed out that one leg was longer and creased than the other. But she said it all at once and just left it at that, instead of getting in to it in a little more detail. It bothered me a lot, and kind of alarmed me. So I took him to the pediatrician just for peace of mind, but he said it was OK".*

Mothers also wanted nurses to recognize the *range of normal* achievement of developmental milestones to avoid a "rigid textbook approach" to assessment.

> *"Don't compare my children to other children, and don't assume all kids develop the same – all kids are different".*

Communication of results. The nurse's ability to effectively communicate the results of the screening or assessment helped mothers understand the value of screening tests. Skilful communication also helped mothers accept the results and follow through with recommendations. Mothers also believed that the discussion of screening results should be complete but moderated, as some mothers found nurses comments to be "frightening".

> *"Maybe how they explain things... they have to hit sort of a happy medium so they're not scaring you to death, but still noticing things they should".*

Parent participation. Mothers desired the opportunity to actively participate in the health assessment of their infant during routine visits by combining their own observations of their child's growth and development and perceived need for intervention, with observations of the CHN.

"They need to let you take your part in it if they want to know how he really is".

In addition to a skilled assessment of their children, mothers valued being able to raise issues about their own physical or emotional health in the clinic setting, as they viewed this setting to be "safe". For mothers with problems or concerns who do not volunteer information, mothers believed nurses should have the skills "to pick this up as they may not automatically share their feelings with the CHN". This issue was discussed specifically in relation to postpartum depression, and was raised by all three mothers'

groups. Mothers from the one health center not providing the same postpartum depression (PPD) identification program as the other two health centers expressed:

> *"... There's no place for women to go when they have it (PPD) so badly. I can't get the help I need if no one can tell me what (negative feelings) it is. At least here, I can talk about it".*

Nurses' comments

Accurate assessment. A sensitive, accurate and skilled assessment of health need with a focus on the child's overall health was important to avoid "a mechanistic monitoring" of children's health believed to be promoted by the content of recording guidelines ("filling out those checklist boxes").

Nurses believed the use of objective measures to distinguish between "subtle deviations" in normal development, and possible "developmental delays" was also necessary for an individualized and skilled assessment.

> *"It's good discussing the abnormal but we also need to reassure mothers about what is normal at the appropriate time. Being able to distinguish when it is normal and when it is abnormal... there's nothing worse than making a normal child's parent anxious about their concerns when the child is perfectly normal".*

> *"It's important to discuss the abnormal, but it is also talking through what's normal—identifying the positive for the mother".*

CHNs agreed that incorporating the use of standardized screening tools into health assessments would enhance their ability to effectively monitor children's development over time, and possibly identify emerging concerns. They cautioned that adequate time was required for correct administration of the tools and interpretation of results.

> *"They're talking about bringing in a new screening program, but how can we do that too if we don't have any more time?"*

Communication of results/ referral sources. CHNs believed that it is important that results of assessment or screening be accurately interpreted to the parent, and were adamant that appropriate referral sources be readily available to the mother.

> *"Our clients don't have a lot of time during the day so it's not appropriate for us to say... 'okay go over to the other side of the city for this appointment'. It's the whole idea that if you do a screen, you do something. But if you don't have the proper resources to deal with what you are finding, then really, should you be doing the screen?"*

Parent participation. Nurses expressed the need to involve mothers in the assessment process to accurately identify important issues to the mother:

> *"If the nurse observes something out of the ordinary, she mentions this to the parent so they can discuss the issue/topic".*

Nurses also spoke of their awareness that "some moms are just not comfortable to share personal information about their child or themselves, especially if they are 'already marginalized' ". Therefore actively involving the mothers, and using standardized assessment tools was necessary to reduce the subjective nature of nurse assessment.

This indicator overlaps with a client centered approach (indicator one).

Indicator 4: Acceptable Service Environment

Mothers' comments

Features in the physical environment that were important to mothers included cleanliness, comfort and good customer service.

Cleanliness. Clean toys and clinic rooms, current reading material in the waiting room, bright lighting, and a pleasant atmosphere created by clerical staff were important.

> *"That lady in the front-she is just so priceless! I don't know her name but when we come in here I say (to older son) 'there's our friend'. She's so nice and she knows everything!"*

The importance of clean clinic rooms and toys in the waiting room were associated with a number of beliefs. They included expectations that health centers would be "clinically clean" and provide safe areas where exposure to communicable disease and infection was minimized.

> *"The toys the children play with in the waiting room need to be cleaned regularly so germs don't pass to other children".*

> *"This facility... it is bright and white... it's cleaner and just makes you feel better about being here".*

Comfort. Comfortably warm examining rooms and weigh scales for babies were also important to mothers.

> *"That (weigh) scale is so darn cold!"*

Customer service. "Good customer service" provided by clerical staff was described in abstract forms as "being nice, courtesy, pleasantness, and positive mood". Mothers reported that the nature of this customer service on arrival at the health center had the potential to influence their overall satisfaction with the rest of the clinic visit.

"It's the positive atmosphere, how they make you feel the whole time you are there".

Nurses' comments

CHNs did not raise the issue of physical environment of care in the same context as mothers. Based on responsive listening, nurses did describe the clinic setting as a psychologically "safe environment" for mothers to discuss difficult situations, and express difficult feelings and concerns.

> *"Sometimes they (mothers) tell us things that they don't tell anyone else".*

Indicator 5: Knowledgeable and Experienced CHN

The issues raised regarding the knowledge and experience of nurses related to professional attributes of the CHN, trust and choice.

Mothers' comments

Professional attributes. To effectively promote the health of children, mothers believed it was important that CHNs demonstrate confidence in their knowledge and skill, and be able to communicate information effectively to parents. They expressed that their confidence in nursing care was strengthened when CHNs were experienced.

"Staff here are knowledgeable in their field – they reassure you".

Mothers also wanted to know that nurses were professional in their attitude, and that they genuinely cared about children:

> *"Even the nurses who don't have their own kids seem very comfortable with them and that makes me feel better, like I can trust them". You feel like they genuinely like their job".*

Mothers interpreted the competence of a "beginning" nurse in a number of ways. When mothers perceived that CHNs lacked an "up to date" knowledge base or were inexperienced, this influenced their perceptions of the CHNs credibility.

> *"The nurse herself said she'd never seen anything like that (hernia). She was young, and inexperienced. She should have known a bit more about it, and not said it the way she did because she scared me a lot".*

Trust. Mothers also expressed that they were more likely to "trust' the CHN if the nurse appeared to possess sufficient knowledge and experience to answer their questions. A CHN who displayed uncertainly about answering mothers questions left mothers "not knowing if you could trust her (CHN) or not". This was particularly

relevant to first time mothers who reported that lack of support from an inexperienced nurse increased anxiety about their ability to care for their babies.

> *"Especially if you have never had a kid before – you don't know what to ask...some of these things could be normal, but you don't know. You feel that because you are in a health care place, they should know what they are doing".*

Mothers also believed that CHNs were trustworthy professionals, as CHNs were believed to use "caution" in representing authority. This was in reference to concerns about being labeled " not a good mother".

> *"In other places you wouldn't feel okay about things that don't go well for a new mother (crying baby)".*

Choice. Feeling confident about the skills of CHNs and their ability to perform specific procedures such as immunization was also very important to mothers.

> *"I don't think she had done it much (immunization). I guess every one has to learn, but not on my child! I think I was in shock more than he (baby) was!"*

In the above example, mothers agreed that they would have felt more confident if the CHN had revealed her inexperience before hand, and given the mother the choice of dealing with a more experienced nurse, especially for the first immunization.

> *"I think it would have been easier on you if you would have been told, 'Listen, this person hasn't given many shots, are you going to be okay with this?' If they would have said that - you could have been truthful and said, 'No, I want an experienced nurse'. But at least you would have had an option."*

Nurses' comments

In addition to professional attributes, nurses also identified that professional growth and development was necessary to increase their competencies and provide safe, ethical and competent nursing care in WCC.

Professional attributes. CHNs believe that mothers need to be cared for by staff who are experienced, approachable, have a solid knowledge base, and are able to answer

mothers' questions. In addition, nurses believe that *"the manner in which they treat mothers"*, and good communication skills are as important as their clinical competence to provide WCC services.

> *"Families need to go away thinking that this is a place they can come and ask any question, and get an answer - and feel comfortable about asking any question."*

Professional growth and development. Opportunities for ongoing continuing education were valued to maintain clinical expertise, enhance their existing knowledge and skills, and increase their competencies in providing nursing care. Critically important to CHNs was the ability to demonstrate technical skills needed to administer safe immunization.

> *"What's really important when parents come to clinic is that you're giving the correct baby, the correct dose, at the correct time..."*

Rather than influencing their clinical competence, CHNs spoke about inexperience of beginning practitioners in relation to time management with clinic schedules, recognizing that the processes in the nurse client interaction "take time".

> *"You know that when you have new staff on, it's going to take them longer".*

> *"The nurse that is taking longer, she might be a new staff member who hasn't got as much clinical expertise...and it might take her longer with each mother in clinic".*

Indicator 6: Access

Mothers comments

Mother's issues related to access were described in four areas: convenience, waiting times, equity, and location.

a) Convenience

Between WCC appointments, mothers appreciate the opportunity to informally drop into the health center, and personally discuss issues/concerns with the CHN. In this way, mothers are able to access a CHN during times of need.

> *"It's reassuring that you can drop in here... if you just need some information... reassuring that you have somewhere to go".*

Telephone assistance was of particular value for mothers who had difficulty with transportation, who were required to transport several young children to the clinic, or when relatively immediate advice was necessary to make a decision. The ability to establish telephone contact with the CHN was particularly important when mothers had a specific concern. This contact reassured them and provided them with an increased level of confidence about their parenting skills.

> *"Being able to phone, get the answer you need right away over the phone rather than having to make an appointment and go out. I just phoned and a nurse got back to me right away instead of sitting waiting for 3 hours (at the Medicenter) to find out... sometimes it's just a simple question".*

Mothers suggested extending the current 24-hour telephone HOTLINE designed for postpartum mothers beyond 2 months to 6 months to address their needs for support and information.

> *"If they could just extend that (24 hour line) to 6 months... something always seems to happen at 8 o'clock at night. That would really help moms that are questioning how and what to do about raising their children".*

Phone or "drop in" access to a CHN was viewed as a "complementary service" to a physician or medicenter visit after immunization and in non-emergency situations.

> *"You don't want to be running to your doctor and the emergency room every time you think that there is a problem when the nurse can help you".*

"It's nice because they (CHN) can answer your questions...you only go to your doctor for checkups...you need someone in between".

b) Waiting times

Reduced waiting times to schedule routine appointments and short waits at clinics (less than 10 minutes) for scheduled appointments were important.

> *"For me to wait an extra 20 minutes or half an hour is like...now I have a screaming child! I understand that it is hard to keep on schedule, but it sure would make things easier for mothers".*

c) Equity

Mothers believed it is important that CHNs provide all mothers across the health region with the same services and programs. This was in reference to specific programs as parent support groups, screening programs for postpartum depression, mental health programs, and "drop in" WCC services.

> *"I think the health centers should get together and see what is working really well. This baby class they have here, people are going out of their way to bring their kids here when there is a health center right by them. If this one is working so well, why can't moms get this same class at their own health center?"*

d) Location

Mothers valued having WCC services available in a location that was geographically close to their homes:

> *"It's easy to get to...the location is good...it's central to everything. Parking is a big plus here...there's lots of it and you don't have to pay...I appreciate the parking when you have kids to haul around".*

For other mothers who relied on bus transportation to attend WCC, it was important that neighborhood bus routes be linked to health centers to reduce difficult and lengthy travel time with young children.

> *"I can't afford to buy a bus pass every month...and no buses go by here that go by my place".*

Nurses' comments

CHNs expressed similar beliefs about the importance of reduced waiting times for clinic appointments, shorter waits in the clinics for scheduled appointments, and management support for alternate approaches to offer services at places and times convenient for mothers. Nurses also mentioned equity of services and information systems to provide efficient service.

> *"Our availability for hours, our availability through location, our availability on different days of the week are very critical to some clients".*

Nurses recognized that problems with "long booking dates" were compounded by budget limitations and competing programs. This led CHNs to prioritize their workload to satisfy budgets, rather than client needs, highlighting the need for management support to provide the additional staff necessary to increase mothers' access to WCC services.

> *"When there are lots of babies born, we need to do something about those long booking dates for clinic... add an extra clinic and the extra staff to bring down the waiting list to what is reasonable. But that's a funding issue".*

Equity. Equity of services across the region was also important to offer mothers.

> *"We do drop in clinics (unscheduled appointments) for our clients. The issue is not only being physically available but time available as well. You feel more accessible... extend the hours during the week (evenings) and offer a Saturday.... Mothers come from all over the city because of the drop in... They just come when they can".*

Information systems. Efficiencies in information systems to retrieve a child's or a family's "health record" would contribute to the availability of consistent information, and improve CHN access to client information when necessary (e.g. immunization records). Nurses pointed out that current information systems are localized. Not enough information is shared provincially or nationally (sometimes regionally), stalling the

retrieval of complete client information. This delay results in increased waiting times for mothers to access WCC services.

> *"If we could get immunization records that are nationally accessible... because our clients come from all over Canada. Sometimes they (mothers) are waiting for an hour because of our issues with records. That becomes ridiculous".*

Indicator 7: Individualized and Non-judgmental approach

Among the issues identified that related to the importance of an individualized and non-judgmental approach were acknowledging individual circumstances, the experiential knowledge of mothers, and positive comments.

Mothers' comments

Individual circumstances. Mothers agreed that although collectively as mothers they share common interests and health needs, services need to be determined in terms of a mother's "individual circumstances".

> *"They (CHNs) should be flexible and remember that everyone is an individual, and not only go by the 'old school text book' rules".*

This also included being viewed within the broader context of their own health beliefs, skills, capabilities, and efforts to promote their infant's health.

> *"People assume I don't know anything about how to look after her (infant daughter) because I look younger than I am".*

Experiential knowledge. Mothers were critical of authoritarian approaches which do not acknowledge the mother's knowledge of the situation, and with advice which was "stereotyped and from the textbook". Concerns were also expressed that nurses made assumptions about mother's parenting knowledge or experience, and their capacity to learn or accept new information. In some situations, mothers believed that nurses did not

provide adequate information as the nurse underestimated the mother's knowledge level or parenting ability.

> *"Some (CHNs) don't explain what they're doing or why they are doing something. Or they take control of the situation... does she think that I am a kid, or that I don't know anything about my own baby?"*

Positive comments. Mothers appreciated positive comments about their parenting skills, and when the CHN helped them to recognize and build on what they were doing well. They also wanted positive encouragement and consistent information for their individual circumstances.

"To hear someone say that you're doing a good job is important once in a while".

Mothers also appreciated positive comments about their body image several months after birth.

> *"...I came in with the baby, and I wasn't feeling great. Just for the nurse to say 'You look really good today' can make you day".*

As a result of the CHNs' reassurance, mothers believe that their self-confidence to make healthy decisions for their child and family is strengthened. When advice was too directive and opinionated, this led to feelings of guilt and self-doubt. This was particularly important regarding breast feeding issues.

> *"They shouldn't tell moms that they <u>should</u> breast feed, or say things like, 'your baby is tiny... but if you would have breast fed...' without finding out why I couldn't".*

Nurses' comments

Positive comments. CHNs had similar beliefs about the importance of providing an individual approach. Of particular importance was the need to build trust with a mother by recognizing her efforts, and giving her positive feedback about what she is

doing well. It was also important to "encourage mothers to make choices" as each effective choice builds a mother's confidence in making decisions about childcare.

Experiential knowledge. Particularly with *"experienced "* mothers, CHNs stressed the need to respect her experiential knowledge by *"validating what mothers already know"*. Nurses believe that respecting a mother's expertise is essential to developing a good relationship with the mother.

Individual circumstances. It was important to CHNs that mothers' concerns were not *"trivialized"*, or given *"pat answers that aren't realistic for her circumstances"*. Nurses believe it is important to not make value judgements about clients. Instead it is necessary to identify the unique characteristics of each mother and her child/family to better understand a mother's views on health, and the factors which may influence her ability to change or adopt a health practice.

> *" We need to look at the mother's context...what she can handle and is realistic for her at that point in her life"*.

CHNs recognize it is important to "listen and make suggestions" rather than "tell a mother what to do". As expressed by one nurse:

> *"After all, there is no absolute right or wrong way to do things when it comes to parenting"*.

Nurses identified that the diversity of parents attending some clinics demands an individualized and nonjudgmental approach to the delivery of services. Considering "cultural, socioeconomic, and individual factors" were examples of "tailoring" interventions to provide "appropriate and responsive" interventions to meet health needs of all parents in the WCC setting. Overcoming language barriers when trying to communicate with "English as second language" mothers was raised as a specific

example of the importance of understanding a mother's health needs to provide appropriate care.

> *"We know better than to be just prescriptive about what reality is for the client. They may know what to feed the child, but they may not be able to go and buy it".*

> *"Sometimes it is hard to be client driven, especially if you have someone who has cultural or language barriers. People that are marginal will not have interpreters available to them. If the communication flow isn't there, it's hard to know what client driven is sometimes. Because of their culture, some moms are not comfortable sharing information with you".*

This indicator overlaps with adequate time for listening, and a client-centered approach.

Indicator 8: Continuity of Care

Mothers' comments

Continuity of care was believed to influence trust, affect clinical decisions, and facilitate a personalized approach to nursing care.

Trust. Mothers said they preferred to see the same CHN each time they attended WCC. This would allow them to interact with a CHN who knew their child and health history rather than having to review their circumstances with a different CHN each visit. Having access to a familiar nurse was described as "comforting", and helped to build a trusting relationship between the CHN and mother.

> *"Dealing with the same nurse every time is more comfortable, she is a friendly face that I can trust".*

Clinical decisions. Mothers also perceived that an opportunity for a CHN to become familiar with what was "normal" for a particular child would influence clinical decisions and contribute to a more accurate assessment of a child's growth and development over time, compared to a "one time snap shot" of a child during routine visits.

"I would like to have the same nurse each time so she would know me and know my child - what is normal for him".

Personal care. Mothers wanted to feel they would know or recognize the same nurse when they attended clinic appointments, or came into the health center between scheduled appointments. Taking the time to respond to a mother by providing a personalized approach was reassuring for the mother that her child was important. She was then more likely to seek help or contact the CHN if needed.

"Dealing with the same nurse every time I come in here – even if he 's just coming to get weighed... it doesn't seem as though you 're cutting into their day by saying 'hello' or asking a question".

Nurses' comments

CHNs identified similar issues related to the importance of individual circumstances, clinical decisions and personal care. Nurses also identified the issue of efficiency related to continuity.

Nurses emphasized that continuity of care increases mothers' trust and comfort to share personal information and to identify needs more freely. With continuity, CHNs believed clinical assessments and decisions would be more accurate because of a better understanding of these individual and family circumstances.

Efficiency. From the nurse's perspective, continuity of provider also saves time for both the mother and CHN as less time is required during each visit to understand the context of a mother's issues or concern. With each encounter, the CHN is able to build on information, plans, and decisions from previous contacts rather than "backtracking" with each subsequent visit. This results in less duplication of some procedures, such as collecting information.

"Years ago in public health nursing, we had some ability to see the same mothers in a certain clinic... build relationships... and provide some continuity. You couldn't do it all the time but you could at least pick out mothers that it was important for. Each visit we could just move on from where we left off... that would make it easier and save time with families".

This is particularly important when families have multiple health issues or concerns.

"Sometimes we loose the flow because they see a different nurse each time, and the same things are missed at each visit. When there are lots of issues, you don't always have time to figure out what their background is so you have to ask the same questions over again. And you don't always have time to determine if they were able to follow through on what was discussed at the last visit."

Indicator 9: Providing Appropriate Health Information

Ensuring that health information was specific and consistent, and including information about community services and access to parenting programs was important. Anticipatory guidance was also viewed as an important strategy to guide and reassure mothers.

Mother's comments.

Mothers discussed three objectives in their needs for specific health information: to enable them to make informed decisions and choices for their child's care; to provide a source of reassurance and; to increase their knowledge about future issues by offering anticipatory guidance.

Anticipatory guidance included information to help mothers:

a) Understand what to expect from their children (e.g., developmental milestones);

"They should give you information about what to expect (growth and development), and what to compare it to".

b) Prevent unwanted conditions or events (e.g., injury prevention);

"I was in an accident and my car got wrecked, and I was told not to use my car seats. So I called them (CHN) and they're the ones that told me that I had to replace both my car seats".

c) Take action when an anticipated or unexpected event or condition occurs (e.g., reactions to immunization).

> *"His fever was over 100.5, a point over ... is this a good thing or a bad thing? I didn't call (the emergency number) because I didn't want someone to tell me that it was not an emergency. I didn't want to feel like that, but I didn't know what to do".*

Mothers spoke of the importance of being offered information when they needed reassurance or help to make a decision, or at times when they were uncertain about what to ask:

> *"If you are a first time mom, you don't know the questions to ask... they assume sometimes that you already know and don't explain enough about what should happen".*

Consistent information. Mothers indicated the need for consistent information between CHNs at the health centers, and between CHNs, hospital nurses, and physicians. Inconsistent information reduced mothers self confidence to provide proper care for their infants, and raised concerns that not all health professionals shared information which was accurate and "up to date".

> *"Everybody tells me different things... The doctor says, 'don't feed him pablum until he's 6 months old'. My friend says, 'I gave my baby pablum at 3 weeks'. The nurse said something different. It's just unreal sometimes...you don't know what to do".*

> *"Sometimes you get 2 or 3 nurses' opinions, and they're kind of different, and then the doctor... who's more up to date? I don't know if it means that someone is not up to date, or somebody's got it wrong. So what do I do? I find that very confusing and frustrating".*

Community Services. Mothers also desired "easy to find" information at the health center about current local community resources and events. They perceived a lack of information about community resources, and gaps in interdisciplinary, interagency communication.

"They need to promote more about what else is going on in the community...we know about events because we've heard from other moms, but there might be a million other things that are good but we don't even know about...something as easy as a bulletin board".

Mothers believed that health center services should be part of a seamless system to provide parents with easy access to information about other health and human services, such as mental health supports, and assessment/ diagnostic programs.

"It's hard to find any doctors that specialize in specific illnesses, or information on what is actually covered by Alberta Health Care or Blue Cross. I was told by the CHN to buy something for my baby...if my child needs something medical, is it covered?

Parenting programs. Parent education and support programs that complement WCC services were described as an important way of conveying information and offering mothers mutual support and reinforcement. Mothers were disappointed however that "new mothers with infants between 2 months and 6 or 7 months" were the target for these health center parenting groups with few programs offered after that time.

"Just being able to be around other mothers and realize that they're going through the same things as you...everyone's more than helpful".

"I couldn't imagine not having this group. It's a big, big benefit! I've got a ton out of it...It's good for everyday living, for peace of mind...too bad he will be too old to bring soon".

Reducing the amount of information to what is relevant, useful, and timely was important to avoid overwhelming a mother.

"There's so many pamphlets that you can't possibly read them all...it's too much...even if they had a section that said 'Just for babies', it would make it easier to get the information we need".

Written information, "in clear, plain English, not medical jargon" was useful to reinforce verbal advice from the CHN.

"Sometimes they're just telling me so much information at one time. It goes in one ear and out another...just give me a pamphlet and leave it with me".

Nurses' comments

Nurses agreed that providing health information, written or verbal has an important role in enhancing a mother's competence. Four objectives for providing evidence-based health information were identified:

1) To deal with immediate concerns;

"Umpteen nurses say they really shouldn't be feeding their baby Homo (milk) at two months, and they have. You need to give them the right information...about something they don't want to do... it's an issue they don't want to discuss...but we can still offer them information to make that better".

2) To provide "informed consent" about procedures (e.g., immunization);

3) To address future issues in the form of "anticipatory guidance so they know what to expect" (e.g., growth and development); and

4) To make appropriate referrals.

Nurses described print information as a supplement to information provided in a face to face encounter in the clinic setting. "Depending on the mother's needs" and the CHNs assessment of the child's achievements, some types of information may be routinely offered to parents on anticipation of developmental tasks (e.g., infant nutrition). Other information is provided on request from the parent such as referral information to help mothers make connections with community referral agencies (e.g., parent support programs):

"We're not only here for immunization, but for other reasons and resources too".

"Being in tune" with the appropriateness of the type of information needed by mothers was strongly identified as being dependent on "asking the right questions to find out what

they really want". When providing health information, it is important to provide clear direct advice without "medicalizing" the visit. To be of practical value, health information should be "research based" and consistent between health providers.

> *"We have to have consistency so we don't have differences between their health nurse and their doctor who is also a caregiver to them".*

CHNs stressed the importance of not undermining the mother's confidence in her physician when communicating current health information, even when confronted with mother's reports of conflicting physician advice.

> *"You try to tell them (mothers) what you know (evidence based practice) and the rationale behind what you're saying. You hope they see the common sense in what you're saying as opposed to debating physician guidelines".*

4.2 Factors Influencing Quality in Nurse Client Interactions

During the focus groups discussions with CHNs, several issues emerged which were believed to influence the achievement of quality nurse client interactions in the delivery of WCC services. Collation and content analysis was conducted with these data, which led to the emergence of five general themes linked to both organizational and health system issues. The themes are presented in Table 7.

Table 7: Factors influencing the achievement of quality in WCC

1. Limited resources and heavy caseloads;
2. Uncertain corporate commitment to a health promotion philosophy of care;
3. Performance management and evaluation strategies based on contacts and "inputs", not assessment of quality and outcomes;
4. Conflicting society values and practical supports for families;
5. Lack of interdisciplinary, intersectoral collaboration.

Nurses views of factors influencing the quality of services in WCC

1. Limited resources and heavy caseloads.

CHNs believe that budget restrictions, budget cuts, and competing client priorities are responsible for inadequate staffing levels, leading to heavy workloads and inadequate program supports to meet client needs.

> *"They want us to do a great job, but they don't provide us with the finances to staff us properly".*

> *"They gave us the scale (postpartum depression questionnaire) but didn't give us the resources to do follow-up with mothers".*

> *"The province will help with funding for purchasing vaccine, but not funding for staff time to do it".*

Nurses also discussed the need for "wise use of resources". It is believed that time inefficiencies in WCC, such as recording protocols, shifts direct service time away from the mother and child, influencing both the quality and benefit of care provided.

> *"Everybody has a wish list for more dollars and staff but we have to be realistic about what we do with our resources".*

2. Uncertain corporate commitment to a health promotion philosophy of care.

CHNs suggest that hospital and physician services/care are more highly valued by health policy makers than preventive health care services. This is reflected in the tension that is perceived to exist between funding of "high profile" priorities in acute care, and the "invisible" priorities of public health services. Although the provincial government has indicated the need for greater emphasis on promoting good health and preventing illness/injury, capital investment in preventive programs appears to be limited. This occurs despite indisputable evidence of its positive effects on health, and reduced costs of health care.

> *"What we do is preventive...it is not valued. It's valued by us, and its valued by our mangers (locally), but it's not in the bigger picture... its not valued at all".*

3. Evaluation strategies based on contacts, not assessment of quality and outcomes.

CHNs believe that current methods to evaluate WCC service effectiveness are driven by the need for numerical data ("numbers of children immunized"). These same judgements of efficiency that are used to reduce hospital and physician costs are not viewed to be relevant criterion measures for evaluating the effectiveness of community health programs related to the different roles and outcomes expected of preventive care. CHNs believe that measures of cost and outcome specifically linked with CHN service in WCC are therefore necessary. Nurses suggest a focus on understanding client views of health benefit as one reasonable alternative to the traditional reliance on economic efficiencies for measuring service effectiveness.

> *"You can't measure that we are saving x amount of dollars or saving hospitals money or saving on physician visits".*

"Really, all that we evaluate is whether we have immunized children on time, but it doesn't really help us to figure out if what we're doing works really well. If we had some way to measure that...it might help us to use that 15 minutes (clinic appointment time) in a way that is more beneficial to clients."

CHNs are unclear about the outcomes of nursing care they are accountable for in WCC when their capacity to function within their "health promotion role" is compromised. Organizational factors as heavily booked clinics resulting in less time with clients, and nursing practice issues associated with "task oriented" recording protocols were examples of factors that "weakened" their nursing roles.

"I would like to be clearer on what is 100 percent necessary... in order to do a fabulous job at what we do, and keep mothers happy, and keep us happy without being totally compromised by politically what we have to do".

4. Conflicting societal values, and practical supports for families.

Nurses believe that despite society's proclaimed desire to "invest in children's health", society undervalues the care of children and families, especially families living in poverty. Inadequate funding of social programs to provide comprehensive services to parents suffering from economic and social stresses reflects this belief. Community services that do not provide practical supports for "at risk" families undermine the efforts of CHNs to promote healthy growth and development, and deflect unhealthy situations before they develop. CHNs believe that better coordination between child welfare, community services, and public health services are needed as expressed in this example.

"There are a lot of pigeon holes, and the rules and regulations are not for the children, or the mothers, or the families. I think that some of the issues that are in society go against what we're trying to accomplish sometimes, like poverty. For example, we're working to help parents promote their children's health and development, and then you have social services.... telling teen mothers they have to go back to school 6 months after they deliver the baby...but who is going to provide good care for the baby?"

5. Lack of intersectoral, interdisciplinary collaboration.

This issue was discussed in reference to the need to ensure that health information provided by CHNs was consistent with physician advice, and also supported by family physicians. To ensure that mothers received current and research based health information, CHNs believe they need to be more adept at raising the awareness and value of their health promotion work with other professionals. This would also promote interdisciplinary partnership approaches in the community, which were viewed to benefit mothers and their families.

> *"We have to promote consistency (of health information). For example...physicians. There's no common ground to explain the really off the wall type of responses they (mothers) have been given by their physicians... it's not based on proper information".*

The findings in this section highlight the impact that organizational factors and health system issues can have on community health nursing practice in the delivery of WCC services. Examples were presented which illustrate how these factors can impact a CHNs ability to incorporate quality into their work practice, and deliver nursing care which is effective and high quality (Macleod Clark, 1997).

Summary of Study Findings

Using a qualitative methodology and eliciting emic perspectives from mothers and CHNs in this study provided clarity of quality issues in WCC. This research has demonstrated that CHN interactions in WCC are characterized by the presence of nine indicators of quality, which emerged consistently from the data generated by CHNs and

mothers. Five themes were presented which described the influences that CHNs perceive affect their ability to incorporate these quality dimensions into their nursing practice.

Obtaining both the perceptions of mothers and CHNs provided an opportunity to validate the information from each source by comparing mother's views with those of CHNs. Further insight was gained about how both mothers and nurses interpreted the interaction in the WCC setting. CHNs described some indicators in more detail based on the CHN's role and professional responsibilities in providing WCC services.

Mothers wanted nurses to be holistic, knowledgeable, experienced, and have good communication skills with a client-centered approach in the delivery of well child clinic services. Being able to access a CHN when they needed, receive timely health information, and have sufficient time with the CHN in an acceptable setting were also important. The ability to make choices in partnership with the nurse who understood the client's needs were also among the key factors.

CHNs identified the majority of issues identified by mothers. Nurse's perceptions of quality in well child clinic services will be compared to mother's perceptions of service quality in the next chapter.

The findings in this chapter have achieved both the research objectives of (1) clarifying the concept of quality within well child clinic services in a public health setting from the perspective of mothers and community health nurses, and (2) identifying factors that are perceived to influence CHNs' abilities to deliver quality WCC services.

CHAPTER 5

DISCUSSION OF STUDY FINDINGS

In this chapter, the nine indicators of quality that were identified in this study will be discussed and applied to Donabedian's (1980) model of quality care. Similarities and differences between mothers and CHNs perceptions will also be discussed. Thereafter, the limitations of the study, policy, program, and practice implications and suggestions for future research are presented.

Quality Indicators

Nine indicators of quality describing the characteristics of an effective nurse-client interaction in WCC services emerged consistently from the analysis of focus group data. Each reflect a theme with related factors or sub-themes that are pertinent to individual CHN/ mother interactions during routine appointments of WCC services. Collectively the nine indicators represent what mothers and CHNs believe are important in the delivery of WCC services.

Perhaps the most striking finding among this heterogeneous assortment of quality indicators was the prominence of a client centered/family approach as the most important factor influencing the quality of the CHN/mother interaction. Both CHNs and all mothers groups expressed their support for a client-centered approach with equal vigor.

Several indicators are interrelated. For example, mothers identified that a skilled health assessment (indicator 3) requires that an experienced and knowledgeable CHN (indicator 5) is able to make accurate clinical assessments of health need. Mothers also identified that responsive listening is a critical element of the assessment process, which

requires a partnership between the CHN and mother (indicator 1), and adequate time to listen (indicator 2).

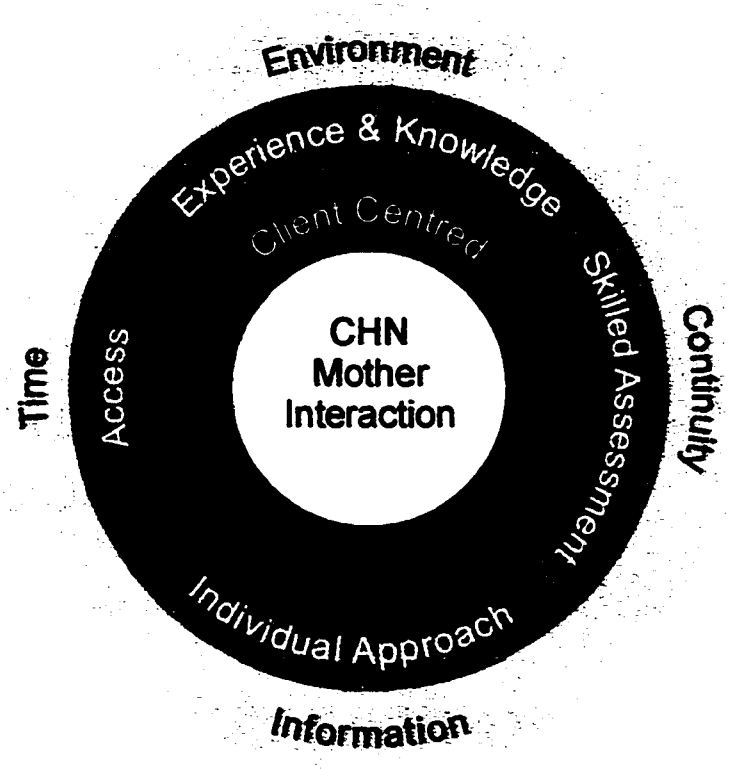
Although interrelated as illustrated in Figure 3, the indicators are distinct. For example, taking the time to listen and understand health issues without rushing a mother (indicator 1) is different than having adequate time to spend with a mother (indicator 2). In another example, a client centered approach focuses on a mother's priorities to tailor care that is most relevant to the mother (indicator 1). To meet a mother's health needs, this approach must also be integrated with an individual approach that is both supportive of a mother's individual circumstances, and non-prescriptive or judgmental (indicator 7). Using an example of working individually with a mother to reduce infant exposure to maternal smoking illustrates the link between these separate indicators. When a mother, who is a smoker, identifies that she is concerned with her infant's frequent respiratory infections, the infant's infections become the focus of the intervention. To address the mother's smoking behavior, the CHN must understand behavior techniques, and recognize the mother's readiness to change, as opposed to blaming the mother. This example shows that the CHN works through issues identified by mothers (client centered approach) using skills and expertise to support the mother's individual circumstances rather than judge her behavior (individualized approach).

These examples suggest that while it is not necessary for all indicators to be present at the same time, the degree of quality in CHN/mother interactions can be assessed by the extent of conformity to the nine indicators. The potential for this assessment is discussed later in the chapter, under "Implications for policy, program and practice". The presence of some or all of these indicators is also believed to have an impact on benefits

(outcomes) achieved by the mother. This relationship has not been explored in this study, and is described by other researchers to be poorly understood (Macleod Clark et al., 1997).

Figure 3

Model of Indicators of Quality In Well Child Clinic Services



Levels of shading ranging from dark (inner circle) to light (outer circle) indicate the relative proportion of responses relating to each indicator from both mothers and CHNs.

Largest proportion

Smaller proportion

The quality indicators identified in this study are similar to indicators identified in the literature (Donabedian, 1988; Maxwell, 1994; Colicelli, 1996) and other nursing studies of quality (Macleod Clark et al., 1997; Proctor, 1998). The indicators also share some commonalties with "generic" health service quality indicators (Alberta Health, 1998) such as access but are more specifically tailored to the role of the CHN in WCC services.

It was also evident that mothers using WCC services have clear views and can articulate both good quality and poor quality elements of the nursing care they experienced. This suggests the need for stakeholders, including the mothers, CHNs, and administrators/managers to have a shared view of the importance of quality in health services, and be committed to the process of quality monitoring (Macleod Clark, 1997). Both mothers and CHNs agreed that professional perceptions of quality care alone, while similar to mother's perceptions are not useful to understand mothers' priority needs for health service.

Structure and Process Elements of WCC Services

Donabedian's model of quality of care (1980) was a helpful framework to use in the analysis of data. This model was used to confirm that quality care in WCC services is a mix of process and structure components. Within Donabedian's model, the quality indicators link the process of a CHN mother interaction with the structure necessary for them to take place, and health benefits to be achieved. By identifying factors that contribute to or distract from incorporating quality into CHN practice, this model also highlighted the need to overcome structural barriers to improve the quality of CHN care.

Structure is important to the quality of care by ensuring that there are sufficient resources and proper system design (Donabedian, 1980). This was identified in CHNs' discussion of factors that influence their ability to provide quality care in WCC services.

As presented in Figure 4, *structure* components that influence the quality of nursing care identified *in this study* include:

1) the CHN,

2) organizational variables,

3) and the client (mother).

CHN variables were identified as experience, knowledge, and skill level. Organizational structure variables affecting quality include adequate time with mothers, access to the service, and the physical environment. All of the organizational variables identified by CHNs that influence CHNs ability to incorporate quality into their practice in WCC are shown in parentheses in Figure 4. Client variables necessitating an individualized and nonjudgmental approach include socioeconomic and cultural factors, and health beliefs.

The *process* of service delivery in WCC is the interaction between the CHN and mother. Without an understanding of the interaction between the CHN and mother, the quality of CHN care in WCC services cannot be improved (Irvine et al., 1998; Proctor, 1997).

Process variables that characterize quality of the nurse client interaction *in this study* are:

1) skilled health assessment;

2) client-centered /family centered approach;

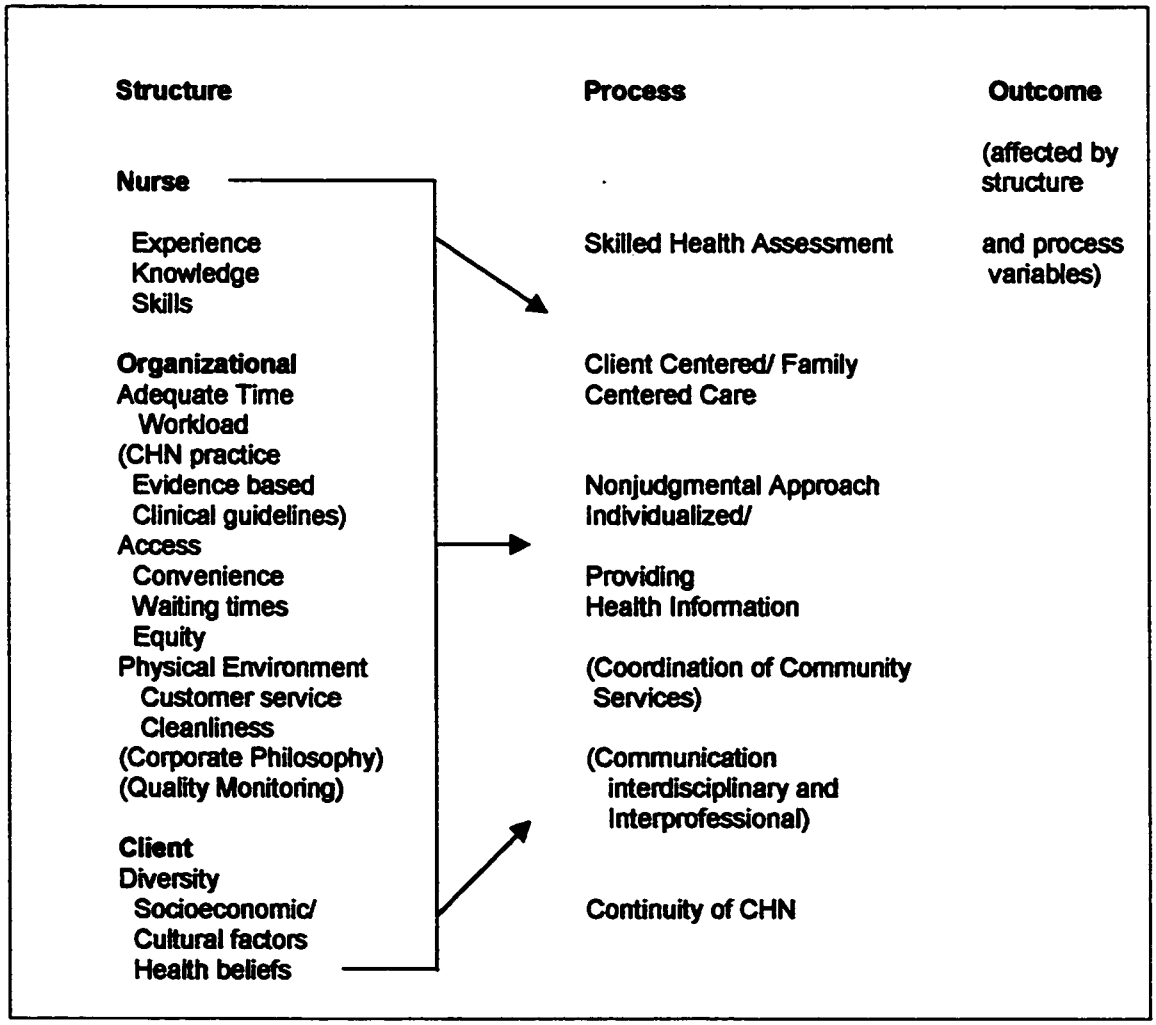
3) an individualized/nonjudgmental approach to service delivery;

4) the provision of health information; and

5) continuity of the CHN.

Interdisciplinary and interprofessional communication, and coordination of community services were also among the factors that were viewed by CHNs to influence quality in the CHN/mother interaction in WCC services. These are also shown in Figure 4. *Outcome variables*, the third element of Donabedian's (1982) model, are missing from Figure 4, as they were not addressed in this study.

Figure 4: Elements of Structure and Processes of Care in Well Child Clinics



The importance of the relationship between structure and process variables can be displayed using an example identified earlier in this study. A mother perceived that the skill and experience level of a CHN (structure variable) affected the quality of a hip assessment (process variable) conducted on her baby, and the adequacy of health information (process variable) provided to the mother. These events in turn affected how the CHN intervened with the mother to achieve desired outcomes. It is also important to realize that even a skilled and experienced CHN may conduct an inadequate health assessment or provide inadequate health information to a mother under conditions of time pressures related to heavily booked clinics (structure variables).

Comparison of CHNs and Mothers Views

Analysis of data demonstrated the presence of areas of shared understanding between CHNs and mothers related to important aspects of WCC services. A high degree of congruence was evident between what CHNs and mothers describe are necessary "ingredients' in a quality interaction. Simultaneously examining CHN and mothers' perceptions highlights the variables that affect mothers' perceptions of quality of CHN care, and ultimately influence their use of WCC services (Rovers & Isenor, 1988). At the same time, an understanding of mismatches between mothers and CHNs can be used to identify possible gaps which can then be incorporated into service delivery (Coombs & Kendall, 1993). The importance of these differences in priorities and expectations for achieving quality cannot be underestimated.

As shown in Table 6, both mothers' and CHNs' assessments of quality are fairly detailed. The use of a client centered approach, good communication skills, and clinical competence occupies a core position among both CHNs and mothers lists of what

mattered most to them. Both CHNs and mothers agree on the importance of knowledge and evidence based practices to perform a skilled health assessment and make appropriate referrals. CHNs acknowledged their interest in continuing education to learn and incorporate new knowledge and skills into their practice. Mothers spoke of knowledge CHNs had already acquired, and the ability of CHNs to inspire confidence in mothers.

Across all mothers groups, the level of agreement on undesirable elements is clear. Mothers identified that the most undesirable elements of a CHN mother interaction were poor interpersonal and communication skills, and a CHN's inability to effectively manage a client-centered approach in the delivery of nursing services. Interacting with an inexperienced CHN was also undesirable for mothers.

CHNs did not identify inexperience in the same context as mothers although their comments about providing quality health services in WCC reflected the need to be a skilled, as opposed to "novice" practitioner. CHNs also did not address the same aspects of the physical environment raised by mothers, but focused their attention on their personal approach to care with the mothers to create a psychologically "safe" environment in the clinic.

Table 8 presents a comparison of the similarities and differences between mothers and CHNs perceptions relating to WCC services.

Table 8: Similarities and Differences in Perceptions between CHNs and Mothers

DIMENSION	MOTHERS' VIEWS	CHNS' VIEWS
1. **Client Centered Approach**		
Partnership	➢ Want a partnership with the CHN to meet mother's needs, focus on mother's issues.	➢ Support mothers in their efforts to address health issues. ➢ Validate mother's knowledge and skills. ➢ Advice must be relevant and easy to adopt-consider mother's circumstances. ➢ Tailor visits to meet needs, contracting clinic service. ➢ Mother has control in interaction with CHN.
Personal attributes of nurse	➢ Personal attributes linked with process of client centered approach, want nurse to be "friendly, caring, easy to talk to, have empathy, be nonjudgmental, supportive, genuine, respectful".	➢ Personal attributes linked to client centered care: accepting, nonjudgmental, responsive listening, positive regard for mother, communication skills, skills to ask the right question, supportive, caring.
Sensitive issues	➢ Want CHN to invite discussion of sensitive issues, have skills to recognize mothers with problems.	➢ Must be sensitive, look "beyond" what mother identifies.
Family assessment	➢ Child friendly clinics with childcare available. ➢ Recognize central role of family in the child's life. ➢ Involve fathers.	➢ Necessary to view child within context of the family. ➢ Very few fathers attend clinics.
Evaluation	➢ CHNs should be evaluated for "suitability" for jobs working with children and families.	➢ Mechanism needed for feedback from mothers about quality issues in clinic. ➢ Data collection systems-health promotion work needs to be captured in addition to numerical data.
Professional responsibilities	➢ Issue not raised.	➢ Recognize professional responsibilities; balance between client focus and child safety. ➢ Recording tools influence content of interaction-more "task oriented" than client centered.

DIMENSION	MOTHERS' VIEWS	CHNS' VIEWS
2. Adequate Time to Listen	➢ Want adequate time with the CHN to talk about concerns and understand what will happen during the appointment.	➢ Need ability to spend time with mothers to understand needs and provide adequate care. ➢ Health promotion work "takes time".
3. Skilled Assessment of Health need		
Accurate and Individualized	➢ Want accurate assessment to avoid unnecessary fears. ➢ Avoid "textbook" approach.	➢ Need to provide accurate clinical assessment of health needs. ➢ Avoid mechanistic monitoring of child's health.
Communication of results	➢ Careful "moderated" discussion of assessment/screening results.	➢ Accurate interpretation of results.
Parent participation	➢ Opportunity for mother to be a participant.	➢ Involve mother in assessment process.
Referral sources	➢ Issue not raised.	➢ Need available referral sources.
4. Acceptable Environment		
Clean	➢ Value a safe and clean environment to reduce exposure to communicable diseases.	➢ Issue not raised.
Customer service	➢ Value good customer service to create a positive atmosphere. ➢ Emphasized "nice" aspects of surroundings.	
"Safe" environment	➢ Issue not raised in the same context.	➢ The clinic setting is a psychologically "safe" environment for mothers to discuss personal issues.

DIMENSION	MOTHERS' VIEWS	CHNS' VIEWS
5. Knowledgeable and Experienced nurse		
Professional attributes	➢ CHN should be experienced, skilled, with sound knowledge base, and "up to date" knowledge. ➢ Confidence is influenced by nurse's ability to answer questions. ➢ Requires good communication skills. ➢ Professional attitude.	➢ CHNs need to be experienced, have research-based knowledge, in-depth clinical skills and judgement. ➢ Ability to answer questions. ➢ Good communication skills necessary. ➢ Provide safe, competent, ethical nursing care.
Choices	➢ Should have choice of dealing with experienced vs. inexperienced CHN.	➢ Issue not raised.
6. Access		
Convenience	➢ Want to be able to "drop in" to discuss issues with CHN. ➢ Telephone service important for reassurance, specific information. ➢ CHN services perceived to be "complementary" to physician services. Prefer to consult with the CHN for parenting and routine growth and development issues. ➢ Extend current 24 hour Hot Line phone service from 2 months to 6 months.	➢ Need management support for alternate approaches to offer services at places and times convenient for mothers e.g., "drop in", expanded hours, different locations.
Waiting times	➢ Reduced times to schedule routine clinic appointments. ➢ Short wait (less than 10 minutes) at clinics for scheduled appointments.	➢ Reduced wait times for mothers to make appointments. ➢ Shorter waits in the clinic. ➢ Efficiency in information systems.
Equity	➢ Same services/programs provided for all mothers across the region.	➢ Equity of service for mothers across the region.
Location	➢ Value having the health center close to their homes. ➢ Neighborhood bus routes should be linked to health center bus routes.	➢ "Drop in" services should be expanded from limited sites to reduce difficult travel with young children for mothers who travel across the city.

DIMENSION	MOTHERS' VIEWS	CHNS' VIEWS
7. **Individualized, Nonjudgmental Approach**		
Individual circumstances	➢ Want services to be determined in terms of individual circumstances, and health beliefs.	➢ Recognize diversity of children/families and need to consider individual differences. ➢ Need to understand a mother's views on health and factors that influence her choices/decisions without value judgements. ➢ Provide culturally sensitive care.
Experiential knowledge	➢ Acknowledge mothers' experience, knowledge, and skills.	➢ Respect mother's experiential knowledge, and validate mother's efforts.
Positive encouragement	➢ Appreciate positive comments about parenting and body image. ➢ Value positive encouragement for individual circumstances.	➢ Provide positive feedback that mother is doing well.
8. **Continuity of Provider**		
Trust, comfort	➢ Want to see the same CHN- comfort, builds trust with CHN.	➢ With opportunity to see same mothers, health needs are identified more readily, builds trust in the CHN.
Accurate clinical decisions	➢ More accurate assessment if CHN "knows" the child and family circumstance.	➢ Greater understanding of context of mother's concerns.
Personalized	➢ Personalized approach encourages appropriate contact with CHN.	➢ Mother more likely to share concerns with CHN, and contact CHN when needed.
Time efficient	➢ Issue not raised.	➢ Builds on past information, decisions. Nurse knows background, from previous contacts. Promotes appropriate clinical decisions and saves time.

DIMENSION	MOTHERS' VIEWS	CHNs' VIEWS
9. Health Information		
Specific detailed information	➢ Need specific information to make decisions. ➢ "Offer" information especially for first time mothers who do not know what to ask. ➢ Clear language, not medical terms. ➢ Written information to reinforce clear spoken advice. ➢ Reduce amount of information to what is timely and relevant.	➢ Provide written and verbal information to make decisions.
Consistent information	➢ Need the same message/advice from CHN, hospital nurses, and doctors.	➢ Mothers need consistent information from CHN, hospital nurses, and family physicians.
Preventive and anticipatory guidance	➢ Want information to support parenting-information on developmental milestones to increase parent knowledge and skills.	➢ Provide anticipatory guidance/information to support parenting, growth, behavior and development.
Parent support programs	➢ Parent support programs provide information, mutual support, and reassurance.	➢ Not addressed in the same context, but referrals made to Health Center "Baby Talk" parenting groups for support and health information.
Information about local community services/programs	➢ Information systems should be integrated to increase access and promote community programs, services, and referral agencies.	➢ Adamant that referral sources be readily available, but not mentioned in the same context.

Discussion Summary

The nine indicators of quality identified in this study relate to attributes of the CHN, features of the CHN/mother interaction, and the settings in which WCC services are delivered. While it is clearly not necessary for all indicators to be present at any one time, this study has shown that CHN interactions in WCC that are characterized by a client centered approach are more likely to be linked with positive health benefits for mothers. There were many similarities between CHNs and mothers perceptions of quality in CHN interaction. There is the potential to use the indicators identified in this study as a framework for quality monitoring and improvement. The results of this study suggest the need to acknowledge the perceptions of mothers and CHNs as well as the organizational structures that influence quality of care in WCC services to determine the quality of care in WCC services.

Policy, Program and Practice Implications

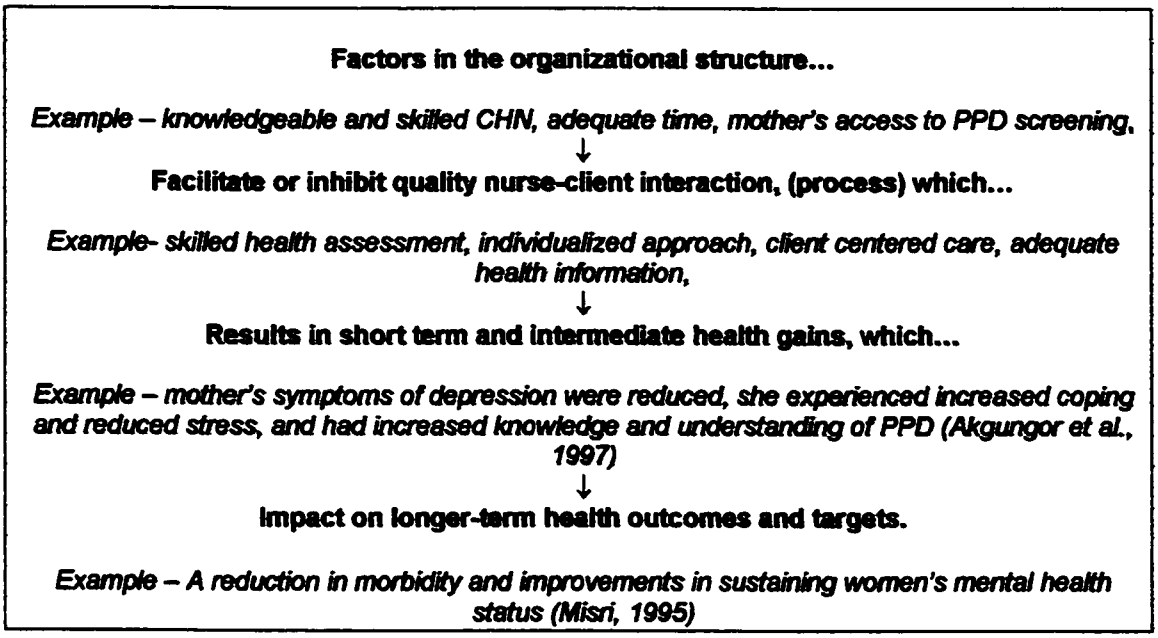
Within Alberta's accountability framework in health care, CHNs and other health providers have been encouraged to assume responsibility for the quality of the processes they are involved in (Alberta Health, 1998). To date quantitative measures have demonstrated the cost effectiveness and efficiency of WCC services related only to the immunization component of WCC services. These measures have not provided an assessment of quality or illuminated the wide spectrum of health outcomes associated with WCC services.

The findings from this study have important implications for CHN practice and WCC services. By identifying a list of nine process indicators of quality in WCC services, and a set of structural variables, results of this study provide:

1) *A framework for monitoring the quality of community health nursing care in WCC services.* For each indicator of quality, expectations and/or measures of quality in CHN interactions in WCC services may be defined in relation to structure, process, and/or outcomes. In this way, the process of developing and revising expectations related to each quality indicator could contribute to continuous quality improvement strategies. As an example, to monitor CHNs' use of a client centered and individual approach, questionnaires could be developed to determine mother's perceptions of whether their priorities and desired approach were used to support them.

2) *A framework to identify the outcomes which can be attributed to CHN/mother interactions in WCC.* Categorizing the quality indicators into structure and process elements has the potential to identify outcomes that are linked to the CHN interaction in WCC services. This categorization also provides information about structure factors that influence the processes of care, and ultimately the outcomes of CHN care (Irvine, 1998). Using a common example in WCC, a postpartum depression-screening program, the relationship between structure and process factors is illustrated in Figure 5. This approach would augment current numerical data with evidence of quality and health benefit in community health nursing care.

Figure 5: Structure and process factors and their relationship to outcome



Analysis of data also revealed several examples of client descriptions of improvements or health benefits experienced in the process of a quality interaction during WCC. This suggests a potential to develop mechanisms that will measure the effectiveness of WCC in terms of these positive changes in health state. Mothers did not use the term "health benefit" but expressed these positive health changes in terms of immediate health gain, or improvement in the way they were able to deal with issues or concerns. For example, mothers used expressions such as, "increased my confidence", helped to reassure me", and "made me feel better". This finding is supported by the work of several researchers (Besner, 1994; Cox, 1982; Olds, 1993; Macleod Clark, 1997) who have demonstrated that the quality of the nurse client interaction has a fundamental influence on whether or not a client derives a health benefit from the intervention.

3) *A set of structure factors which may facilitate the delivery of quality interventions.*

An awareness of these factors may guide the development of standards or

prerequisites for "needed' structural elements in the clinic setting which will assist CHNs to incorporate quality into their nursing practice. A checklist of "prerequisites" and process indicators of quality offer a useful framework for this effort (e.g., adequate time).

4) A framework to provide feedback to CHNs from mothers' comments about the quality of CHN care received during CHN interactions in WCC. For example, as suggested by CHNs, mothers could be questioned about their satisfaction with the WCC service, and about their perception of health wants and needs using questionnaires or interviews developed with findings from this study. Nursing managers could recognize CHNs or the entire nursing staff who were identified as providing outstanding care. Negative comments could also be analyzed and communicated to identify opportunities to prevent similar concerns in the future. Issues identified by mothers such as the physical environment that CHNs have no control over may provide input for organizational changes, as well as to justify administrative initiatives to address structure factors such as long waiting lists (Megivern et al, 1992).

Individually CHNs also have an important role to play in the evaluation of quality and benefit of their interaction with mothers. Mothers' descriptions of quality will supply information to CHNs to encourage them to reflect on their own experiences with the identified indicators, and strive to use approaches which comply with mothers' perspectives of quality (e.g., a client centered approach).

5) A *knowledge base to establish a link between nursing practice and research. Results of this study also contribute to the literature on quality and health benefit that can be attributed to community health nursing care in WCC services.*

Using perceptions of both CHNs and mothers has addressed gaps in existing knowledge about the quality of CHN interactions in WCC services. If CHNs are able to incorporate the indicators of quality identified in this study into practice, they are then uniquely positioned to play a key role to improve the quality of services offered, and influence health benefits experienced by clients subsequent to nursing interventions in WCC. To date, this role has been underestimated both in practice and in the development of health system performance measures of quality. Within the region that this study was conducted, understanding the dimensions of quality in WCC services represents a considerable impact on the health and well being of the population, as over 10,000 families utilize the services of well child clinics provided by CHNs yearly.

WCC services in a public health setting provided a focus for the identification of quality indicators. These indicators may be relevant to other areas of health promotion work involving CHN/mother interactions. The indicators may be applied to other services by using the indicators as a framework to plan and design quality interactions.

Future Research

The research described in this report is a first step in the development of process indicators of quality in CHN interactions in WCC. Future research is important to validate, refine, and test the process indicators of quality identified in this study with a greater number of CHNs and clients to: 1) increase their generalizability, and 2) assess whether use of these indicators contributes to quality improvement. Repeating the study

with more groups would also allow the information from the focus groups to be explored in greater depth.

This study suggests that organizational support is necessary to create a work environment for CHNs that will maximize the potential for quality and health benefit. The results of this study also suggest that a shared corporate philosophy and commitment to improving quality must support quality improvement strategies. Therefore future interviews with WCC program and regional managers is essential to determine: 1) the degree of importance attached to quality monitoring, 2) specific indicators believed to be most valuable, 3) constraints on monitoring approaches, and 4) feasibility of monitoring the quality of CHN/mother interactions in WCC services with current resources.

This study focused on perceptions of English speaking mothers who are currently involved in WCC services and the CHNs who provide WCC services to this population. Future research is necessary to learn about the perceptions of "English as second language" mothers and the nurses who provide WCC services to these children and mothers. This approach would ensure that quality services in WCC are provided to all mothers and children in the region.

This study did not involve "hard to reach" mothers, or address the many sociological issues which may impact on mother's use of preventive health services such as WCC services. These complex issues such as poverty, lack of personal, economic, and educational resources, and family alienation from medical and health services were believed to be beyond the scope of this study. Future study of these issues may however provide valuable data to overcome traditional barriers to service utilization, and provide quality WCC services to "hard to reach" mothers.

Ultimately, research to develop tools to monitor and measure client's perceptions of quality based on information offered by the focus groups in this study, would assist CHNs and program managers to demonstrate the quality of WCC services. Mothers' evaluation of quality determined by using these measures would be helpful to design quality improvement strategies as needed.

Finally, it is hoped that this study will spark the interest of other researchers to examine the relationship between outcome variables, and the structure and process indicators identified in this study. Research of this nature has the potential to demonstrate health benefits linked to the role of the CHN in WCC services. This will validate some important long term convictions held by practicing CHNs about quality in community health nursing practice, and its relationship to health gain, or "making a difference".

Limitations of the Study

Several features, including the nonrandom, volunteer sampling method and the small number of mothers and community health nurses, have limited this study. CHNs were chosen because of their experience with and interest in improving quality in WCC services. All mothers spoke English and met the other selection criteria of this study. As a result of the selection criteria, it is recognized that the study participants, whose participation was voluntary, may not be representative of the majority of individuals in these populations (Field & Morse, 1985). As such, the generalizability of the study findings is not certain. Obtaining study findings that are consistent with findings of other researchers whose scope of nursing practice is similar to that of CHNs, and the consistency in the issues identified among mothers and CHNS, offers some credibility of the results obtained (Field and Morse, 1985).

This study was also limited by constraints of time and resources. Recruiting mothers for the focus groups was a more difficult and lengthy process than expected for two reasons. The first was that mothers with young children have very busy schedules, making it a challenge to find enough mothers who could meet at the same time. The second reason was competition with other health center questionnaires that mothers were asked to complete in the clinic setting.

Recruiting CHNs who were able to commit time to the focus group discussions was also a challenge. Reasons were related to CHNs' very busy work schedules, and family responsibilities.

Opportunities to provide childcare for mothers may have made it easier for a greater number of mothers to participate in focus groups. Some mothers brought their infants to the group discussion, but mothers were discouraged from bringing toddlers due to the possibly of distraction, and noise levels. Additional funds to offer a more generous recruitment incentive may also have interested a larger group of mothers to participate.

Conclusion

With health restructuring there has been a growing emphasis on costs, patient outcomes, and shifting priorities in the health organizations that CHNs have traditionally worked in. These changes have prompted the need for CHNs to articulate their role in the health care system, and demonstrate the impact of community health nursing care on the health of children and families.

The key findings in this study focus on the factors that influence the achievement of quality in WCC services provided by community health nurses. Results of this study have identified that an important determinant of quality in the process of promoting

health and delivering WCC services is the quality of the interaction between the CHN and mother. Donabedian's model of quality (1980) was used to identify that CHN/mother interactions in WCC are characterized by the presence of nine key indicators of quality. Identification of these indicators offers an evidence-based framework to monitor the quality of CHN/mother interactions, and demonstrate the child/family outcomes that can be attributed to the nurse client interactions in WCC. The indicators may also be applied to other services provided to mothers in a public health setting by using the indicators as a framework to plan and design quality interactions.

A high level of congruence was evident between what CHNs and mothers described as necessary indicators of an effective nurse client interaction in WCC. This suggests that the perceptions of all stakeholders are necessary in the measurement of quality in health services. Current quantitative measures do not account for the presence of these indicators that were all validated against existing research data.

Opportunities and barriers to incorporate the nine indicators of quality in nursing practice were related to organizational and professional supports for client centered, and individualized care in WCC. While it is not necessary for all indicators identified in the study to be present, this study has shown that WCC interactions which are characterized with a client centered and individualized approach are more likely to be linked with positive health benefits for mothers and children who attend WCC services. Although a community health nursing service provided the focus for this study, the indicators of quality may be relevant to other areas of health promotion work to ensure that health services meet the needs of children and families.

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Appendix A

Interview Questions for Community Health Nurses

Icebreaker

1. How would you describe well child clinic services currently provided to mothers in public health services?

Your views

2. What does the term "quality" mean to you in terms of health care services?
3. Thinking about aspects of "quality" well child clinic services, what matters most to you as community health nurses? What are the key issues in achieving quality?

Probe for different aspects of the service as identified

4. What do you believe matters most to women who attend and use clinic services?
5. Is there a difference between what you believe is important in providing services, and what you experience in reality? Can you give any examples?
6. What factors do you believe are associated with the difference between what matters to you and what happens in reality? (Obstacles to providing a good service in WCC)
7. How is quality measured/monitored at your Health Centre?
8. What do you think are the main strengths/weakness of your Health Centre's WCCs?
9. Is there anything else you would like to add or talk about?

Adapted from Proctor (1997)

Appendix B

Interview Questions for Mothers who use Well Child Clinic services

Icebreaker

1. Please describe your most recent experience in the well child clinic, and with the community health nurse that you had contact with? How do you feel about this experience?

Main discussion

2. What does the term "quality" mean to you in terms of health services?
3. Thinking about aspects of "good" service, what matters most to you in contacts with community health nurses when you attend clinic? What do you think should happen?
4. Can you think of an experience to describe an example of a "good" quality service in well child clinic?
5. Can you think of an experience to describe an example of a "poor" quality service in well child clinic?
6. How does the care you have received so far, compare with what matters most to you?
7. Is there any difference between what you believe should happen in your contacts with the community health nurses during the WCC, and what actually happens?
8. *If there is a difference*, Why do you think there is a difference between what matters, and what you get?

Probe perceptions of factors associated with differences between expectations and experiences

9. Is there anything you would like to add or talk about?

Adapted from Proctor (1997)

Appendix C
Information Letter
(Mothers)

Title of Project: **Dimensions of Quality in Well Child Clinic Services: A Comparison of Community Health Nurses' and Mothers' Perceptions**

Principal Investigator: Carol Shemanchuk, Graduate Student
Public Health Sciences, University of Alberta,
492-6211

Thesis Supervisor: Dr. Lory Laing, Public Health Sciences, 492-6211

Purpose of Project: To determine mothers' (or fathers'), and nurses' views of what is most important in terms of the services provided by community health nurses in Well Child Clinics. A comparison of what is the same and what differs between nurses and mothers' views will also be made.

Background: What clients believe is important for their health is key information for health providers to know. Health services can then be planned which will meet the health needs of clients. I am doing this study to increase understanding of what is important to mothers who use the services in well child clinic, and to the nurses who provide services to mothers. My results may improve the quality of well child clinic services in 2 ways.

1. My results will provide information about what parents believe is important in terms of Well Child Clinic Services. This will help nurses to plan services, which are helpful to parents.

2. Mothers are more likely to have their health needs met if nurses understand what is important to mothers.

I will be meeting with 6-8 mothers from 3 Health Centers, and one group of 10 nurses.

Procedures: Mothers will be asked to come to one group meeting (focus group) with 6 or 7 other mothers. During the meeting, mothers will be asked about their experiences and views of the services in Well Child Clinic. The group meeting will last about 1.5 hours and will take place at this Health Center. A facilitator will lead the group discussion. The researcher will also attend. Nurses will not attend the group meeting with mothers. They will meet at a separate time.

Benefits and Risks: There are no risks or direct benefits to you or your child by taking part in the discussion group. The general knowledge that is gained about mothers views will help nurses to plan services which meet parents most important needs.
$20 will be offered to you when you attend the group meeting. This may help you with travel and/or childcare costs.

Confidentiality: All the information we obtain about you, your child, and your family is confidential. I will store all written materials and audiotapes in a locked file cabinet. Only the investigator and supervisor will have access to this information. I will not publish any information that could identify you, your child or your family.

Freedom to withdraw: You are free to refuse to take part in this study. Your are free to refuse to answer any questions for this study. If you decide to take part, you are free to withdraw from this study at any time. Your refusal or withdrawal will not affect future care for yourself or your family.

Additional contacts: If you have any concerns about this study, you may contact the Patient Concerns office of the Capital Health Authority at 474-8892. This office has no connection with study investigators.

If you are interested in attending the group meeting with other mothers, please give your name and phone number to the receptionist. You may also call the researcher directly if you wish. Thank you for considering taking part in this study.

Sincerely,

Carol Shemanchuk,
University of Alberta Graduate Student

Appendix D
Information Letter
(Nurses)

Title of Project: **Dimensions of Quality in Well Child Clinic Services: A Comparison of Community Health Nurses' and Mothers' Perceptions**

Principal Investigator: Carol Shemanchuk, Graduate Student
Public Health Sciences, University of Alberta,
492-6211

Thesis Supervisor: Dr. Lory Laing, Public Health Sciences, 492 6211

Purpose of Project: To determine mothers' (or fathers'), and nurses' views of what is most important in terms of the services provided by community health nurses in Well Child Clinics. A comparison of what is the same and what differs between nurses and mothers' views will be made.

Background: What clients believe is important for their health is key for health providers to know. Health services can then be planned which will meet the health needs of clients. I am doing this study to increase understanding of what is important to mothers who use the services in well child clinic, and to the nurses who provide services to mothers. My results may improve the quality of well child clinic services in 2 ways.

1. The results will provide an initial set of quality indicators, as defined by parents to meet parents priority needs in Well Child Clinic Services. Mothers are more likely to have their health needs met if there is a shared understanding between nurses and mothers about what mothers believe is important.

2. The comparison of nurses and mothers views will identify any mismatches which may create barriers to service use.

3. The results will provide information for community health nurses to examine their own experience with the key indicators. This will help nurses understand if the services provided comply with what is important to mothers.

I will be meeting with 6-8 mothers from 3 Health Centers, and one group of 10 nurses.

Procedures: Community health nurses will be asked to attend one group meeting (focus group) with 9 other nurses. During the meeting, nurses will be asked about their experiences and views of the Well Child Clinic services. The group meeting will last about 1.5 hours and will take place at one of the Health Centers. A facilitator will lead the group discussion. The researcher will also attend. Nurses will not attend the group meeting with mothers. They will meet at a separate time.

Benefits and Risks: There are no risks or direct benefits to you by taking part in the discussion group. The general knowledge that is gained about mothers views will help nurses to plan services which meet needs that are important to parents.

Confidentiality: All the information we obtain about you is confidential. I will store all written materials and audiotapes in a locked file cabinet. Only the investigator and supervisor will have access to this information. I will not publish any information that could identify you.

Freedom to withdraw: You are free to refuse to take part in this study. Your are free to refuse to answer any questions for this study. If you decide to take part, you are free to withdraw from this study at any time. Your refusal or withdrawal will not affect your work in any way.

Additional contacts: If you have any concerns about this study, you may contact the Patient Concerns office of the Capital Health Authority at 474-8892. This office has no connection with study investigators.

Thank you for considering taking part in this study.

Sincerely,

Carol Shemanchuk
Graduate Student
University of Alberta

Appendix E

CONSENT

Title of the Project:	Dimensions of Quality in Well Child Clinic Services: A Comparison of Community Health Nurses' and Mothers' Perceptions
Principal Investigator:	Carol Shemanchuk, Graduate Student Public Health Sciences, University of Alberta, 492-6211
Project Supervisor:	Dr. Lory Laing, Public Health Sciences, University of Alberta, 492-6211

Do you understand that you have been asked to be in a research study?	**Yes**	**No**
Have you read and received a copy of the attached Information Letter?	**Yes**	**No**
Do you understand the benefits and risks involved in taking part in this research study?	**Yes**	**No**
Have you had an opportunity to ask questions and discuss this study?	**Yes**	**No**
Do you understand tht you are free to refuse to participate or withdraw from the study at any time? You do not have to give a reason and it will not affect your child's or your family's care.	**Yes**	**No**
Has the issue of confidentiality been explained to you?	**Yes**	**No**
Do you want the investigator(s) to inform your family doctor that you are participating in this research study? If so, please provide your doctor's name	**Yes**	**No**

_____

This study was explained to me by: _____

I agree to take part in this study.

_____	_____	_____
Signature of Research Participant	Date	Signature of Witness
_____		_____
Printed Name		Printed Name

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

_____	_____
Signature of Investigator or Designee	Date

If you would like a summary of the report when it is complete, please indicate your mailing address

_____

Appendix F
Mothers'
Demographic Data Form*

1. Your age at last birthday:_____ years old.

2. How many years of full time schooling have you completed? _____

3. Your highest level of education:

College or university graduation _____
Partial college/specialized training _____
High school graduate _____
Partial high school _____
Junior high school _____

4. Are you currently working for pay?_____Full Time _____On maternity leave

_____Part time _____No

Please describe your job?

_____ Description: _____

_____

4. Number of children in your home?_____

Please list the year of birth for each of these children:

a)_____ c)_____ e)_____

b)_____ d)_____ f)_____

5. Did you attend routine well child clinic appointments with your other children?

Yes_____ No_____ Sometimes_____

6. Yearly family income:

a) less than $10,000 _____
b) $25,001-$40,000 _____
c) $40,000 and over _____

* To be completed by mother after consent is signed

Appendix G

Community Health Nurse
Demographic Data Form*

1. Your age at last birthday:_____years old.

2 How many years have been employed as a Community Health Nurse?_____years

3. How many years have you been delivering services in Well Child Clinic?____Years

4. What is your highest level of education in Nursing?

   a) Registered Nurse____

   b) Registered Nurse with Diploma in Community Health Nursing____

   c) Bachelor's Degree_____

   d) Master's Degree_____

   e) Other_____

* To be completed after consent is signed