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## Centering as a Model for Group Visits Among Women with Chronic Pelvic Pain

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### Abstract

Providing comprehensive care for chronic pelvic pain is impeded by time and resource constraints of the standard healthcare visit. To provide patient education, psychosocial support, and healthcare assessment, we developed group visits for women with chronic pelvic pain using an evidence-based, holistic nursing approach. In this article, we describe the structure of group visits, the process of conducting Centering group visits focused on empowerment, and the content of a holistic curriculum for women with chronic pelvic pain.

### Keywords

chronic pelvic pain; group visits; group medical visits

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Chronic pelvic pain (CPP) is defined as continuous or episodic pain in the lower abdomen or pelvis lasting at least six months (Williams, Hartmann, & Steege, 2004). The estimated prevalence of CPP among women ranges from 12%–39% (Jamieson & Steege, 1996; Latthe, Latthe, Say, Gulmezoglu, & Khan, 2006; Mathias, Kuppermann, Liberman, Lipschutz, & Steege, 1996; Zondervan & Barlow, 2000). While CPP is as common as back pain and asthma, it receives less recognition as a significant health condition and has been described as “a neglected reproductive health morbidity” (Latthe, Latthe et al., p. 177).

Chronic pelvic pain is a syndrome encompassing an array of symptoms that affect many aspects of a woman’s life, from her ability to accomplish simple tasks of daily living, to sexual functioning, and emotional well-being (Romao et al., 2009; Tripoli et al., 2011). Multiple systems interact and contribute to the pathophysiology of CPP, including gastrointestinal, reproductive, neurological, endocrine, and urinary systems. Women with CPP commonly experience co-existing conditions, such as endometriosis, myofascial pain, irritable bowel syndrome, and interstitial cystitis. Furthermore, women with CPP have an increased risk of a history of abuse, depression, and anxiety, which exacerbate their painful symptoms (Latthe, Mignini, Gray, Hills, & Khan, 2006; Romao et al., 2009). In many cases, a direct cause of CPP cannot be identified; diagnostic laparoscopy identifies an organic cause in fewer than half of women with CPP (Daniels et al., 2009). In addition to the challenges of diagnosing CPP, standard treatments of CPP have limited effectiveness. Hormonal therapy has side effects for some women, impairs fertility during use, and does

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not provide sustained benefits post-treatment (Stones, Cheong, & Howard, 2005). Surgery is invasive, may give only temporary benefit, and may in fact be associated with the development of adhesions or worsen pain for patients in the long run (Butrick, 2007).

Given the complexity of CPP and the limitations of current treatment paradigms, it is unlikely that the painful symptoms women with CPP experience can be completely eliminated through medical treatment alone. Recommended care for women with CPP emphasizes improving day-to-day functioning and quality of life. Rather than “curing” the pain, care should be focused on facilitating the woman’s ability to manage her pain and improve quality of life (Jarrell et al., 2005). The presence of multiple co-morbidities of women with CPP underscores the need for a comprehensive, multidisciplinary approach to address the range of associated physical and psychosocial symptoms (Butrick, 2007; Daniels & Khan, 2010; Fall et al., 2010; Gunter, 2003). Unfortunately, many women with CPP cannot afford the cost or time required to see multiple practitioners and do not have access to a multidisciplinary pain clinic (Howard, 2000). A feasible model for optimal care for women with CPP is needed.

In this article we discuss the development of CenteringCPP, an innovative, group-based model of health care designed to address some of the challenges in the treatment and management of CPP among medically underserved women. As background and rationale for the structure of CenteringCPP, we provide a summary of literature on group visits, including potential challenges of implementing group visits particularly among underserved populations and research findings on patient outcomes. We then describe the process of CenteringCPP, which is based on a model of patient empowerment exemplified in the Centering approach. We conclude with the content of CenteringCPP, including a curriculum developed from a holistic nursing approach for managing chronic pain, and next steps for group visits for women with CPP.

### **Structure of CenteringCPP: Use of Group Visits**

Group visits, also commonly referred to as group medical visits, are an innovation in health care delivery aimed at providing efficient, quality health care on an on-going basis. Prompted in part by the increasing healthcare needs of patients with chronic illnesses, group visits have been developed in primary care settings for a range of conditions, such as diabetes, urological conditions, and pulmonary disease. The needs of patients with chronic conditions, such as frequent monitoring, on-going support, and education about self-management of disease are challenging to accomplish in brief office visits. In a group visit, patients with a similar condition simultaneously meet with clinicians for an extended period of time (usually 90–120 minutes; see Table 1 for a sample schedule). In contrast to a support group or health education class, the group visit combines health care with education in a group setting. A portion of the group visit is designated for one-on-one healthcare visits between the patient and the healthcare provider, while the remaining time is spent as a group discussing topics relevant to chronic illness management.

Existing resources provide details on how to plan and implement group visits (Improving Chronic Illness Care, 2001; Noffsinger, 2009). Sufficient preparation and dedicated

resources are requisite to successfully initiate group visits in a healthcare setting accustomed to individual one-on-one appointments. Foremost among the needs for implementing group visits is finding adequate private space that can accommodate a group of at least 20 people. To address space needs, group visits may take place off-site at a community organization. Developing a memorandum of understanding between the healthcare facility and the community organization is highly recommended to clarify roles, responsibilities, and liability. In addition, effective group visits require institutional commitment and resources to train healthcare providers in group facilitation and management of the medical condition and to provide continuity of care with consistent providers at each group visit. Administrative support is required to develop new scheduling and billing systems tailored to the specific needs of group visits, including verification of insurance eligibility, obtaining authorization for visits, and any changes in insurance. Although official coding rules for group visits have not been established, billing for evaluation and management time under current procedural terminology (CPT) codes such as 99213 may be appropriate (American Academy of Family Physicians, 2012). To address concerns about patient confidentiality and to avoid any violations of the Health Information Portability and Accountability Act, patients participating in group visits should be asked to sign a confidentiality agreement.

Implementing group visits among underserved populations requires addressing specific needs, as comprehensively described by Hammer (2007). Attendance may be a challenge among individuals with multiple time demands including work and child care. In addition, a group model of care may be undervalued if it is perceived as education rather than as health care. Possible solutions include incentivizing attendance by providing child care, food, and giveaways (e.g., books or pedometers). Patients with chronic pain may require special accommodations, such as having the group at a time of day when pain is not as severe at a location that is easily accessible and with comfortable chairs. In addition, group visits can be uniquely tailored to meet language and literacy needs of patients (Hammer). Language needs can be addressed by either having simultaneous interpretation or by conducting the group in the native language. For patients with limited health literacy, written materials will be of less value unless adapted.

Researchers have assessed the effects of group visits on various patient outcomes and measures of health care quality. While findings on patient behaviors and health outcomes have been inconsistent (Jaber, Braksmajer, & Trilling, 2006), group visits have been associated with improved quality of life, self-efficacy, and patient satisfaction among some patient populations (Geller, Orkaby, & Cleghorn, 2011; Lorig et al., 2001; Scott et al., 2004). In a qualitative review of group visits, Jaber et al. (2006), found that group visits improve quality of care and decrease emergency department and specialist visits in the majority of studies. Research among low-income women with chronic disease indicated a decrease in urgent care visits (Miller, Zantop, Hammer, Faust, & Grumbach, 2004). Data on the cost savings of group visits are still equivocal, although Clancy and colleagues' study among inadequately insured patients with type 2 diabetes indicated that group visits were at least as effective as usual care in terms of quality and were less costly (Clancy, Dismuke, Magruder, Simpson, & Bradford, 2008).

Researchers have suggested that group visits may be particularly well suited for meeting healthcare needs among underserved and socioeconomically disadvantaged populations. Patients from underserved communities face considerable challenges, including limited financial resources, inconsistent access to healthcare and disempowerment that hinder their ability to make lifestyle changes that are necessary to manage chronic illnesses (Geller et al., 2011). Group visits may facilitate patient empowerment, behavior change, and disease self-management through peer support, improved access to healthcare providers, and high quality of care through strong provider continuity (Geller et al.; Manant & Dodgson, 2011). *CenteringPregnancy* is a specific model of group visits focused on patient empowerment (Rising, 1998) and has been widely adopted to provide prenatal health care across socioeconomically diverse patient populations.

The structure of Centering is designed for patient empowerment through a set of “essential elements” (see Table 2) that correspond with the Institute of Medicine’s recommendations for improving quality of healthcare (Rising, Kennedy, & Klima, 2004).

## **Process of CenteringCPP: Empowerment-Focused Health Care through Centering**

The Centering model has been used to provide health care for conditions requiring ongoing treatment, including pregnancy and diabetes, and can be adapted to chronic pelvic pain. The Society of Obstetricians and Gynaecologists of Canada identified four important needs of CPP patients: to receive legitimization of their pain from a healthcare professional; to be heard during the patient contact visit; to have support in numerous forms; and to take personal responsibility for their own health (Jarrell et al., 2005). The Centering model is particularly well-suited to address these needs because it is a specific model of group-based health care delivery that emphasizes patient empowerment through promotion of self-care, peer support, and group problem solving. Importantly, each Centering group is shaped and defined by the needs, priorities, and experiences of the patients themselves (Rising et al., 2004). A licensed health provider (such as a nurse practitioner, nurse midwife, or physician) and a co-facilitator lead the group (Rising, 1998). Both facilitators are formally trained in the Centering model, which incorporates three components structured to facilitate the empowerment of group participants: health care assessment, education, and support.

*Healthcare assessment* occurs during the group time and in the group space with a healthcare provider. Both patients and provider contribute to the data in patients’ charts. Patients participate in self-care activities including assessing their own weight and blood pressure. Participants in the CenteringCPP group complete a self-assessment at each visit that covers: pain, quality of life, depression, and domestic violence, and they are asked to update contact information. Each participant has a brief one-on-one visit with the provider. For privacy reasons, these health assessments occur in a corner of the group room behind a privacy screen on a cot or a chair with background music playing. When the group meeting is finished, the provider enters a note into each participant’s healthcare record summarizing the visit.

*Education* is incorporated into each group visit through facilitative leadership rather than a didactic method. Facilitators develop content guidelines for every session, but the actual group discussion is determined largely by the interests, needs, and concerns of the group members. The overarching goal of the sessions is to provide information, tools, and skills to improve participants' health-related quality of life. Each participant receives a Centering notebook with educational material for at-home reference.

Critical to the empowering design of Centering are Self-Assessment Sheets (SAS), which are used by participants at the beginning of each session. These SAS introduce the topic(s) for each session and provide a springboard for the facilitated discussion. The topic areas, educational materials and SAS can be adapted to meet the needs of different clinical populations. For CenteringCPP, the SAS and educational materials were developed to address issues specific to CPP and were tailored for a multiethnic low literacy population. Topics are discussed in detail in Content of CenteringCPP.

*Support*, including friendship and community building, are important to the Centering model. This is fostered by the use of nametags, stability of the group, interactive activities, and time to enjoy refreshments together at every session. Because the facilitators and the group participants meet for 90–120 minutes on a regular basis, trust and camaraderie develop. During each group meeting there is time for sharing and discussion in the circle. The Centering model is based on the premise that each participant has experiences and knowledge to share that are beneficial to other group members. A key role of the facilitators is to ensure that all participants have the opportunity to share and that each participant's contributions are valued. Through the group discussions, participants have the opportunity to validate one another's experiences, to problem solve collectively, and to receive and provide peer support.

Central to the Centering model of group care is a reorganization of the provider-patient relationship from a hierarchical to a symmetrical one, thus reducing the power differential prevalent in modern health care (Rising et al., 2004). Moving health care into a hospitable and comfortable group space and out of the examination room helps to eliminate barriers between patients and providers. Shifting from a didactic to a facilitative leadership style promotes an environment of respect, confirming the importance of group member concerns. Participants are empowered because their knowledge and experience are valued (Massey, Rising, & Ickovics, 2006) and they assist one another in developing solutions to problems. Centering further reduces barriers to symmetrical, relationship-centered care by providing group members with access to their healthcare records, along with opportunities to ask questions about unfamiliar healthcare terminology. Participants gain skills and confidence for advocating for themselves within the healthcare system (Rising et al., 2004) and for taking responsibility for their own health. The schedule of the group visits also alleviates time spent in waiting rooms (Novick, 2004), honoring the value of the patient's time as well as the provider's.

A growing body of evidence relates to the impact of the various Centering models currently in use on key health-related outcomes of interest and on more process-oriented indicators of participant experiences of care. The most widely disseminated form of Centering, the

CenteringPregnancy model has been shown in a randomized controlled trial (RCT) to reduce risk of preterm birth, particularly for African American women (Ickovics et al., 2007). Compared to recipients of standard, individually-delivered care, Centering participants in the RCT reported greater satisfaction with their health care ( $p < .001$ ) and were less likely to have suboptimal care ( $p < .01$ ) (Ickovics et al.). In a review of the literature, Manant and Dodgson (2011) reported that CenteringPregnancy has consistently improved attendance for prenatal care across studies, but findings for other outcomes, such as knowledge and satisfaction, have been equivocal. Manant and Dodgson commented on the need for additional research to develop theoretical frameworks, improve measurement, and test meaningful outcomes specific to the Centering model. Research is also needed to evaluate the feasibility and outcomes of adapting the Centering model for other health conditions.

## **Content of CenteringCPP: Curriculum Development for CPP based on Holistic Nursing**

A nursing perspective focused on the care of the whole person is particularly important when caring for patients suffering from conditions that are not adequately addressed by standard medical treatment, including chronic pain. Nurses are ideally suited to address the challenges of providing optimal, comprehensive care for women with CPP. Nurses have advocated for the use of complementary and alternative therapies for the treatment of chronic pain and conducted research on their effectiveness. Examples of these therapies for chronic pain include imagery (Lewandowski, 2004), aromatherapy (Buckle, 1999), humor (Matz & Brown, 1998), acupuncture (Eshkevari & Heath, 2005), meditation (Teixeira, 2008), and touch therapies (So, Jiang, & Qin, 2008). This research coupled with nursing practice have furthered our understanding of how different types of chronic pain respond to different types of mind-body therapies (McCaffrey, Frock, & Garguilo, 2003). The use of complementary and alternative therapies offers nurses an opportunity to demonstrate caring, promote comfort, and reduce pain. Holistic nursing focuses on healing the whole person, alleviating suffering, and empowering the patient with knowledge (American Holistic Nurses Association, 1998). These goals are congruent with the program that we designed for women with CPP.

The 10-session CenteringCPP curriculum was developed based on a review of the literature on chronic pain and CPP, information provided by professional organizations and chronic pain advocacy groups, and clinical experience; it was modeled after the Centering Diabetes curriculum. Consistent with other Centering groups, each session of CenteringCPP includes a self-assessment sheet for participants to complete (see Table 3). The session topic areas fall under three broad headings: understanding CPP, managing CPP, and living with CPP.

### **Understanding CPP**

Chronic pelvic pain is a complex condition that is associated with many different conditions such as endometriosis, vulvodynia, irritable bowel syndrome, interstitial cystitis, and myofascial pain, and it may or may not have an identifiable underlying cause. Participants are offered information about basic female anatomy including the pelvic floor muscles, causes of CPP, understanding chronic pain and common signs and symptoms.



## Managing CPP

After they develop an understanding of the causes of CPP and some of the complexity of the condition, participants attend four sessions that focus on information and various skills to help women better manage and cope with their pain:

- **Easing pain and symptoms.** Participants complete a 3-day pain diary, explore how pain changes over time, and identify pain triggers and self-care strategies to help ease pain. They exchange information and ideas with each other about how they relieve pain.
- **Myofascial Pain.** A physical therapist visits the group to provide information about myofascial pain and CPP. She discusses how symptoms such as dyspareunia, urinary frequency, and constipation are related to pelvic floor muscle tension. Participants learn belly breathing, rescue poses for painful flares, and pelvic floor stretches to relieve muscle tension.
- **Medications.** A number of different medications are used to treat CPP such as hormones, analgesics, opioids, antidepressants, muscle relaxants, and anticonvulsants. We discuss medication uses, doses, side effects and drug interactions. All participants are encouraged to carry a list of their medications and allergies with them at all times.
- **Nutrition.** An important part of supporting health is eating well. The emphasis in this session is on eating whole foods such as grains, fruits and vegetables to obtain and maintain a healthy weight. Many of the conditions women with CPP suffer from such as endometriosis and myofascial pain are inflammatory in nature (Sesti et al., 2010). Information about an anti-inflammatory diet is provided along with easy recipes.

## Living with CPP

Five sessions are designed to improve quality of life and address psychosocial aspects of daily living among CenteringCPP participants:

- **Managing stress.** A session is dedicated to exploring the relationship between stress, emotions, and pain. Participants have an opportunity to experience a variety of mind/body techniques that can relieve stress and ease pain. They are exposed to a number of resources such as books, CDs, and community programs that support mind/body health.
- **Setting goals.** In this session the participants learn how to set an achievable goal. They identify an area of health that needs improvement, then they write a goal. The group provides feedback and support.
- **Communication.** Living with CPP can lead to isolation and a lack of social support. To facilitate improving communication about their needs to partners, family members, friends and coworkers, participants learn about assertiveness and active listening and have an opportunity to role play.



- **Sexual pain.** Approximately 74% of women with CPP suffer from sexual pain (Verit, Verit, & Yeni, 2006). During this session a sexologist with a specialty in sexual pain visits the group to discuss how to make sexual intimacy more pleasurable and how to improve communication with sexual partners.
- **Spirituality.** During this session we explore what brings hope, joy and strength to each participant. Expressive arts are used as a method of exploring the inner spirit and what brings meaning to life. Each participant leaves the session with an object that can remind them of the work they did in the group.

## Next Steps and Conclusion

CPP is an undertreated syndrome that profoundly affects overall quality of life including physical, social, and psychological functioning. To address the challenges of providing comprehensive care for underserved women with CPP, we developed ten group-based sessions of CenteringCPP using the Centering model of care and principles of holistic nursing. CenteringCPP may provide a feasible intervention that can be implemented in various healthcare settings. To evaluate CenteringCPP for pain management among underserved women with CPP, research is necessary to assess: (a) feasibility and acceptability of the program through recruitment success and participant attendance; (b) participant receptivity and engagement through process evaluations by facilitators after each group session; and (c) patient outcomes including health-related quality of life, pain, and emotional functioning, as recommended by the Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials (Dworkin et al., 2005; Turk et al., 2003) as well as measures of patient activation (Hibbard, Mahoney, Stockard, & Tusler, 2005) and healthcare empowerment (Johnson, 2011). Efforts are underway to collect preliminary data on these indicators. In addition, we plan to collect qualitative data through focus groups to further our understanding of how women with CPP experience group visits and to determine the best way to provide ongoing care after the ten-session CenteringCPP program is completed.

CenteringCPP is an initial effort towards developing an evidence-based, holistic nursing approach to CPP focused on improving quality of life that is scalable to women's health centers. Nurses play a critical role in Centering and other group visits through facilitating groups, coordinating care, and evaluating the clinical effectiveness of such programs for their patients.

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**Table 1**

## Typical Format of a Group Visit for Women with Chronic Pelvic Pain

Allotted Time	Activity
30 minutes	Various patients have brief one-on-one visits with the healthcare practitioner. Co-facilitator helps group participants with blood pressure and charting.
15 minutes	All participants and facilitators come together in a circle for check-in and self-assessments.
60 minutes	Group discussion on topic(s) of the day.
15 minutes	Closing activity.

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**Table 2**

Essential Elements of Centering Health Care

Health assessment occurs within the group space.
Women are involved in self-care activities.
A facilitative leadership style is used.
Each session has an overall plan.
Attention is given to the core content; emphasis may vary.
There is stability of group leadership.
Group conduct honors the contribution of each member.
The group is conducted in a circle.
The composition of the group is stable, not rigid.
Group size is optimal to promote the process.
Involvement of family support people is optional.
Opportunity for socialization within the groups is provided.
There is ongoing evaluation of outcomes.

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**Table 3**

## CenteringCPP Session Topics

Session Theme	Self-assessment sheet	Topics and exercises
Understanding chronic pelvic pain (CPP)	International Pelvic Pain Society intake form	Review female anatomy Discuss causes of CPP, types of pain, diagnosis, and treatment of CPP
Easing pain and symptoms	3 day pain log with pain triggers and pain relievers	Identify pain triggers and ways to ease pain and manage symptoms Practice diaphragmatic breathing
Pelvic floor therapy	Body awareness	Discuss the pelvis and its structures Practice finding the pelvic floor, restful rescue poses, stretches for the pelvic floor
Setting goals	Personal goals	List things going well and things needing improvement Identify an achievable goal and how to successfully achieve it
Medications	Pocket medication list	Make a pocket medication list Review commonly prescribed drugs for CPP including side effects, common reactions, warning signs, and allergies
Communication	Assertiveness	Discuss active listening and assertiveness Practice active listening and assertive communication
Sexual intimacy	Discovering pleasure	Learn ways to reduce sexual pain and discover pleasurable activities Improve communication with sexual partners
Managing stress	Relaxation measures	Learn mind body techniques
Nutrition	Diet assessment	Learn about a healthy diet, anti-inflammatory diet Sample easy recipes
Caring for your spirit	Caring for the spirit	Use expressive arts to explore what brings you joy, hope and strength