Patient-centered Care in Maternity Services: A Critical Appraisal and Synthesis of the Literature

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ABSTRACT

Background: Patient-centered care (PCC) has been recognized as a marker of quality in health service delivery. In policy documents, PCC is often used interchangeably with other models of care. There is a wide literature about PCC, but there is a lack of evidence about which model is the most appropriate for maternity services specifically.

Aim: We sought to identify and critically appraise the literature to identify which definition of PCC is most relevant for maternity services.

Methods: The four-step approach used to identify definitions of PCC was to 1) search electronic databases using key terms (1995–2011), 2) cross-reference key papers, 3) search of specific journals, and 4) search the grey literature. Four papers and two books met our inclusion criteria.

Analysis: A four-criteria critical appraisal tool developed for the review was used to appraise the papers and books.

Main Results: From the six identified definitions, the Shaller’s definition met the majority of the four criteria outlined and seems to be the most relevant to maternity services because it includes physiologic conditions as well as pathology, psychological aspects, a nonmedical approach to care, the greater involvement of family and friends, and strategies to implement PCC.

Conclusion: This review highlights Shaller’s definitions of PCC as the one that would be the most inclusive of all women using maternity services. Future research should concentrate on evaluating programs that support PCC in maternity services, and testing/validating this model of care.

There is growing evidence and recognition in the literature that patients should be involved in their own care if improvements are to be made in the quality of care provided (Hunter & Cameron, 2006). In recent years, global policy documents have developed new patient-focused initiatives in areas such as public health, mental health, chronic care, and maternity care (Australian Commission on Safety and Quality in Health Care, 2014; Commonwealth Fund, 2014; U.S. Department of Health and Human Services, 2011; Scottish Government, 2006). Maternity services are commonly delivered across a variety of settings, including the community and hospitals. Maternity services cover three stages of care: antenatal, intranatal, and postnatal care (National Audit Office, 2013). Although there has been an observed increase in social and clinical complexity within maternity services, most women tend to be healthy with no morbidities or complications, unlike hospitalized women in other health services (Tonidandel, Booth, D’Angelo, Harris, & Tonidandel, 2014; Tracy et al., 2014; Vaughan, Cleary, & Murphy, 2014). With regard to maternity-related policies, there is a lack of consistency in the description of the models of care with patient-centered care (PCC), woman-centered care, family centered-care, and person-centered care being used interchangeably (U.S. Department of Health and Human Services, 2011; Scottish Government, 2006).
(2011); Health Quality and Safety Commission New Zealand, 2012; Scottish Government, 2011). Davidson, Halcomb, Hickman, Phillips, and Graham (2006) described a model of care as “an overarching design for the provision of a particular type of health care service that is shaped by a theoretical basis, EBP [evidence-based practice] and defined standards.” It consists of defined core elements and principles and has a framework that provides the structure for the implementation and subsequent evaluation of care. The authors underlined the importance of having a clearly defined and articulated model of care to ensure that all health professionals are actually sharing the same vision (Davidson et al., 2006).

Therefore, identifying the most appropriate model of care for maternity services and reaching a consensus on its core domains would help policy makers and health care providers (HCP) to consider appropriate goals and implementation strategies to improve the quality of care delivered and the rigorous evaluation of that care. Taking a closer look at the four models of care (woman-centered care [WCC], PCC, person-centered care, and family-centered care) used in maternity services policies, family-centered care has an emphasis on the sick child (Shields, Pratt, & Hunter, 2006; Svanavarsdottir, 2006) and person-centered care relates mainly to older people or those with long-term conditions (Health Foundation, 2014; Victorian Government Department of Human Services, 2006). These last two terms do not fit the health status and age profile of reproductive women using maternity services. WCC and PCC, however, are used within maternity services policies more frequently and are described herein.

WCC is the most commonly used model of care within maternity services policy and is seen as the cornerstone of the partnership between the midwife and the woman (Carolan & Hodnett, 2007; Hodnett, 2004, 2002; Mosucci, 2003). The definition given by the Royal College of Midwives (RCM) defines WCC as a nonmedical model, which represents choice, continuity of care, and control for women (RCM, 2001, 2008). The Department of Health (UK and Australia), and the Australian College of Midwives also recommend this model of care for maternity services (Australian College of Midwives, 2011; Department of Health, 2004; Department of Health New South Wales, 2010). The RCM (2008) argues that midwife-led care is the key to achieving WCC making a direct link between the scope of WCC and midwife-led care. The RCM (2008) stresses that, to achieve truly WCC, this needs to be led by midwives through the care they deliver during uncomplicated pregnancies, birth, and postnatal care. Furthermore, midwife-led care has been defined as the care provided by midwives being “the lead professional in the planning, organization and delivery of care given to women [who are healthy and at low risk of complications] from initial booking to the postnatal period” (Sandall, Soltani, Gates, Shennan, & Devane, 2013, p. 3). This model cannot be applied to women who are at high risk of obstetric complications, and thus has some shortcomings when one looks at the diversity of women using maternity services (Nursing and Midwifery Council, 2004; Pope, Graham, & Patel, 2001). It is estimated that 40% of women are not suitable for midwife-led care at booking according to a recent survey conducted by the RCM (2010). This means that, right from the onset of the pregnancy, many women would be excluded by the WCC model. Furthermore, one could question what happens to the women who are cared for by health professionals other than midwives. The WCC model would also not be appropriate for countries, where the family physician or the obstetrician are primarily responsible for prenatal care (Sandall et al., 2013). Some international definitions of WCC also emphasize uncomplicated pregnancies and normal birth (American College of Nurses Midwives, 2014; Department of Health New South Wales, 2010). Although there is a lack of reference within the literature to support which model of care would be the most relevant for women with medical or obstetric risk factors or complications, WCC remains the dominant model for maternity care. Arguably, however, the restriction of this model to normal pregnancy, labor, and postnatal care (RCM, 2008) demonstrates that WCC is not the most inclusive model of care for maternity services. Therefore, an alternative and more accessible model of care for maternity services that includes a continuum from wellness to illness for women who present in various states of health during the course of their pregnancy is needed (Travis & Ryan, 2004).

PCC, which has also been used in maternity services policy offers such an alternative (Australian Commission on Safety and Quality in Health Care, 2011; Docteur & Coulter, 2012; Ministry of Health British Columbia, 2015). PCC as a marker of quality has been recommended in health service delivery (Scottish Executive Health Department, 2007), because the evidence suggests that PCC increases HCP’s levels of empathy and affective responses, as well as patient satisfaction with their care and their perception of control (Lewin, Skea, Entwistle, Zwarenstein, & Dick, 2009; Picker Institute & Planetree, 2008). There are numerous definitions of PCC, but one of the most influential models that formed the foundation of the PCC approach was developed by Gerteis, Edgman-Levitan, Daley, and Delbanco (1993) for the Picker Institute and has seven key domains, namely: 1) respect for patient’s values, preferences and expressed needs, 2) coordination and integration of care, 3) information, communication, and education, 4) physical comfort, 5) emotional support and alleviation of fear and anxiety, 6) involvement of family and friends, and 7) transition and continuity. Where other models may not be inclusive of the diversity of care that women may need, the coordination and integration of care domain of the PCC model of care encompasses various care pathways that can fit with the uncertainty of childbirth. Additionally, this domain is not dependent on the discipline of the HCP. Instead, it is inclusive of the variety of HCPs that some women may encounter (e.g., midwives, obstetricians, nurses, pediatricians, neonatologists, and allied health professionals) and the dynamic nature of risk within pregnancy, which means that women can flow from one pathway of care to another without it affecting their model of care. Finally, the PCC domain “respect for patient’s values, preferences and expressed needs” is comprehensive enough to consider the general and the specific issues of the diversity of women’s needs and expectations using maternity services. When one of the most referenced definitions of PCC is reviewed, it seems that PCC may be more appropriate model of care for maternity services. However, if PCC is applicable per se for maternity services, it is not clear which definition of PCC (out of several definitions) best suits the diversity of women (complicated or physiologic care, diversity of the socio-demographics characteristics) and the HCPs providing care in maternity services.

Earlier reviews about maternity services have used the terms PCC without justifying their choice and defining the model of care (Black & Brocklehurst, 2003; Hildingsson, Waldenstrom, & Radestad, 2002; Hundley et al., 1994). The purpose of this paper, rather than develop a new model of care for maternity services, is to critically appraise and synthesize the literature
looking at the definitions of PCC to find the most relevant one for maternity services.

The Review

Aim

The aim was to identify and critically appraise the literature to find which existing definition of PCC is the most relevant to maternity services.

Design

The authors undertook a critical appraisal of the literature and a synthesis to find a suitable definition of the model of PCC for maternity services. The review was performed in five stages: literature search, inclusion/exclusion of papers, screening, data extraction, data analysis (critical appraisal), and data synthesis.

Literature Search Methods

In the systematic approach of searching and collecting literature, the authors chose an inclusive approach to the process reflecting the large and diverse amount of data about PCC. A four-step search methodology inspired by Greenhalgh and Peacock (2005) was conducted: an electronic search, cross-referencing and hand-search of key papers, and search of specific journals and of grey literature. The first step was an electronic search of five relevant databases: Pubmed, Ovid, Medline, CINAHL, and the Cochrane Library. This was to identify studies in French and English in the initial study period January 1995 and June 2011. These two languages were chosen on the basis that these languages were spoken fluently by two of the authors. A combination of the most recurrent descriptors and MeSH terms on the topic were used such as “patient-centred,” “patient centered care,” “patient-centered,” “patient centered care” and “patient experience.”

Inclusion and Exclusion of Papers (Screening)

Limits included age “adolescents” AND “adults 13–44 years” and methodology, that is, “reviews” and in CINAHL “systematic reviews.” No documents in French were found. The second step used hand searching of reference lists on key papers, with search of specific journals for the third step and finally a search of the grey literature (nonconventional or fugitive publications such as reports, theses, and conference papers). The exclusion criteria were as follows: i) publications in a language different than English or French, ii) population younger than 13 years and older than 44 years (because of the reproductive age), and iii) publications focusing on a context of care radically different than maternity services such as palliative care, cancer care, acute disease (i.e., pulmonary or heart), or oral care.

Data Extraction, Analysis, and Synthesis

In the first step of the electronic searches, 217 references were imported; duplicates were eliminated, leaving 152 citations. These articles were reviewed by the first author based on the inclusion and exclusion criteria using title and abstract screening to reduce the 152 articles to 26 articles. The 26 remaining articles were retrieved and the full-text papers were read to confirm the relevance of each, deeming 24 to be irrelevant to the research topics and the population, and two eligible for the review. In our initial search of the literature, the four most cited articles and reports were highlighted as: Rowe, Garcia, Macfarlane, and Davidson (2002), Mead and Bower (2000), Richards and Coulter (2007), and Shaller (2007). The second step of the search included cross-referencing and hand searching of the reference lists of these four key papers. This piece of work identified 13 other literature reviews and randomised controlled trials and two books reviews. When the full texts were screened, only one literature review was eligible for the review. The two book reviews were key publications about PCC which were also included in the review: Crossing the Quality Chasm (Institute of Medicine [IOM], 2001) and Transforming the Clinical Method (Stewart et al., 2003). The third step was a search in specific journals that tend to publish predominantly on PCC: Social Science and Medicine and Health Expectations, using the same keywords as the electronic searches; this did not identify new papers. Finally, the grey literature was searched on four major websites on PCC: Picker Institute, Institute of Healthcare improvement, The King’s Fund, and the Commonwealth Fund identified 13 reports, but only one was eligible for the review. A total of four studies and two books were included in the review (Figure 1). Six definitions of PCC were identified (Table 1). We acknowledge that there is some conceptual overlap between Shaller’s (2007) and the IOM (2001), Stewart et al. (2003), and Delbanco and Gerteis, 2010, because Shaller’s domains are the results of an overview PCC concepts from Cronin’s model (2004) that included the IOM (2001), Stewart et al. (1995), and Gerteis et al. (1993).

Nevertheless, this review aims to critically appraise the definitions of the domains rather than the concepts, and their relevance to maternity services. To find the definition of PCC that would best fit with maternity services, four criteria were developed to determine whether the definitions reflect the population of interest (childbearing women and HCPs), and the strategies to implement PCC. First, is the definition inclusive of physiologic as well as pathologic pregnancy? Second, is the definition inclusive of the different characteristics of the population using maternity services? Third, is the definition inclusive of the diversity of practitioner caring for women using maternity services? And finally, is the definition inclusive of strategies to facilitate the implementation of PCC?

Figure 1. Data extracted for the narrative review of the literature.
Table 1
Patient-centered Care Definitions Selected for Critical Appraisal

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<tr>
<th>Authors</th>
<th>Reference</th>
<th>Definition</th>
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<td></td>
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<td>Finding common ground.</td>
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<td></td>
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<td>Incorporating prevention and health promotion.</td>
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<td></td>
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<td>Enhancing the patient–doctor relationship.</td>
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<td>Being realistic.</td>
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<td>Coordination of care and integration of services within the clinical setting.</td>
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<td>Communication between patient and providers.</td>
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<td>Enhancing physical comfort.</td>
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<td></td>
<td>Emotional support and alleviation of fears and anxiety.</td>
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<td></td>
<td></td>
<td>Involvement of family and friends.</td>
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<td></td>
<td></td>
<td>Education and shared knowledge.</td>
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<td></td>
<td></td>
<td>Involvement of family and friends.</td>
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<td></td>
<td>Collaboration and team management.</td>
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<td></td>
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<td>Sensitivity to nonmedical and spiritual dimensions of care.</td>
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<td>Respect for patients needs and preferences.</td>
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<td>Free flow and accessibility of information.</td>
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<td>Effective treatment delivered by trusted professionals.</td>
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<td>Involvement in decisions and respect for preferences.</td>
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<td>Clear, comprehensive information and support for self-care.</td>
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<td>Attention to physical and environment needs.</td>
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<td>Emotional support, empathy, and respect.</td>
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<td>Involvement of, and support for family and carers.</td>
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<tr>
<td></td>
<td></td>
<td>Respect for patient’s values, preferences, and expressed needs.</td>
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<td>Coordination and integration of care</td>
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<td>Information, communication, and education.</td>
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<td>Physical comfort.</td>
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<td>Emotional support, relieving fear, and anxiety.</td>
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<td>Biopsychosocial perspective.</td>
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<td>The “patient as a person.”</td>
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<td></td>
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<td>Sharing power and responsibility.</td>
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<td>Therapeutic alliance.</td>
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<td>The “doctor as a person.”</td>
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Abbreviations: IOM, Institute of Medicine; NHS, National Health Service.

Results

The first three authors independently and critically appraised the six documents using the criteria developed (Table 2). The authors critically appraised the document in a narrative way, to be as inclusive as possible. Discrepancies in the results were discussed and a consensus between the authors was reached. A synthesis of the critical appraisal is presented in Table 3.

Criteria 1: Is the Definition Inclusive of Physiologic as Well as Pathologic Pregnancy?

Pathologic pregnancy

Four papers included in the review focused on the definition of pathology (Delbanco & Gerteis, 2010; Stewart et al., 2003; IOM, 2001; Coulter, 2005). The documents described a range of conditions and employed various terms that focus on pathology. The terminology used such as illness and disease (Stewart et al., 2003; Delbanco & Gerteis, 2010) or disability or disfigurement (IOM, 2001), within the definitions are relevant only to pathologic pregnancy. A description of the stages of illness and patient’s perception of those stages of illness gave a deeper understanding of the phenomenon and defining the goals and the priorities of treatment and/or management. This gives more emphasis on the pathology as the essence of the definition (Stewart et al., 2003). Alternatively, Mead and Bower (2000) integrated the illness experience or the patient’s understanding of illness into their definition rather than the patient being the recipient of a disease. This includes a biological and psychological aspect of non-acute medical situations, being more balanced and more inclusive of the nonpathologic experience that patient may want when receiving care.

Physiologic pregnancies

None of the reviewed papers focused solely on the physiologic care or the exclusion of pathologies. Two authors used terms that were inclusive of physiologic pregnancies, intranatal, and postnatal care such as “clinical status, progress, prognosis, processes of care” (Shaller, 2007, p. 3). In Shaller (2007) and Mead and Bower (2000) pathology-oriented terms such as disease, illness, and sickness were absent.

Health promotion and prevention of disease are important topics for maternity services. Matters such as preconceptual care, substance abuse and tobacco consumption have public health targets published in health policies (Department of Health, 2004). Two authors included health promotion as “enabling people to take control over and to improve their health” (Stewart et al., 2003, p. 102) and “information, communication and education in order to provide autonomy, self-care and health-promotion” (Shaller, 2007, p. 3). Health promotion was approached
differently by some authors who presented the experience of care, but with less emphasis on information provision, guidance or reassurance for women (Mead & Bower, 2000). Health promotion was approached finally from a disease prevention perspective: risk avoidance, risk reduction, early identification, and complication reduction (Stewart et al., 2003). These are relevant to maternity services and routinely practiced during maternity care (Kramer & McDonald, 2006; Castrucci, Culhane, Chung, Bennett, & McCollum, 2006).

Criteria 2: Is the Definition Inclusive of the Different Characteristics of the Population Using Maternity Services?

Social diversity

Delbanco and Gerteis (2010) and Shaller (2007) addressed the necessity to respect patient’s needs, autonomy and dignity. This reflects women’s diversity and variability of preferences and needs. Some authors went beyond the traditional notion of family with the inclusion of same sex couples. This made it representative of women from other minorities (e.g., teenagers, single mothers, immigrants; Stewart et al., 2003). The selected populations on some documents were teenagers and children, inpatient and outpatients, but the proportion of these population that would include pregnant women is unknown (Coulter, 2005).

Clinical situations

Some documents focused solely on conditions such as end of life pain, palliative care, suffering, and respiratory management. These are acute medical conditions that are not part of routine care delivered in maternity services (IOM, 2001). Other specialities such as cancer care or accident and emergency (leg fracture; Mead & Bower, 2000) were also felt to be irrelevant for maternity services. Pain management is a recurrent topic, but is addressed differently from one service author to another, for instance in relation to cancer care or inpatients (Coulter, 2005), or indeed about patient misconceptions, such as low expectation for pain relief, or the view that a patient endures far more pain than necessary (Delbanco & Gerteis, 2010). Shaller (2007) included pain management in relation to patient daily activity, which is relevant to women with minor disorders during pregnancy, such as symphysis pubis dysfunction or back pain together with fear and anxiety of some women’s feelings about the pain of childbirth. Physical comfort and attention to patient’s discomfort were approached both by the IOM (2001) and Shaller (2007). However, only Shaller (2007) discussed elements such as massage, music, alternative practices, healing, and human touch. These are important aspects in maternity care.

Partner and family involvement

The role of family and friends was considered by most of the authors (IOM, 2001; Coulter, 2005; Stewart et al., 2003; Shaller, 2007; Delbanco & Gerteis, 2010). Families were noted as being involved in decision making and giving support as caregivers. The authors recognized their needs and contributions (IOM, 2001). Stewart et al. (2003) included maternity services in this section, considering the family and the impact of illness on maternal–infant bonding. More generally, Stewart et al. (2003) suggested that clinicians should take into account contextual elements such as social support (present or absent), employment, financial security, and community-oriented primary care. These are relevant for women who work during their pregnancy and hospitalization because this can have a detrimental effect on their job security. Shaller (2007) went a step further and encouraged an involvement of the family not only in patient care, but also in decision making at an institution level (e.g., policy and program development, implementation, evaluation in health care facility). Family involvement was briefly described by Coulter (2005) for times when staff needed to speak with family or carers, but without giving explicit information about their involvement outside of convalescence care. Mead and Bower (2000) did not address this dimension and focused the definition on patient’s involvement only.

Psychological aspect of care

Aspects such as compassion, empathy, and respect were described by two authors Stewart et al. (2003) and Shaller (2007). Delbanco and Gerteis (2010) referred to more physical elements of care, such as maintaining personal hygiene, eating, and moving or walking. Even women accessing maternity services with significant morbidity were unlikely to need help with
|------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Delbanco & Gerteis (2010)  
Title: A patient-centered view of the clinician-patient relationship. Up to date.  
Mead & Bower (2000)  
Title: Patien-centered: a conceptual framework and review of the empirical literature. Social Science and Medicine.  
IOM (2001)  
Title: Crossing the quality chasm. National Academy Press.  
Delbanco & Gerteis (2010)  
Title: A patient-centered view of the clinician-patient relationship. Up to date.  
Stewart (2003)  
Title: Patient-centered Medicine. Transforming the clinical method. Radcliff Medical Press.  
Shaller (2007)  
Title: Patient-centered care, what does it take? The Commonwealth Fund  
Coulter (2005)  
Title: Trends in patient’s experience of the NHS. Picker Institute.  | There is a focus on acute and chronic sickness, spectrum of ill-health, medical care and treatment of ill-health. No mention of health promotion. The definition acknowledges diversity of ethnicity, social background and cultural differences, socioeconomic factors of patient. Mention of diversity of family and significant others and patient’s diversity in needs. Pain management is addressed in relation to ill-health only. Pain management is addressed in relation to ill-health only. Pain management is addressed in relation to ill-health situation, medical treatment and hospital confinement only. As well as Pathologic Pregnancy. | The definition mentioned pain management and quality of life. There is an attention to patient’s needs. Complete and unbiased communication to patients and family is incorporated as well, along with patient, families and friend’s knowledge, values and belief. There is a focus on fear and anxiety in relation to mental illness. Patient involvement only is addressed, with no inclusion of family and friends. The definition includes accommodating family and friends, and recognizing their needs and contributions. The definition incorporates physical and emotional needs. There is a focus on suffering and anxiety that accompany illness and injury. The definition includes patient’s involvement in decision making. It addresses anxieties, fears, privacy, respect, dignity and strong beliefs. Children and teenagers are addressed specifically, but not the rest of maternity services population. The definition gives an emphasis on acute and chronic ill-health (e.g., A&E, cancer care, coronary heart disease) and outpatient appointments. The definition does not address health promotion. The definition is inclusive of physiologic as well as pathologic pregnancy. The definition is inclusive of the different characteristics of the population using maternity services. The definition is inclusive of the diversity of practitioners caring for women using maternity services. | The definition acknowledges no single provider is responsible of all aspect of patient care. Multidisciplinary team (social worker, physiotherapist, speech therapist, etc.) is mentioned. The definition includes accommodating family and friends, and recognizing their needs and contributions. The definition incorporates physical and emotional needs. There is a focus on suffering and anxiety that accompany illness and injury. The definition includes patient’s involvement in decision making. It addresses anxieties, fears, privacy, respect, dignity and strong beliefs. Children and teenagers are addressed specifically, but not the rest of maternity services population. Strategies are named: Patient feedback, mindfulness communication, patient feedback, staff training in crisis intervention, webpages, emails with HCP and softening hospital environment. Multidisciplinary teams encountered. Strategies are named: Motivational interview, shared decision making, grid, and medical education. Strategies are named: Care for caregivers, leadership, strategic vision, involvement of patient and families at multiple levels, supportive work environment, systematic measurement and feedback, quality of built environment, and supportive technology. 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Abbreviations: A&E, Accident & Emergency; HCP, health care provider; PCC, patient-centered care.
personal care or mobilization. Emotional support was highlighted by Delbanco and Gerteis (2010) only in relation to the burden of the illness on patients and family in the event of the specific situations named (i.e., hygiene, mobility, nutrition). Mental illness is, however, relevant to maternity services. An estimated 10% to 15% of women suffer from postnatal depression (Coulter, 2005; IOM, 2001; Stewart et al., 2003). Emotional needs were either described in relation to end of life situations (IOM, 2001) or to fear and anxiety (Shaller, 2007). Given that end of life situations (IOM, 2001) are fortunately rare in maternity care, Shaller’s description of emotional needs as inclusive of fear and anxiety is more applicable to psychological needs during the perinatal period. Finally, only Coulter (2005) addressed religious beliefs, although the focus was on cancer care.

Criteria 3: Is the Definition Inclusive of the Diversity of Practitioners Caring for Women Using Maternity Services?

Medical doctors and multidisciplinary team

All the documents reviewed, except Mead and Bower (2000), included a variety of HCPs that deliver the care to the patient. Multidisciplinary teams are important to maternity services as different HCPs are required to cover the range of clinical care during pregnancy, childbirth and postnatal period. Four authors included HCPs such as social workers, nurses, doctors, physiotherapists, and managers (Stewart et al., 2003; Delbanco & Gerteis, 2010; Shaller, 2007; Coulter, 2005). The IOM (2001) does not specify the type of HCPs but included a “smooth transition from one setting to another or from a healthcare to self-care setting” (p. 50), which implies the inclusion of all HCPs providing care in the settings concerned.

Criteria 4: Is the Definition Inclusive of Strategies Facilitating the Implementation of PCC?

Four authors presented a range of strategies to implement PCC (Stewart et al., 2003; Delbanco & Gerteis, 2010; Shaller, 2007; IOM, 2001). Two authors did not address this aspect as their papers were aimed at evaluating health services or empirical knowledge about PCC (Coulter, 2005; Mead & Bower, 2000). Feedback from the patients were named by the four authors as an integral part of assessing experiences of care in maternity services. Stewart et al. (2003) and Delbanco and Gerteis (2010) both proposed motivational interviews as strategies for addictive behaviors, to promote a shared understanding of a problem and to inform decision making. Other strategies proposed were support groups and mindfulness education programs to highlight the importance of the non-technical aspect of care, which has a significant impact upon patients’ satisfaction (e.g., a hug or use of humor; Delbanco & Gerteis, 2010). Grids detailing problems, goals, roles of patients and doctors, and PCC education in health promotion were also suggested (Stewart et al., 2003). The IOM provided additional strategies and technical support such as a web platform to access knowledge and discussion groups, emails between HCPs and patients, and involvement of visitors in treatment. All these are relevant for maternity services to involve family the care provided. Finally, transparency and free flow of information strategies were described (e.g., preparation of a prompt sheet for patients to remember questions), using all expertise and knowledge of the team and patient’s access to their clinical record. Shaller (2007) proposes a plan with seven factors that contribute to implementation of PCC: 1) leadership, 2) strategic vision of the organization, 3) involvement of family and friends in three levels, 4) care of the care givers, 5) systematic measurement and feedback, 6) quality of the built and work environment, and 7) supportive technology. Shaller’s (2007) description of strategies in domains 3, 4, 5, 6, and 7 are similar to the strategies described by the IOM (2001), Stewart et al. (2003), and Delbanco and Gerteis (2010). However, Shaller (2007) puts forward a stronger involvement of the family and friends, evaluation of the service, guidelines and policies, leadership, and the strategic vision of the organization.

Synthesis of the Findings

Criteria 1: Physiologic and pathologic pregnancy

It became evident that three definitions (IOM, 2001; Stewart et al., 2003; Coulter, 2005) emphasize acute or chronic disease. This leaves clinical situations like physiologic changes during the pregnancy (e.g., heartburn, nausea, vomiting, sleep disturbances, constipation, back pain, anemia, and mood swings) to be seen as pathologic (Cunningham et al. 2010). However, a large percentage of women (approximately 60%) start their pregnancy with no medical disorders that would necessitate them seeing an obstetrician and 40% of women give birth with no complications (National Institute for Health and Care Excellence, 2014). These definitions would therefore exclude many pregnant women who present normal physiologic changes as they are not diseases (Leap, 2009; Mason, 2010; Tucker et al. 1996). Shaller (2007) uses terms such as “clinical situation or processes of care” integrating the unpredictability of pregnancy and childbirth and its complications, as well as predictable physiologic changes. Again, there is a need for a model that can incorporate physiologic and pathologic pathways.

Criteria 2: Different characteristics of the population

Four subcategories could be compared between the six documents: social circumstances, clinical situations, involvement of family and friends, and psychological aspects of care. The authors all placed value on respect for patient’s needs and preferences in relation to social diversity. The main difference seen was with Shaller’s (2007) inclusion of nonmedical approaches to care that are commonly used in maternity services. These were described as including emotional support, awareness of patient’s knowledge and values, and alternative therapies such as massage, acupressure/acupuncture, aromatherapy, and a shower or bath. Shaller (2007) also makes a distinction between family and friends’ involvement in care, and the effect that the clinical situation can have on their degree of involvement. Shaller (2007) highlights the importance of users and carers experiences in helping to construct the system and amend the policies that guide the provision of services. Finally, psychological aspects of care were approached by most authors including fears and anxiety, emotions commonly described during antenatal, intrapartum, and postnatal care. However, the IOM (2001) used these terms in the context of suffering, loneliness, injury, or illness, which are inadequate to describe physiologic mood disorders that can happen during pregnancy. Similarly, Shaller’s (2007) definition of PCC does not include acute mental disorders that go beyond fears and anxiety; neither definition fully encompasses the requirements for emotional support in maternity services.

Criteria 3: Diversity of practitioners

The appraisal did not identify strong differences between documents that included HCPs other than medical doctors. These
definitions grouped together a range of professions that women may encounter during their care in maternity services from physiotherapists, midwives, social services, and so on.

Criteria 4: Strategies facilitating the implementation of PCC

Four of the six documents reported the following strategies: Stewart’s grid and educational program (2003), the IOM’s technical support, care of the carer’s, transparency/free flow of information (2001), and Delbanco and Gerteis’s support groups, mindfulness program, and the nontechnical aspects of care (2010). These last four strategies are similar to those of Shaller (2007): care of the care givers, systematic measurement and feedback, quality of the work environment, and the supportive technology. Shaller (2007) not only included strategies that were presented in all other documents, but in addition included important information on leadership and the strategic vision of the organization.

Discussion

To the best of our knowledge and to date, this is the first critical appraisal of the definitions of PCC and its applicability to maternity services. This review has allowed the identification and critical appraisal of diverse definitions of PCC and an assessment of their suitability for use in maternity services. There was a need to assess a “best fit” to reflect on the spectrum of risk in pregnancy, the characteristics of the women seeking care, the diversity of health care professionals providing maternity care, and the appropriateness of implementation strategies.

The results of this review revealed six definitions of PCC, with no consensual description of the domains; their commonalities and differences were reviewed. The six papers have individually described PCC, using five to eight domains with their definitions. The type and quantity of data collected on the definitions varied between the six papers, with the amount of data from the two books being greater than the articles and reports. Nevertheless, the evidence published by the authors when analyzed helped to understand the different emphasis that they placed on their definitions of PCC. To find the most relevant definition to PCC in maternity services, four criteria were developed and used to compare them.

For criteria one (inclusivity of pathologic and physiologic pregnancy), Delbanco and Gerteis (2010), Stewart et al. (2003), the IOM (2001), and Coulter (2005) focused mainly on disease, whereas Shaller (2007) and Mead and Bower (2000) used non-pathology-oriented terms. Shaller (2007) set himself apart by including illness and pathologic pathways of care, with a greater emphasis on the involvement of family and friends compared to the other authors, for criteria two. The diversity of practitioners in criteria three did not differ a great deal between authors who include other HCPs and not just doctors. Finally, for criteria four, similar strategies were described by the authors with the exception of Shaller who added leadership and strategic vision.

By presenting a definition including 1) a sensitivity to physiology and pathologic pathways of care, 2) an awareness of the different social and clinical situations, 3) having the strongest involvement of partner and family, and 4) strategies to implement PCC, Shaller (2007) seems to present the most inclusive definition of PCC that fits with maternity services.

Strength and Limitations of the Review Results

One of the strengths of this narrative review is that it uses four different sources to represent the scientific, empirical, and professional literature. Most of the other reviews in this area focused on discipline-related concepts and therefore focused their search strategies on electronic databases only (Kitson, Marshall, Bassett, & Zeitz, 2012; Mead & Bower, 2002; Rowe et al., 2002; Stewart, 2001).

A critical appraisal of the research documents was undertaken using a grid developed to answer the review questions and gain a consensus agreement on the comments. No quality appraisal of the documents was done because the focus of the review was to have a historical overview of the concept, the diverse background, the possible development, and the variety of documents. By analyzing the quality of the different sources, we may have had to eliminate some key documents that could have been important in the analyses. Nevertheless, to overcome this limitation, we would recommend that Shaller’s domains of PCC as a model of care are tested and validated, because this is the first attempt to synthesize knowledge on PCC within maternity services.

Implications for Practice and/or Policy

Setting up a model of care that is too strongly linked to pathologic circumstances can be detrimental to maternity services particularly when looking at policies’ goals to normalize birth and to reduce unnecessary interventions (Department of Health New South Wales (2010); Scottish Government Health Directorate, 2009). The relevant domains of PCC for maternity services should cover the needs of all women and help to forge policies that neither accentuate nor ignore potential complications during or at the end of pregnancy. The model should emphasize pregnancy and birth as physiologic events, because the majority of pregnancies start with no or little risk of complications, but must include possible pathologies. Shaller's (2007) domains of PCC take the uncertainty of childbirth into consideration rather than other definitions that tend to reduce the domains to complicated or normal births, only. It is important that PCC terms and domains are chosen carefully as they will be used in policies and action plans. Shaller (2007) described strategies to implement PCC at both an organizational level: 1) leadership development and training, 2) internal rewards and incentives, 3) training in quality improvement, 4) practical tools derived from an expanded evidence base, and then at a system level, namely, 1) public education and patient engagement, 2) public reporting of standardized measure, and 3) accreditation and certification requirements. As highlighted by Davidson et al. (2006), giving a strong theoretical underpinning on the model of care for a specific health care service, will help in the development of PCC strategies and their evaluation, and therefore will strengthen care that is already provided. This would achieve the goal of improving quality of care by enhancing clinical quality, safety, and response to individual needs (Australian Commission on Safety and Quality in Healthcare, 2010). Keeping these elements in mind and with the results of this review, we conclude that Shaller’s domains of PCC seem to be the most inclusive for the women receiving care and the HCP delivering care in maternity services.

However, if Shaller’s (2007) domains of PCC can be recommended, it is still unclear how to design and best put into operation interventions which can deliver PCC to patients. Several interventions have been targeting organizational and system levels with no clear precision and practical implication for professionals (Iowa Department of Public Health, 2010; Scottish Government, 2006). Maternity services have tried to
implement PCC strategies for over 20 years; however, if improvements are to be made, the adoption of one clearly defined model of care by all key stakeholders groups (such as Shaller’s from this critical appraisal), could help policymakers in achieving PCC. It would seem that what is needed now to improve the quality of care in maternity services is an evaluation of programs that support PCC, such as those run by interprofessional teams (Picker Institute & Planetre, 2008) or procedures that are established at a national level (Scottish Government, 2006), to assess the extent to which these programs support PCC and HCPs and women perceptions of these programs.

Conclusion

This review highlights the advantages of adopting PCC as a model for maternity services. PCC models support the achievement of high quality care across the entire pathways for both women and HCP. The six domains of Shaller’s PCC definition best address the context and the content of maternity services. However, what seems to be important is how the six domains of PCC fit in practice. Using Shaller’s definitions and strategies in the development of maternity services’ policies could strengthen the implementation of PCC interventions in practice. It remains unclear today how best to support PCC in maternity services and what implementation strategies would be most effective. Specific PCC projects in maternity services have been conducted but it has looked at PCC strategies and how to improve patient experience (Goodrich & Corwell, 2008; Whitford et al. 2014). Detailed evaluation of these projects, recommendations generated and the measurement of PCC components would allow for improvement initiatives targeted towards women in maternity services, and, if appropriate, facilitate the development of future policy documents (National Quality Forum, 2012; Lewin et al. 2001).

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