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Review

Patient-centered care in chronic disease management: A thematic analysis of the literature in family medicine

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ABSTRACT

Objective: The objective was to provide a synthesis of the results of the research and discourse lines on main dimensions of patient-centered care in the context of chronic disease management in family medicine, building on Stewart et al.'s model.
Methods: We developed search strategies for the Medline, Embase, and Cochrane databases, from 1980 to April 2009. All articles addressing patient-centered care in the context of chronic disease management in family medicine were included. A thematic analysis was performed using mixed codification, based on Stewart's model of patient-centered care.
Results: Thirty-two articles were included. Six major themes emerged: (1) starting from the patient's situation; (2) legitimizing the illness experience; (3) acknowledging the patient's expertise; (4) offering realistic hope; (5) developing an ongoing partnership; (6) providing advocacy for the patient in the health care system.
Conclusion: The context of chronic disease management brings forward new dimensions of patient-centered care such as legitimizing the illness experience, acknowledging patient expertise, offering hope and providing advocacy.
Practice implications: Chronic disease management calls for the adaptation of the family physician's role to patients' fluctuating needs. Literature also suggests the involvement of the family physician in care transitions as a component of patient-centered care.

1. Introduction

Chronic diseases represent a major health burden worldwide [1]. Experience with chronic diseases implies that the patient, along with having to adopt improved health behaviors, is faced with having to make major adaptations to its repercussions and the daily management of the disease. As many people affected by chronic diseases frequently interact with a family physician [2–4], this professional is in a privileged position to play a significant role in their lives.

Patient-centered care is widely acknowledged as a core value in patient–physician interactions [1,5]. Stewart et al. played a major role in the conceptualization of patient-centered care in family medicine. Their patient-centered care model, initially developed in the 1980s [6–8] and described later in 1995 in the first edition of their book [9], is now the most cited in family medicine [10–14]. This framework is taught in family medicine residency programs across Canada [15]. Much patient-centered care evidence in family medicine relies on Stewart et al.'s model [10,16,17] that proposes six dimensions: (1) exploring both the disease and the illness experience; (2) understanding the whole person; (3) finding common ground; (4) incorporating prevention and health promotion; (5) enhancing the patient–physician relationship and (6) being realistic.

Several recent studies have focused on patient-centered care in the specific context of patients affected by chronic diseases [18–22]. Some have suggested components of patient-centered care that go beyond Stewart et al.'s model, such as notions of hope [22] or engaging patient expertise [18]. Therefore, the aim of this research was to provide a synthesis of the results of the research and discourse lines on main dimensions of patient-centered care in the context of chronic disease management in family medicine, building on Stewart et al.'s model.

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2. Methods

2.1. Search methods

We conducted an electronic literature search for English and French articles spanning the 1980 to April 2009 period in Medline (1980–), Embase (1980–), and Cochrane (1991–). An information specialist developed and ran the specific strategies for each database (Appendix A). The following MeSH terms and keywords were used: "patient-centered care" or its linguistic variants and, "family practice," or "primary health care," or "primary medical care," or "primary care". To broaden the scope of our research, we applied one other search strategy for patient-centered care instruments to the same databases (Appendix A). We also examined articles found in the reference lists of collected articles (hand searching).

2.2. Data collection

All search results were transferred to a reference database (Refworks) and duplicates were eliminated. We searched for articles meeting all of the following criteria: (1) pertained to patient-centeredness of care, (2) in the context of chronic disease management in family medicine, and (3) in an adult population.

Titles and abstracts were read by one team member (ML) to exclude articles that were clearly not eligible. We excluded references distinctly not meeting our inclusion criteria and retained all other references for complete evaluation. Two authors (CH and ML) independently appraised the full text of the retained papers to identify potentially eligible articles. Discrepancies between the two reviewers regarding inclusion or exclusion were resolved by submitting the reference to a third evaluator (MEP).

2.3. Analysis

The approach taken in this study corresponds to descriptive qualitative research as described by Sandelowski [23,24]. It falls under a postpositivism paradigm [25] which aims to objectively apprehend the reality as closely as possible by rigorous methods. We used thematic analysis to analyze the patient-centered care-related data of the included articles in order to identify patterns from the literature review and to obtain a more detailed analysis [26]. Therefore, themes were created from the semantic content of the data for their explicit meaning.

The thematic analysis was performed on all articles by two evaluators from different professional backgrounds (CH, an experienced general practitioner and ML, an anthropologist), using mixed coding as described by Miles and Huberman [27], with the six dimensions of Stewart's model as a starting point. The relevant features addressed in the papers were organized into a grid according to Stewart's six dimensions and new ones emerging from our analysis. The analysis process was in line with the phases of thematic analysis identified by Braun and Clarke [26]. Initially, familiarization with the data generated ideas to create initial codes. Then, codes that were linked were grouped into potential themes. Each theme was reviewed to ensure that it reflected both its associate coded extracts and the entire data set. Finally, themes were defined and refined by attributing clear definitions and names. Stewart's model was thus iteratively modified to highlight chronic disease realities. Throughout the analysis, disagreements or questions were discussed and interpretations were validated with four (4) co-researchers (MF, JH, CL, MEP). Pair debriefing, triangulation and team validation minimized the influence of researcher subjectivity and preconceptions [28].

3. Results

3.1. Included studies

Fig. 1 shows the number of references found at each stage of the selection process. The search strategies identified 1745 references, of which 1565 were kept after removing duplicates. The majority of these references were excluded by reading the abstract, as they clearly did not meet our inclusion criteria. One hundred five papers were read completely. References found through hand searching ($n = 4$) were also included, for a total of 109 potentially eligible references. Of these 109 articles, 77 were excluded: 52 did not pertain to the concept of patient-centered care and were related to other concepts (empowerment, quality of care, self-management, continuity of care, involvement, etc.), 19 were not applicable to ambulatory family medicine (hospital setting, medical specialty, nursing, healthcare network, etc.), 5 did not relate to chronic disease, and one concerned patients under 18 years of age. A final sample of 32 articles was retained [5,12,18–22,29–53].

Table 1 presents the characteristics of the included articles.

3.2. Themes

Thematic analysis allowed us to group the relevant features addressed in the articles into six major themes: (1) Starting from the patient's situation; (2) Legitimizing the illness experience; (3) Acknowledging the patient's expertise on his/her own life; (4) Developing an ongoing partnership; (5) Offering realistic hope; (6) Providing advocacy for the patient in the health care system. Table 2 presents the number and type of articles falling under each theme and sub-theme.

Table 1
Characteristics of the included articles ($n = 32$).

	Number of articles
Type of publication/study design	
Empirical studies	
Qualitative studies [12,16,17,32,37,39,40,44,46,49]	10
Quantitative studies [38,52,53]	3
Mixed methods [21,35,42]	3
Theory development, opinion papers, commentaries [5,19,20,22,29,31,33,34,36,43,45,47,48,50,51]	15
Selected reviews [41]	1
Chronic diseases	
Diabetes [21,32,35,38,49–51,53]	9
Cancer [22,30,31,37,40,44]	6
Chronic diseases (unspecified diseases) [5,33,34,39,41,48]	6
Chronic pain/fibromyalgia/chronic fatigue [42,43,46,52]	4
Asthma/COPD [36,47]	2
Depression [12]	1
Diabetes + asthma + arthritis [29]	1
Erectile dysfunction [20]	1
Long-term disability [45]	1
Migraine [19]	1
Author's location	
United States [5,19,22,31,33,34,36,48,49,51]	10
United Kingdom [21,37,38,41–45,50]	7
Canada [30,39,40,46,47]	5
Australia [29,43]	2
Spain [42,52]	2
Greece [20]	1
Ireland [12]	1
Norway [32]	1
Oman [16]	1
Sweden [35]	1
Thailand [53]	1

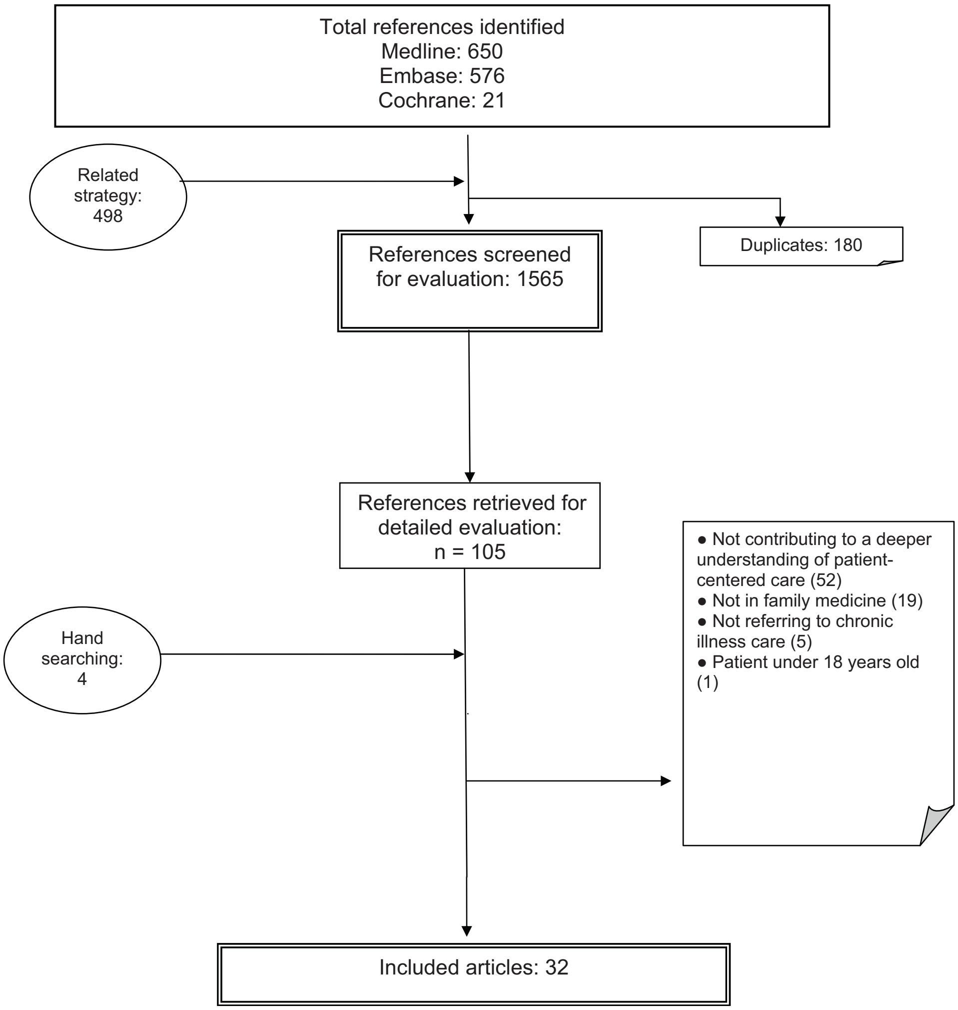

Fig. 1. Number of references identified through the stages of the concept analysis.

3.2.1. Starting from the patient by acquiring a comprehensive understanding of his/her situation: 30 articles

Patients present to the family physician with their own background and unique experience of illness. A rich knowledge of the patient's situation is a necessary component of chronic disease management. This theme is subdivided into two sub-themes corresponding to Stewart et al.'s dimensions: "Exploring both the disease and the illness" and "Understanding the whole person".

3.2.1.1. Exploring both the disease and the illness experience: 25 articles. As suggested by Stewart et al. [17], this theme involves paying as much attention to dimensions of illness (feelings, ideas, and patients' perceptions of disease seriousness or expectations of

Table 2
Number and type of articles falling under each theme and sub-theme.

Themes and sub-themes	Number of articles *n* (%)	Type of publication/study design				
		Empirical studies			Theory development, opinion papers, commentaries *n* (%)	Reviews *n* (%)
		Qualitative *n* (%)	Quantitative *n* (%)	Mixed methods *n* (%)		
Starting from the patient by acquiring a comprehensive understanding of his/her situation	30 (94)	10 (31)	2 (6)	5 (17)	12 (40)	1 (3)
• Exploring both the disease and the illness experience	25 (78)	8 (25)	2 (6)	4 (13)	10 (31)	1 (3)
• Understanding the whole person	25 (78)	10 (31)	1 (3)	4 (13)	10 (31)	–
Legitimizing the illness experience	5 (16)	2 (6)	1 (3)	–	2 (6)	–
Acknowledging patient expertise on their own lives	14 (44)	4 (13)	–	2 (6)	7 (22)	1 (3)
Developing an ongoing partnership	27 (84)	7 (22)	2 (6)	5 (17)	13 (41)	–
• Enhancing the patient physician relationship	23 (72)	7 (22)	2 (6)	3 (9)	10 (31)	1 (3)
• Finding common ground	25 (78)	7 (22)	2 (6)	4 (13)	12 (38)	–
Offering realistic hope	2 (6)	–	–	–	2 (6)	–
Providing advocacy for the patient in the health care system	9 (28)	6 (19)	–	–	3 (9)	–

outcomes) as to dimensions of disease (history, physical examination, laboratory tests) [5,12,18,20,21,30,32–34,36–38,41–44,46,47,52,53]. In the context of chronic disease management, understanding the patient's unique experience of illness [17] also entails the exploration of co-morbidity [53], previous experience of care [22,35], health behaviors [53] and confidence about disease management [29,49].

3.2.1.2. Understanding the whole person: 25 articles. According to Stewart et al., considering the person as a whole may help increase our understanding of the disease and the illness experience [21,30,34,39,42–44,46,47,50]. This could be accomplished over time by knowing about the patients' life context (family, work, religion, culture, social support, etc.) [18,20,29,31,37,38,48] as well as personal development stages (life history and personal and developmental issues) [12,36,49,53]. In being aware of the multiple aspects of the patient's life [17], health literacy should also be taken into account [22,32,33].

3.2.2. Legitimizing the illness experience: 5 articles

This new theme emerged as an integral part of chronic disease management which becomes a persistent presence in the patient's life, including a redefinition of selfhood. Naming the illness [46,52] is a crucial step when possible, or at least addressing the uncertainty of the diagnosis [46]. Patients need to see their concerns, ambivalence, feelings of loss and grief over their prior capabilities acknowledged [30] as well as their uncertainty about the future [22]. They also need to be able to express their individual problems, fears and frustrations with having a chronic disease [29,46].

> "Participants experienced a sense of relief now that their struggle was acknowledged and their illness experience legitimized." [46]

3.2.3. Acknowledging patient expertise on their own lives: 14 articles

In chronic disease management, most interventions are undertaken by the patient rather than by the physician. The physician should believe in the patient's capacity [18,33], to enable him/her to self-manage [5,18,29,41,43,50,51,53]. Interventions should be tailored to the person's strengths and challenges in managing his/her care [5,30,32,36,46,53]. Physicians could also help to establish realistic self-management goals [47,50,51].

> "Tailoring interventions based on each person's unique set of factors: his or her strengths. . .." [48]

3.2.4. Developing an ongoing partnership: 26 articles

Effective chronic disease management requires sustained and coordinated action by the patient and the physician: an ongoing partnership. That partnership is negotiated over time and in light of patient capacities. The physician has to adjust his/her role to patients' role preference [22]. This theme includes two sub-themes corresponding to Stewart et al.'s enhancement of the physician–patient relationship and finding common ground.

3.2.4.1. Enhancing the patient–physician relationship: 23 articles. Each encounter with a patient is an opportunity to develop the patient–physician relationship [34]. The patient often needs compassion [32,42,43,52], trust [31], equality [12,32], respect [35], positive regard [21] and interest [30], recognition [20,53], appreciation and understanding [38] as well as relational continuity [5,18,19,22,29,30,33,36,37,43], enough time [36,43,52] and support [22,44,46,52].

> "Continuity of care can foster a relationship which has the potential to empower the patient and enhance the healing process during the more difficult and stressing phases of the disease process." [30]

3.2.4.2. Finding common ground: 25 articles. The physician uses his/her competency [18] and best medical evidence [36,47] to diagnose, provide results [18] and present information [18,42,44,51] if needed [37,44,52] in an understandable language, in order to find a common ground in regard to management [12,19–21,29,30,33,34,38,42,43]. Patients' participation in their own care should be encouraged [50–52] by stimulating him/her to ask questions [38], providing therapeutic options when available [31,37,44], assessing how much information the patient wants to know [22], and his/her readiness to engage in the discussion [22,32,33]. Patient needs, preferences and beliefs should be respected at all times [18,37,38,42,53]. Family members could be involved if the patient is willing [18,48].

3.2.5. Offering realistic hope: 2 articles

This new theme differs from Stewart et al.'s "Being realistic" in its emphasis on hope and support, often in the context of uncertainty or the inevitable decline of chronic conditions. Options for the future should be discussed when appropriate [22].

> "Perhaps primary care physicians' greatest skills are the ability to offer hope and wisdom while assisting patients and family as they adjust to an ever-changing social and medical environment." [31]

3.2.6. Providing advocacy for the patient in the health care system: 9 articles

This new theme pertains to the physician's role in guiding the patient through the healthcare system. It assumes increasing importance as the patient's chronic condition and resulting care trajectory become more complex. The physician uses external resources [39] by referring the patient to other members of the primary or healthcare team in the clinic or the health care system [18,22,29,30] as well as support groups and other community-based services [18,22,29]. For example, the physician helps prepare for hospital appointments and tests [37]. In fact, the physician must coordinate care to act as gatekeeper in defending patient interests and safety in the healthcare system [44,46].

> "Patients need easy access and prompt assistance to deal with urgent situations." [31]

3.2.7. Over time

Each of the themes previously described includes a longitudinal dimension. Needs and expectations (Section 3.2.1) will change depending on episodes of illness, context of life and illness experience (Section 3.2.2) [22,30,37]. Time is a precious ally to the development of patients' expertise in self-management (Section 3.2.3) [29,33,38]. The physician will have to adapt his/her role taking these new skills into account.

The long-term relationship (Section 3.2.4) and a unique knowledge of the patient contribute to the development of trust that often increases over time and may, in turn, strengthen the relationship [31]. As the disease progresses, values, goals and preferences must be reassessed and discussed [22,29,33,46].

"Offering realistic hope" (Section 3.2.5) calls for a longitudinal perspective as it often refers to upcoming facts or states [30]. Finally, the physician advocacy role (Section 3.2.6) will change according to fluctuations in patient needs [30].

> "The patient's expectations of his/her physician will fluctuate during the course of his/her disease." [30]

4. Discussion and conclusion

4.1. Discussion

This thematic analysis of the literature is the first attempt to integrate theoretical and empirical literature on patient-centered care in chronic disease management in family medicine, building on Stewart et al.'s model. The four main dimensions of their model emerged from our analysis and were regrouped under broader themes and refined to account for chronic disease realities. For instance, considering the significant prevalence of multimorbidity in primary care practices [54–56], experience of care should extend beyond present experience to capture previous experiences of care [22].

New themes emerged from the literature such as "Legitimizing the illness experience" [22,29,30,46,52]. This theme is in continuity with Stewart's dimension "Exploring both the disease and the illness experience" that proposes assessing both the disease process and the patient's unique experience of illness [17]. Three empirical studies [30,46,52] stressed the importance of physicians acknowledging patient feelings of loss and grief over their prior capabilities as well as uncertainty about the future and allowing them to express their individual problems and frustrations with having a chronic disease. It is often a necessary step to help patients regain more control over their health and increase self-management capabilities.

Stewart et al.'s dimension "Being realistic" [17] includes teambuilding and teamwork and recognizes the importance of wise stewardship in accessing resources. "Patient advocacy" [18,22,29,30,33,37,39,44,46] goes further by introducing actions such as helping the patient obtain needed healthcare, ensuring quality of care, defending patient rights, and serving as a liaison between patient and health care system [57,58]. This theme was stressed in six qualitative studies [18,30,37,39,44,46]. Transition in care often constitutes a major issue for patients with chronic diseases. This notion of physician involvement in facilitating transition in care and his/her role in defending the patient stands out from the other themes in this work and from those in Stewart et al.'s model that are more specific to the interaction between patient and physician.

The course of each clinical encounter with the family physician can be considered as being on an ad hoc basis, in the patient-centered care model. The two instruments specifically conceived to measure patient-centered care [59] in fact evaluate the last visit with a physician. Chronic disease management brings a longitudinal component into perspective. In this context, all the dimensions of the concept could be better captured with a measure considering a certain period of time.

Self-determination theory, of which one of the key concepts is autonomy support, addresses several elements related to patient-centered care [60]: eliciting and acknowledging patient perspectives, providing information and treatments options, avoiding physician control over the patient, and supporting patient initiatives for change [61,62]. Recognition and promotion of patient expertise, stressed in six empirical studies [18,30,32,46,50,53] and one review [41], is also a central element of the enablement concept which aims to empower patients to gain more control over their life [63,64]. For people with chronic diseases, professionals' enabling interventions promote individual empowerment which means a better awareness of one's life situation, of one's own strengths and needs, an increase in self-esteem, a decrease in negative feelings and better informed decision-making and learning skills [64]. We consider that individual empowerment is a desired outcome of patient-centered care in chronic disease management as well. The two concepts (patient-centered care and enablement) are in line with Carl Rogers' concept of client-centered therapy in the 1950s [65–67]. Family medicine promoted the concept of patient-centered care [11,17] whereas enablement or empowerment became a core value of nursing [68–70]. We consider patient-centered care in chronic disease management and enablement as very similar concepts aiming at similar outcomes of individual empowerment.

Our study has some limitations. A limitation of any review is the potential omission of relevant articles as well as any unpublished material. However, all steps were taken to ensure an exhaustive literature review: our search strategy was adapted for different databases and was developed in collaboration with an information specialist. Moreover, we identified additional articles through hand searching.

Although beyond the scope of this paper, addressing the broader literature (nursing, psychology, sociology, team care, etc.) in further work will broaden the impact of the results. Literature on research conducted among children, which is a specific research area, could also be explored. This literature review is another step toward understanding how family physicians can provide patient-centered care in the context of chronic disease management. Further theoretical and/or empirical work is still necessary to expand the construct and support evidence of the proposed themes, especially for new themes outlined in only a few articles. This is the case for example of the theme "Offering realistic hope" stressed in two non-empirical articles [22,31].

4.2. Conclusion

This article presents a thematic analysis of the literature on patient-centered care in the context of chronic disease management in family medicine, building on Stewart et al.'s model. The context of chronic disease management brings forward new dimensions of a patient-centered interaction between the patient and the physician such as legitimizing the illness experience, acknowledging patients' expertise and offering hope, and proposes the involvement of the family physician in transitions in care (patient advocacy) as a component of patient-centered care. Chronic disease management also calls for the adjustment of the family physician's role to patients' fluctuating needs. Further research is needed to validate these results empirically, to better understand which themes are the most meaningful for patients and how they are acted out in practice and team care. Additional studies could also examine or produce evidence linked to those themes.

4.3. Practice implications

Chronic disease management requires coordinated action by the patient and the physician to create a real partnership. A rich knowledge of the patient is a necessary step toward this. Patients need their concerns, ambivalence and grief over their prior capabilities to be acknowledged. The physician should provide hope and support and believe in the patient's capacity. The physician can also play a role in guiding the patient through the system. The patient will have fluctuating needs requiring physicians to adapt their role over time.

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Conflict of interest

The authors declare that they have no competing interests.

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Appendix A. Electronic literature search of the Medline, Embase and Cochrane databases

Database	Set	Searches
Medline	1	"Patient-centered Care" or patient focused care or patient centered care or patient centred care or patient centeredness or patient centredness
	2	Limit 1 to English or French
	3	"Family Practice"
	4	"Primary Health Care" or primary care
	5	"Quality Assurance, Health Care"
	6	"Psychometrics" or psychometric or psychometrics
	7	"Validation Studies" or validation studies or validation study
	8	"Reproducibility of Results"
	9	"Factor Analysis, Statistical" or factor analysis
	10	"Outcome and Process Assessment, Health Care" or "Outcome Assessment, Health Care"
	11	"Questionnaire" or questionnaire or questionnaires
	12	"Process Assessment, Health Care"
	1st strategy	2 and (3 or 4)
	2nd strategy	2 and (5 or 6 or 7 or 8 or 9 or 10 or 11 or 12)
Embase	1	"Patient-centered Care"* or patient focused care or patient centered care or patient centred care or patient centeredness or patient centredness
	2	Limit 1 to English or French
	3	"Primary Health Care" or primary care
	4	"Primary Medical Care"
	5	"Family Practice"
	6	"Psychometrics" or psychometric or psychometrics
	7	"Validation Studies" or validation studies or validation study
	8	"Reproducibility of Results"
	9	"Factor Analysis, Statistical" or factor analysis
	10	"Outcome and Process Assessment, Health Care" or "Outcome Assessment, Health Care"
	11	"Quality Assurance, Health Care"
	12	"Questionnaire" or questionnaire or questionnaires
	13	"Process Assessment, Health Care"
	1st strategy	2 and (3 or 4 or 5)
	2nd strategy	2 and (6 or 7 or 8 or 9 or 10 or 11 or 12 or 13)
Cochrane	**1st and 2nd strategies**	Patient focused care or patient centered care or patient centred care or patient centeredness or patient centredness

The words in quotation marks (" ") indicate that they have been used as a MeSH while the words followed by an asterisk (*) have been sought as a main subject of the articles. All the other words have been used as a keyword.

References

[1] WHO. World Health Organization. The innovative care for chronic condition (ICCC); 2010, Retrieved November 3, 2010 from http://www.who.int/diabetesactiononline/about/ICCC/en/index.html.

[2] Starfield B, Lemke K, Bernbardt T, Foldes S, Forrest C, Weiner J. Comorbidity: implications for the importance of primary care in case management. Ann Family Med 2003;1:8–14.

[3] Broemeling A, Watson D, Prebtani F. Population patterns of chronic health conditions, co-morbidity and healthcare use in Canada: implication for policy and practices. Healthcare Q 2008;11:70–6.

[4] WHO. World Health Organization. Former les personnels de santé du XXe siècle: le défi des maladies chroniques; 2010, Retrieved September 10, 2010 from http://www.who.int/chp/knowledge/publications/workforce_report_-fre.pdf.

[5] Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. Milbank Q 1996;74:511–44.

[6] Stewart M, Brown J, Levenstein J. The patient-centred clinical method III. Changes in residents' performance over two months of training. Fam Pract 1986;3:164–7.

[7] Levenstein J, McCracken E, McWhinney I, Stewart M, Brown J. The patient-centred clinical method I. A model for the doctor–patient interactions in family medicine. Fam Pract 1986;3:24–30.

[8] Brown J, Stewart M, McCracken E, McWhinney I, Levenstein J. Patient-centred clinical method II. Definition and application. Fam Pract 1986;3:75–9.

[9] Stewart MA, Belle Brown JB, Weston WW, McWhinney IR, McWilliam CL, Freeman TR. Patient-centered medicine: transforming the clinical method. Thousand Oaks, CA: Sage Publications Inc.; 1995.

[10] Little P, Everitt H, Williamson I, Warner G, Moore M, Gould C, et al. Observational study of effect of patient centredness and positive approach on outcomes of general practice consultations. Brit Med J 2001;323:908–11.

[11] Mead N, Bower P. Patient-centredness: a conceptual framework and review of the empirical literature. Soc Sci Med 2000;51:1087–110.

[12] Gilmore KA, Hargie O. Quality issues in the treatment of depression in general practice. Int J Health Care Qual Assur 2000;13:34–41.

[13] Little P, Everitt H, Williamson I, Warner G, Moore M, Gould C, et al. Preferences of patients for patient-centred approach to consultation in primary care: observational study. Brit Med J 2001;322:468–72.

[14] Howie JGR, Heaney DJ, Maxwell M. Quality, core values and the general practice consultation: issues of definition, measurement and delivery. Fam Pract 2004;21:458–68.

[15] The College of Family Physicians of Canada. Defining competence for the purpose of certification by the College of Family Physicians of Canada; 2011, Retrieved August 4, 2011 from http://www.cfpc.ca/uploadedFiles/Education/Defining%20Competence%20Complete%20Document%20bookmarked.pdf.

[16] Stewart M, Brown JB, Donner A, McWhinney IR, Oates J, Jordan J. The impact of patient-centered care on outcomes. J Fam Pract 2000;49:796–804.

[17] Stewart M, Brown JB, Weston WW, Freeman TR. Patient-centred medicine: transforming the clinical method, 2nd ed., United Kingdom: Radcliffe Medical Press; 2003.

[18] Abdulhadi N, Al-Shafaee M, Freudenthal S, Ostenson CG, Wahlstrom R. Patient–provider interaction from the perspectives of type 2 diabetes patients in Muscat, Oman: a qualitative study. BMC Health Serv Res 2007;7.

[19] Diamond ML, Wenzel RG, Nissan GR. Optimizing migraine therapy: evidence-based and patient-centered care. Expert Rev Neurother 2006;6:911–9.

[20] Hatzichristou D, Tsimtsiou Z. Prevention and management of cardiovascular disease and erectile dysfunction: toward a common patient-centered care model. Am J Cardiol 2005;96:80M–4M.

[21] Moran J, Bekker H, Latchford G. Everyday use of patient-centred, motivational techniques in routine consultations between doctors and patients with diabetes. Patient Educ Couns 2008;73:224–31.

[22] Ngo-Metzger Q, August KJ, Srinivasan M, Liao S, Meyskens FL. End-of-life care: guidelines for patient-centered communication. Am Fam Physician 2008;77:167–74.

[23] Sandelowski M. Whatever happened to qualitative description? Res Nurs Health 2000;23:334–40.

[24] Sandelowski M. What's in a name? Qualitative description revisited. Res Nurs Health 2010;33:77–84.

[25] Guba EG, Lincoln YS. Paradigmatic, controversies, contradictions, and emerging confluences. In: Denzin NK, Lincon YS, editors. The SAGE handbook of qualitative research. Thousans Oaks: SAGE; 2005. p. 191–216.

[26] Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006;3:77–101.

[27] Miles MB, Huberman MA. Qualitative data analysis, 2nd ed., London: Sage; 2003.

[28] Creswell JW. Quantitative inquiry & research design: choosing among five approaches, 2nd ed., Thousand Oaks: Sage; 2006.

[29] Bauman AE, Fardy HJ, Harris PG. Getting it right: why bother with patient-centred care? Med J Aust 2003;179:253–6.

[30] Brown J, Stewart M, McWilliam CL. Using the patient-centered method to achieve excellence in care for women with breast cancer. Patient Educ Couns 1999;38:121–9.

[31] Douglas AB, Maxwell TL, Whitecar PS. Principles of palliative care medicine part 1: patient assessment. Adv Stud Med 2004;4:15–20.
[32] Fagerli RA, Lien ME, Botten GS, Wandel M. Role dilemmas among health-workers in cross-cultural patient encounters around dietary advice. Scand J Public Health 2005;33:360–9.
[33] Glasgow RE, Davis CL, Funnell MM, Beck A. Implementing practical interventions to support chronic illness self-management. Joint Comm J Qual Saf 2003;29:563–74.
[34] Gray GR. Teaching patient-centered care. Fam Med 2002;34:644–5.
[35] Holmstrom I, Larsson J, Lindberg E, Rosenqvist U. Improving the diabetes patient encounter by reflective tutoring for staff. Patient Educ Couns 2004;53:325–32.
[36] Irwin RS, Richardson ND. Patient-focused care: using the right tools. Chest 2006;130:73S–82S.
[37] Kendall M, Boyd K, Campbell C, Cormie P, Fife S, Thomas K. How do people with cancer wish to be cared for in primary care? Serial discussion groups of patients and carers. Fam Pract 2006;23:644–50.
[38] Kinmonth AL, Spiedal N, Woodcock A. Developing a training program in patient-centred consulting for evaluation in a randomised controlled trial: diabetes care from diagnosis in British primary care. Patient Educ Couns 1996;29:75–86.
[39] Martin C, Rohan BG. Chronic illness care as a balancing act. A qualitative study. Aust Fam Physician 2002;31:55–9.
[40] McWilliam CL, Brown J, Stewart M. Breast cancer patients' experiences of patient–doctor communication: a working relationship. Patient Educ Couns 2000;39:191–204.
[41] Michie S, Miles J, Weinman J. Patient-centredness in chronic illness: what is it and does it matter? Patient Educ Couns 2003;51:197–206.
[42] Moral RR, Alamon MM, Jurado MA, de Torres LP. Effectiveness of a learner-centred training programme for primary care physicians in using a patient-centred consultation style. Fam Pract 2001;18:60–3.
[43] Murdoch JC. Chronic fatigue syndrome. The patient centred clinical method—a guide for the perplexed. Aust Fam Physician 2003;32:883–7.
[44] Murray SA, Boyd K, Campbell C, Cormie P, Thomas K, Weller D, et al. Implementing a service users' framework for cancer care in primary care: an action research study. Fam Pract 2008;25:78–85.
[45] Procter S. The move to community care and the impact of long-term disability on health service provision: some implications for library services. Health Libr Rev 1995;12:235–41.
[46] Raymond MC, Brown JB. Experience of fibromyalgie. Qualitative study. Can Fam Physician 2000;46:1100–6.
[47] Simpson AC, Rocker GM. Advanced chronic obstructive pulmonary disease: rethinking models of care. Q J Med 2008;101:697–704.
[48] Sevin C, Moore G, Shepherd J, Jacobs T, Hupke C. Transforming care teams to provide the best possible patient-centered, collaborative care. J Ambul Care Manage 2009;32:24–31.
[49] Smith BK, Frost J, Albayrak M, Sudhakar R. Facilitating narrative medical discussions of type 1 diabetes with computer visualizations and photography. Patient Educ Couns 2006;64:313–21.
[50] Stott NCH, Rollnick S, Rees MR, Pill RM, Anwar A, Besh S. Innovation in clinical method: diabetes care and negotiating skills. Fam Pract Manag 1995;12:413–8.
[51] White B. Improving chronic disease care in the real world: a step-by-step approach. Fam Pract Manag 1999;6:38–43.
[52] Alamo MM, Moral RR, Perula de Torres LA. Evaluation of a patient-centered approach in generalized musculoskeletal chronic pain/fibromyalgia patients in primary care. Patient Educ Couns 2002;48:23–31.
[53] Prueksaritanond S, Tubtimtes S, Asavanich K, Tiewtranon V. Type 2 diabetic patient-centered care. J Med Assoc Thai 2004;87:345–52.
[54] Fortin M, Bravo G, Hudon C, Vanasse A, Lapointe L. Prevalence of multimorbidity among adults seen in family practice. Ann Family Med 2005;3:223–8.
[55] Britt HC, Harrison CM, Miller GC, Knox SA. Prevalence and patterns of multimorbidity in Australia. Med J Aust 2008;189:72–7.
[56] Uijen AA, van de Lisdonk EH. Multimorbidity in primary care: prevalence and trend over the last 20 years. Eur J Gen Pract 2008;1:28–32.
[57] AAFP. Primary care; 2010, Retrieved November 3, 2010 from http://www.aafp.org/online/en/home/policy/policies/p/primarycare.html#Parsys0002.
[58] Negarandeh R, Oskouie F, Ahmadi F, Nikravesh M, Hallberg IR. Patient advocacy: barriers and facilitators. BMC Nurs 2006;5.
[59] Hudon C, Fortin M, Haggerty J, Lambert M, Poitras ME. Measuring patient perception of patient-centered care: a systematic review of tools for family medicine. Ann Family Med 2010;9:155–64.
[60] Williams G, Frankel R, Campbell T, Deci E. Research on relationship-centered and healthcare outcomes from the Rocherter Biopsychosocial Program: a self-determination theory integration. Families Syst Health 2000;18:79–90.
[61] Williams G, Patrick H, Niemiec C, Williams L, Divine G, Lafata J, et al. Reducing the health risks of diabetes: how self-determination theory may help improve medication adherence and quality of life. Diabetes Educ 2009;35:484–92.
[62] Williams G, Lynch M, Glasgow R. Computer-assisted intervention improves patient-centered diabetes care by increasing autonomy support. Health Psychol 2007;26:728–34.
[63] Hudon C, St-Cyr Tribble D, Bravo G, Poitras ME. Enablement in healthcare context: a concept analysis. J Eval Clin Pract 2010 [published online].
[64] St-Cyr Tribble D, Gallagher F, Bell L, Caron C, Godbout P, Leblanc J. Empowerment interventions, knowledge translation and exchange: perspectives of home care professionals, clients and caregivers. BMC Health Serv Res 2008;8:117.
[65] Rogers CR. Psychometrics tests and client-centered counseling. Educ Psychol Meas 1946;6:139–44.
[66] Rogers CR. Significant aspects of client-centered therapy. Am Psychol 1946;1:415–22.
[67] Rogers CR. Client-centered psychotherapy. Sci Am 1952;187:1–7.
[68] Crawford Shearer NB, Reed PG. Empowerment: reformulation of a non-Rogerian concept. Nurs Sci Q 2004;17:253–9.
[69] Rundqvist E, Lindstrom UA. Empowerment and authorization—who provides and who receives? A qualitative meta-study of empowerment in nursing research: a caring science perspective. Int J Human Caring 2005;9:24–32.
[70] Chang LC, Li IC, Liu CH. A study of the empowerment process for cancer patients using Freire's dialogical interviewing. J Nurs Res 2004;12:41–9.