REVIEW

Addressing Hidden Curricula that Subvert the Patient-Centeredness “Hub” of the Pharmacists’ Patient Care Process “Wheel”

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Objective. This systematic review’s purpose is to improve clarity for the meaning of patient-centered care in the JCPP Pharmacists’ Patient Care Process referenced in ACPE Standard 10.8, and provide an initial foothold for faculty to address “hidden curricula” that undermine the concept. Our corresponding objectives were to (1) identify and describe the conceptualizations defining patient-centered care from the pharmacy literature; and (2) compare the meaning of patient-centeredness in the pharmacy literature with the construct’s seminal conceptualizations from other professional groups.

Findings: The search protocol produced 61 unique sources from the pharmacy literature. More than two-thirds of these results lacked precise use of terminology consistent with the literature or operational depth or theoretical exploration of the term’s meaning. The remaining sources yielded two separate conceptualizations of patient-centeredness with three commonalities, but key differences between their grounding in the construct’s seminal sources in the broader health care literature.

Summary: The pharmacy literature clarifies the meaning of patient-centered care in the patient-pharmacist encounter, but additional understanding is needed at the meso- (ie, health care systems) and macro-levels (ie, legislation, accreditation, payment, workforce dynamics) of care. This expansion of understanding may reduce dissonance between the formal and hidden curricula on patient-centeredness associated with health professional student disillusionment, contempt for faculty and institutions, and reductions in empathy and ethics. Increasing use of integrative case-based training, equitably blending patient-centeredness considerations with other curricular content, represents one strategy for reducing the presence and negative impact of hidden curricula.

Keywords: patient-centered care; hidden curricula; Pharmacists’ Patient Care Process; ACPE standards; systematic review

INTRODUCTION

The Joint Commission of Pharmacy Practitioners’ Pharmacist Patient Care Process “encompasses a contemporary and comprehensive approach to patient-centered care that is delivered in collaboration with other members of the health care team” and the patient-centered care at the conceptualization’s center.¹ The 2016 Accreditation Council for Pharmacy Education’s (ACPE) Standard 10.8 charges that curricula of schools and colleges of pharmacy prepare students “to provide patient-centered collaborative care as described in the PPCP model.”² Guidance documents for the ACPE standards and PPCP thoroughly describe five process-oriented steps for patient care, but provide little detail about how to define or conceptualize the patient-centered care concept.^{1,3} This reflects an observation by Ekman and colleagues that the principal challenge for patient-centeredness research and practice implementation is not getting stakeholders to recognize its applicability and importance, but that the construct’s meaning is not self-evident.⁴ Cribb likens the problem of defining patient-centeredness to assembling a jigsaw puzzle with pieces from separate sets that are incomplete or even mixed with other sets; not having enough of the correct pieces prevents a meaningful or complete picture.⁵ A granular understanding of what pieces pharmacists contribute to the broader patient-centered care puzzle is necessary to ensuring informed and consistent incorporation of patient-centeredness into the curricula of schools and colleges of pharmacy. Such an understanding may also extend recognition of the pharmacist’s roles and expertise in team- and value-based care models beyond optimizing safe and effective use of medication products for treating what is the matter with patients, to managing medications through direct patient care that optimally achieves what matters to patients.

A scan of the pharmacy literature reveals considerably less breadth and depth exploring the meaning of patient-centeredness than other health-related fields like medicine, nursing, and health policy.⁵ These other groups have invested significant attention to reconciling different areas of emphasis, and sometimes divergent meanings, of patient-centeredness among care populations (eg, age, disease), settings (eg, outpatient, inpatient, nursing home), and professional disciplines (eg, medicine, nursing).⁵⁻⁷ This intensive area of research has also led to realizations about the existence of “hidden curricula” in health professional education that undermine intended lessons about the importance, meaning, and practice of patient-centered care.⁸⁻¹⁰

“Hidden curricula” refer to tacit, inconspicuous, and commonly unintended lessons about what is “actually expected” from students that differ from a school’s formal standards. They include premises that may be transmitted to students in hallway conversations between faculty or observed paternalistic dynamics in student-faculty interactions. Students may encounter hidden curricula during experiential education or internships in a practice where holistic, biopsychosocial-oriented care is neither the primary goal nor a reimbursable value of health care practice. Consequently, students may primarily allocate their finite amount of time and energies into knowledge and skills embodying a pathophysiological-oriented focus on drug products, rather than providing holistic care. Kerr’s article, “On the folly of rewarding A while hoping for B” highlights the dangers of misunderstanding the incentives underlying behavior and has even been discussed in the context of pharmacy education.^{11,12}

These veiled lessons send strong socializing messages about a professional identity made up of widespread attitudes, behaviors, and care norms that often supersede what is formally taught.⁸ The influence of a hidden curricula can be positive, negative, or neutral, but is thought to negatively impact student learning and adoption of patient-centeredness content in health professional education. For example, Haidet and colleagues¹³ found that patient-centered attitudes among medical students showed a negative relationship with each successive year of medical training, despite emphasis in formal curricula on patient-centered communication, values, and behaviors. Furthermore, dissonance between the hidden and formal curricula over the importance of patient-centeredness has been linked to student disillusionment with their profession, contempt for the faculty and institution, and reductions in empathy and ethics. The most successful students are those who become adept at fulfilling what the system “really” wants from them rather than those who are the “brightest.”^{8,14}

The idea of “hidden curricula” is not new to pharmacy education, having been identified by Gardner,¹⁵ Bradley and colleagues,¹⁶ and others in the area of patient safety; however, recognition of the presence and impact hidden curricula have for patient-centered care in schools and colleges of pharmacy appears limited. A cursory review of PubMed and Web of Science conducted by Hafferty and O’Donnell with the keywords “hidden curriculum” produced over 500 journal articles from, “dentistry, dietetics education, ethics, nursing, psychiatry, evidence-based teaching, pediatrics, primary care, orthopedics, obstetrics/gynecology, anesthesia, urology, orthopedics, physical therapy, internal medicine, oncology, emergency medicine, health care analysis, political science, urban studies, and architecture,” but makes no mention of pharmacy.⁸ A better understanding of the meaning and origins of the patient-centeredness and patient-centered care constructs by pharmacy educators can therefore improve the design, delivery, and monitoring of curricula to ensure that students have the “requisite knowledge and skills [and] maturation of professional attitudes and behaviors” to carry out the PPCP as charged in ACPE standard 10.²

This purpose of this systematic literature review is to clarify the meaning of patient-centered care within the PPCP as it relates to ACPE’s Standard 10.8. Our goals for this methodical and comprehensive approach is to familiarize faculty with a key, but understudied component of the PCPP often undermined by hidden curricula and provide them with an initial foothold for identifying the biases of “hidden curricula” within their own programs that are not readily exposed without explicitly searching for them.¹⁵ Detecting and addressing dissonance between formal and hidden curricula embedded in course content, institutional policies, practice experiences, resource allocation, and other curricular components can improve student development of knowledge, skills, attitudes, and behaviors necessary for team-based, patient-centered care consistent with the PPCP. Thus, this review aims to (1) identify and describe conceptualizations defining patient-centered care from the pharmacy literature; and (2) compare the meaning of patient-centeredness in the pharmacist patient care literature with the construct’s seminal conceptualizations from other professional groups that also comprise the health care team.

METHODS

The systematic review consisted of five successive steps detailed below: Identification; Screening; Eligibility; Inclusion; and Categorization.

Identification

Patient-centeredness conceptualizations in the pharmacy literature were primarily identified using an electronic database-driven protocol. Nine health care databases (see Figure 1) relevant to the review's aim were searched in the titles of peer-reviewed articles, conference abstracts, book reviews, magazines, and short commentaries published in English using the search terms "patient-centered*," "person-centered*," "client-centered*," "patient-focused*," "patient empowerment," "patient engagement," "patient self-management," and "shared decision making." A search layer of "Pharm* not pharmacological" for source abstracts was added to eliminate results focused on pharmaceutical products, rather than care.

The initial search layer was limited to publication titles in order to reduce results using patient-centered terminology in ways that were perfunctory (ie, term not defined or used inconsistently with precise meanings found in the patient-centeredness literature) or exhibited insubstantial use (ie, appropriately used or generally defined but lacking operational depth or theoretical exploration of component concepts). Search terms containing the word "centered" were duplicated with an alternative spelling of "centred" to account for regional differences. Additional sources were identified using an iterative snowballing technique consisting of recommendations from patient-centeredness content experts' or frequently cited references in the literature that were not produced by the electronic search protocol.

Screening and Eligibility

A reading list was created by screening out abstracts or opening sections of identified sources with "perfunctory use" of patient-centeredness terminology. The resulting list was read in full by the primary author who then discarded sources with "insubstantial use" of patient-centeredness terminology.

Inclusion and Categorization

Eligible sources from the reading list included for analysis were then categorized as "Pharmacy Only" (ie, defines, describes, references, or conceptualizes patient-centered terminology solely in pharmacist practice), "Seminal Only" (ie, defines, describes, references, or conceptualizes patient-centered terminology from seminal sources outside of the pharmacy literature), or "Seminal & Pharmacy" (ie, defines, describes, references, or conceptualizes patient-centered terminology in the pharmacy and seminal health care literature).

RESULTS

Figure 1 summarizes the search protocol process and results. The electronic database search identified 99 non-duplicated results with another seven sources identified by alternative methods. Examples of sources screened out for "Perfunctory Use" defined patient-centered care as any pharmacist service delivered within a Patient-Centered Medical Home,¹⁷ any course in Clinical, Social or Experiential Pharmacy,¹⁸ or used the terminology imprecisely.¹⁹ Examples of sources deemed ineligible for "Insubstantial Use" were publications that appropriately used terms and concepts like shared decision-making,²⁰ patient-focused care,²¹ patient engagement,²² and patient self-management²³ but lacked operational depth or theoretical exploration applied to patient-centeredness. From the 21 sources selected for categorization and qualitative synthesis, seven classified as "Pharmacy Only," four as "Seminal Only," and 10 as "Pharmacy & Seminal." All "Pharmacy Only" and "Pharmacy & Seminal" sources were connected to one of two patient-centeredness conceptualizations for pharmacy: (1) Wolters and colleagues' "Utrecht's Model for Patient-Centred Communication in the Pharmacy" (UMPA)²⁴ and Kibicho & Owczarzak's "Patient-Centered Pharmacy Services Model" (PCPS).²⁵

The UMPA conceptualization was produced from a narrative review influenced by Pharmaceutical Care Practice, which identifies patient-centered care as one of three building blocks informing the '*Philosophy of Pharmaceutical Care Practice*.'²⁶⁻²⁸ All seven "Pharmacy Only" sources defined, described, or referenced patient-centered care according to Pharmaceutical Care Practice, which before the UMPA did not have an explicit patient-centeredness conceptualization. Cipolle, Strand, & Morley define patient-centered care as "care that places the patient's needs as the focus of the clinician's work...[that] maintains the patient as a holistic being."²⁷ This meaning appears to be largely influenced by patient-centeredness elements originating from the medical literature, which is reflected in the UMPA's component concepts.²⁹

The UMPA (see Figure 2) has two hierarchically arranged components; the upper half is "Patient-Centredness" consisting of 10 theoretical concepts organized into "Patient," "Pharmacist," and "Therapeutic Relationship" groupings and the lower half is a more concretely operationalized "Pharmaceutical Consultation." This review will focus on the UMPA's upper-half because a theoretical understanding of patient-centeredness is necessary to inform appropriate applications of patient-centered care. However, additional insight into operationalizations of patient-centeredness with connections to seminal sources from the overarching health care literature are provided elsewhere by Naughton,³⁰ and

Shoemaker & de Oliveira.^{28,31} These authors describe patient-centered communication best practices for pharmacists (eg, openness, active listening, speaking plainly).

Seven of the UMPA's ten theoretical concepts are traceable to three authors from the medical literature: Mead & Bower³² (ie, '*biopsychosocial perspective*,' '*patient as unique person*,' '*doctor as person*,' and '*therapeutic alliance*') and Stewart and colleagues³³ (ie, '*health promotion*,' '*building a relationship*,' and '*context & time*'). The UMPA contains or approximates all of the component theoretical concepts from these seminal authors except one: Mead & Bower's '*sharing power & responsibility*' (ie, the clinician having "sensitivity to the patient's preferences for information and shared-decision-making and respond[ing] appropriately to these."³²). However, this single theoretical concept is congruent with the shared problem defining and shared decision-making elements of the "Pharmaceutical Consultation." The remaining three UMPA concepts (ie, '*trust*,' '*required skills*,' and '*empathy*') also reference contributors from the medical tradition that were highly influenced by Mead & Bower and Stewart.³⁴⁻³⁹ Definitions and cross-alignment for the UMPA's concepts are depicted in Table 1.

It is important to note two direct connections between terms from the medical literature depicted in the UMPA with Cipolle, Strand, & Morley's Pharmaceutical Care Practice. The first link is the pharmacy trio's concepts of the 'medication experience' and 'drug therapy problems' with Mead & Bower's 'patient as a unique person,' which Stewart and colleagues described as the clinician exploring the patient's (1) feelings about, (2) meaning for, (3) perceived impact of, and (4) expectations of clinician actions to address disease and illness.^{27,32,33} Cipolle, Strand, & Morley apply these four subdimensions to their pharmacist-specific concepts by substituting the word "medications" for "disease and illness."²⁷

The second connection is the proximity in meaning of Cipolle, Strand, and Morley's '*therapeutic relationship*' and Mead & Bowers' '*therapeutic alliance*,' which are both depicted in the UMPA.^{27,32} Each concept refers to shared patient-clinician goals and a bond built on elements like trust, respect, empathy, and commitment. However, only the '*therapeutic alliance*' extends beyond the medication experience and recognizes a patient's right to and preference for a clinician-oriented power dynamic for treatment selection.

*Kibicho & Owczarzak's "Patient-Centered Pharmacy Services Model" (PCPS)*²⁵

The PCPS was developed for and informed by care of patients with HIV in a community pharmacy setting. The model has five concepts positioned at the top of Figure 3, with corresponding pharmacy services beneath each respective concept. The five theoretical concepts will be the focus of this section given the theoretical scope of this review.

Each of the PCPS concepts were congruent with at least two of the three seminal patient-centeredness conceptualizations from the medicine, nursing, and health policy literatures. Concept representation in the PCPS approximating these respective literatures may be attributed to the model's focus on multiple levels of care (ie, micro-, meso-, macro-) and minimal linkage to the literature (ie, cited only one source traceable to a seminal conceptualization).⁴⁰ The absence of more direct references to the overarching patient-centeredness literature and a search protocol with limited detail has raised questions about whether the PCPS actually represents a theoretical model instead of a commentary about the ideal qualities for care of patients with HIV.⁴¹ Furthermore, the PCPS does not account for patients' goals of therapy which may not always align with those of the pharmacist. This idea is at odds with the ethos of patient-centeredness and Pharmaceutical Care Practice. Still, the compositional congruence of the PCPS with patient-centeredness concepts beyond the micro-level of care and medical literature, represent two strengths not found in the UMPA. Table 2 defines each PCPS theoretical concept and identifies its compositional congruence with patient-centeredness seminal conceptualizations from the overarching health care literature.

DISCUSSION

This systematic review identified two conceptualizations of patient-centeredness in pharmacist practice. Both conceptualizations shared commonalities in their focus and approach, but only one was grounded in a seminal conceptualization of patient-centeredness found in the broader health care literature.

First, both the UMPA and PCPS are primarily focused on the patient-pharmacist encounter (ie, the micro-level of patient-centeredness), although the PCPS also formally recognizes factors at the level of health care systems (ie, meso-level of care). Another commonality is their "process-oriented" approach that adopts a patient perspective to identify a non-ordinal list of essential elements and activities captured by patient-centeredness. This contrasts with a systems-oriented approach of step-wise progression through sequential layers needed to create conditions conducive to organizing and delivering care services that center on the individualized needs of each patient. Finally, both models reference health outcomes as the value produced from patient-centered care and do not articulate an inherent ethical value independent from these outcomes.

This comparison of the UMPA and PCPS identifies areas of common meaning for patient-centered care within the PPCP, but does not address whether either conceptualization represents a solid foothold for pharmacy educators as patient-centeredness relates to the construct's interpretation in the seminal literature from other health care team professions. This is better assessed by raising two important questions: (1) What patient-centered care content should be included in schools and colleges of pharmacy curricula as it relates to the PPCP; and (2) How should this content be most effectively incorporated into curricula, especially given what is known about hidden curricula undermining formal instruction on patient-centered care in other health care professions? The following sections provides recommendations pertinent to these questions.

Recommendations

Integrate into pharmacy curricula both what is known and unknown about patient-centered care

Purposeful and systematic integration of patient-centeredness in pharmacy curricula requires a grounding in the literature. The UMPA meets this criterion better than the PCPS, resulting in more fidelity and applicability across diverse outpatient pharmacist care settings and services, especially involving team-based care approaches. This connection to the literature also provides the UMPA with support from a broader evidence base than the PCPS and avoids unfounded assumptions (ie, patient goals and expectations for pharmacist services may not align or be identical to those held by the pharmacist). These qualities also makes the UMPA more helpful for finding inconsistencies between formal and hidden curricula, potentially improving the credibility of educators with students.⁴² Furthermore, recent work by Wolters and colleagues provides direct instruction for integrating the UMPA into curricular design, teaching methods, and assessment techniques using general education principles.⁴³

However, the UMPA's almost sole focus on the micro-level of care suggests it may not be sufficient in providing a comprehensive approach to patient-centered curricula. While Wolters and colleagues identify some meso- and macro-level factors (eg, inconducive care space or workflows for private counseling, a patient's unfamiliarity with pharmaceutical care), these considerations are not present in their conceptualization and represents a glaring gap. Thus, pharmacy curricula should incorporate content that directly acknowledges what is unknown about patient-centeredness in pharmacist practice at these levels of care,⁴⁴ just as it acknowledges the theoretical elements that are known. For example, tailoring care through biopsychosocial perspective is critical for addressing social determinants of health, but less is known about viable reimbursement models for pharmacists in community-integrated care approaches that do not seamlessly fit with standardized, algorithmic clinical guidelines. Including curricular elements of patient-centeredness at the meso- and macro-levels of care are particularly important because these areas are where the forces fostering hidden curricula have been most prominent in other health professions.⁸

Providing an interpretive lens that allows students to grapple with these inherent tensions among different stakeholders is also an important educational exercise that can help students to clarify their values, future roles on the health care team, and reconcile discrepancies arising from hidden curricula. For example, a macro-level perspective of patient-centeredness through a health policy lens (ie, legislation, regulation, accreditation)⁴⁵ may be interested in how well a service fits with societal values and engenders trust in the system, while payors might concentrate more intensely on the impacts on consumer behavior, marketplace dynamics, and cost savings. Likewise, approaching care from a purely clinical viewpoint is primarily concerned with improving surrogate markers for preventing or reducing pathophysiological risk through the expertise of the caregiver (eg, cardiovascular events), while patients themselves may be most interested with how their care is experienced, advances their goals, and impacts their quality of life. Patient-centered care may often produce desirable outcomes aligned with the interests of each stakeholder simultaneously, but also may not in many situations. Therefore, finding activities that help students practice balancing these perspectives is important. These might include exercises in the valuation of their clinical expertise with a patient's medication experience in the context of developing a therapeutic alliance or therapeutic relationship.⁴⁶ This idea overlaps with the second question of interest derived from the review's findings, which describes strategies that educators can take to incorporate this content into formal curricula while recognizing and mitigating the undermining hidden curricula around patient-centered care.

Recommendations for Assessing and Addressing Hidden Curricula

The most common starting point for assessing hidden curricula on patient-centeredness is through its identification, best accomplished by faculty empowering students to question and share when they receive conflicting messages from curricular content or experiences about the meaning and importance of patient-centeredness.⁴⁷ Additionally, faculty should have a concrete understanding of patient-centeredness in the formal curricula, which can be illustrated by building a concept map displaying information about:

- What, if any, and in what context/courses/activities are patient-centeredness concepts consistent with the literature explicitly taught or modeled?
- Who teaches the concepts?
- How much time is spent on them in terms of credit hours, actual class time, and out of class work in comparison to other concepts?
- How are students evaluated for proficiency from a Bloom's taxonomical perspective?).

Comparing the answers to these questions in relation to other content in curricula reveals underlying messages sent to students about what is considered most important, how they should allocate their time, and what should form the basis of their professional identity. For instance, if the number and difficulty of courses, session hours, experiential activities (eg, lab), and examinations (eg, OSCEs, NAPLEX) for pathophysiological-oriented content is substantially higher than those focused on the biopsychosocial perspective, the message becomes clear: what is the matter with a patient takes precedence of what matters to a patient in pharmacist practice. A different, but congruent message is sent to students if the quantity and depth for the five process steps at the rim of the PPCP overshadows the patient-centered care concept at its hub.

Fortunately, curricular content does not have to be a zero-sum game if there is commitment from institutional stakeholders to foster graduates that will be most valuable to the patients in contemporary, team-based care approaches. Day and Benner assert this requires an honest prioritization of integrative case-based training that balances and scaffolds student acquisition of the essential knowledge, awareness, skills, and attitudes that meets this goal.⁴⁸ An integrative case-based approach also means moving away from a privileging of the mental aspects of cognition and learning (ie, question and answer examinations taken at a desk or computer) over physical and social elements. This reflects the reality that patient-centered care takes place not only in what we think and know, but how we communicate and act. This acknowledgement upends a widespread defense that students do not need as much time or instruction on patient-centered care compared to other pharmacy topics because it is "commonsense."

Just as it may not be feasible to follow or address all drug therapy problems in a single encounter, so too is the case for remedying components of hidden curricula. Haidet and Teal recommend assessing and addressing one or two particularly powerful, undermining components of patient-centeredness and to focus on developing interventions for those.⁴⁷ Depending on context, this may involve enlisting a senior student to advise more junior students or finding well-respected faculty that can serve as message bearers about the presence and effects of hidden curricula. It is also important to remember that the forces driving hidden curricula, the actions of individuals that are consistent with it, and the negative impacts it produces are more than likely unintentional. Thus, working towards a more common awareness of what patient-centered care means, identifying the nature of its value, and tailoring its application to the person and the situation can help pharmacy educators mitigate the presence and negative impact of hidden curricula.

Limitations and Future Research

The search protocol's exclusion of non-English publications may have omitted important contributions not written in this language. Furthermore, patient-centeredness research is primarily based on Western health care approaches and may not reflect universal values, principles, and preferences held by all patients. The source screening and eligibility determination criteria may have also produced less representation of publications that solely framed patient-centered care around concrete care practices and measures without description of its theoretical basis. Future research should map the congruence of the UMPA with how patient-centered care is operationalized for the teaching and assessment in schools and colleges of pharmacy. This is important for understanding the current curricular landscape related to patient-centered care and enabling evaluation of its consistency and impact in pharmacy education.

CONCLUSION

The importance of patient-centered care in pharmacist practice is reflected by its central placement in the PPCP and corresponding inclusion in the ACPE Standard 10.8. However, this systematic review reveals ambiguity for schools and colleges of pharmacy in determining the specific patient-centeredness content that should be taught and how to integrate this content most effectively into curricula given what is known about the undermining forces from hidden curricula on patient-centered care. The findings suggest that schools and colleges of pharmacy can look to the UMPA as a starting point for incorporating patient-centered care in curricula, but also acknowledge the need to expand beyond the patient-pharmacist care encounter to the meso- and macro-levels of patient care. Incorporating patient-centered care in a meaningful manner that positively impacts the education of pharmacy students also requires identifying and evaluating the hidden curricula that may provide students information that conflicts with the goals of patient-centered care. Such hidden curricula may contribute to student disillusionment with the pharmacy profession, contempt for the faculty and institution, and reductions in empathy and ethical interactions with patients. Increasing the use of integrative case-based training,

equitably blending patient-centeredness considerations with other curricular content, represents one strategy for possibly mitigating the presence and negative impact of hidden curricula on patient-centeredness.

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REFERENCES

1. Joint Commission of Pharmacy Practitioners. The Pharmacists' Patient Care Process. Published 2014. Accessed December 17, 2016. <https://jcphp.net/patient-care-process/>
2. Accreditation Council for Pharmacy Education. *Accreditation Standards and Key Elements for the Professional Program in Pharmacy Leading to the Doctor or Pharmacy Degree.*; 2015. Accessed December 16, 2020. <https://www.acpe-accredit.org/pdf/Standards2016FINAL.pdf>
3. Accreditation Council for Pharmacy Education. *Guidance for the Accreditation Standards and Key Elements for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree (Guidance for Standards 2016).*; 2015. Accessed February 1, 2021. <https://www.acpe-accredit.org/pdf/GuidanceforStandards2016FINAL.pdf>
4. Ekman I, Swedberg K, Taft C, et al. Person-centered care-Ready for prime time. Published online 2011. doi:10.1016/j.ejcnurse.2011.06.008
5. Harding E, Wait S, Scrutton J. The state of play in person-centred care: A pragmatic review of how person-centred care is defined, applied, and measured featuring selected key contributors and case studies across the field. *Heal Policy Partnersh.* Published online 2015:139. Accessed June 25, 2019. <http://www.healthpolicypartnership.com/wp-content/uploads/State-of-play-in-person-centred-care-full-report-Dec-11-2015.pdf>
6. de Silva D. Helping measure person-centred care. *Heal Found.* Published online 2014:80. Accessed August 4, 2018. www.health.org.uk/helpingmeasurepcc
7. Kitson A, Marshall A, Bassett K, Zeitz K. What are the core elements of patient-centred care? A narrative review and synthesis of the literature from health policy, medicine and nursing. *J Adv Nurs.* 2013;69(1):4-15. doi:10.1111/j.1365-2648.2012.06064.x
8. Hafferty FW, O'Donnell JF. *The Hidden Curriculum in Health Professional Education.* (Hafferty FW, O'Donnell JF, eds.). Dartmouth College Press; 2014. Accessed February 3, 2021. <https://books.google.com/books?hl=en&lr=&id=tSXZBQAAQBAJ&oi=fnd&pg=PP1&ots=RcRUd472MI&sig=5LNx0li6Km7cPur0Gczuvt56StQ#v=onepage&q&f=false>
9. MacMillan K. The Hidden Curriculum: What Are We Actually Teaching about the Fundamentals of Care? *Nurs Leadersh (Tor Ont).* 2016;29(1):37-46. doi:10.12927/cjnl.2016.24644
10. Martimianakis MA (Tina), Michalec B, Lam J, Cartmill C, Taylor JS, Hafferty FW. Humanism, the Hidden Curriculum, and Educational Reform. *Acad Med.* 2015;90(11 Association of American Medical Colleges Medical Education Meeting):S5-S13. doi:10.1097/ACM.0000000000000894
11. Kerr S. On the Folly of Rewarding A, While Hoping for B. *Acad Manag J.* 1975;18(4):769-783. doi:10.5465/255378
12. Latif DA. A Management Skills Course for Pharmacy Students. *Am J Pharm Educ.* 2004;68(1):3-.
13. Haidet P, Dains JE, Paterniti DA, et al. Medical student attitudes toward the doctor-patient relationship. *Med Educ.* 2002;36(6):568-574. doi:10.1046/j.1365-2923.2002.01233.x
14. Snyder BR. *The Hidden Curriculum.* Knopf; 1971.
15. Gardner S. Car keys, house keys, easter eggs, and curricula. *Am J Pharm Educ.* 2010;74(7). doi:10.5688/aj7407133
16. Bradley F, Steven A, Ashcroft DM. The Role of Hidden Curriculum in Teaching Pharmacy Students About Patient Safety. *Am J Pharm Educ.* 2011;75(7). Accessed February 2, 2021. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3175654/pdf/ajpe757143.pdf>
17. Cooke RL, Lipowski E, Magness JW. Achieving Recognition as Patient-Centered Care Providers: We are our own best advocates. *J Am Pharm Assoc.* 2013;53(3):234-238. doi:10.1331/JAPhA.2013.13515
18. Nunes-da-Cunha I, Arguello B, Martinez FM, Fernandez-Llamos F, Martinez Martinez F, Fernandez-Llamos F. A Comparison of Patient-Centered Care in Pharmacy Curricula in the United States and Europe. *Am J Pharm Educ.* 2016;80(5):83. doi:10.5688/ajpe80583

19. Hope L, Hope DL, King MA, Hattingh HL. Impact of Socratic teaching on pharmacy students' critical thinking and patient-centredness regarding emergency contraception. *Pharm Educ*. 2017;17(1):55-59. Accessed August 1, 2019. <http://hdl.handle.net/10072/342711><http://pharmacyeducation.fip.org/pharmacyeducation/article/view/473>
20. Rosenberg-Yunger ZRS, Verweel L, Gionfriddo MR, MacCallum L, Dolovich L. Community pharmacists' perspectives on shared decision-making in diabetes management. *Int J Pharm Pract*. 2018;26(5):414-422. doi:10.1111/ijpp.12422
21. Vogel DP, Ivey MF. ASHP statement on the role of the pharmacist in patient-focused care. *Am J Heal Pharm*. 1995;52(16):1808-1810. doi:10.1093/ajhp/52.16.1808
22. Bates JS, Auten J, Sketch MR, et al. Patient engagement in first cycle comprehensive chemotherapy consultation pharmacist services and impact on patient activation. *J Oncol Pharm Pract*. 2019;25(4):896-902. doi:10.1177/1078155219832644
23. Smith L, Brown L, Bundy A, et al. A Learning and Teaching Resource on Patient Self-Management of Chronic Pain. *Am J Pharm Educ*. 2013;77(2):9. Accessed August 1, 2019. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3602859/pdf/ajpe77235.pdf>
24. Wolters M, van Hulten R, Blom L, Bouvy ML. Exploring the concept of patient centred communication for the pharmacy practice. *Int J Clin Pharm*. 2017;39(6):1145-1156. doi:10.1007/s11096-017-0508-5
25. Kibicho J, Owczarzak J. A Patient-Centered Pharmacy Services Model of HIV Patient Care in Community Pharmacy Settings: A Theoretical and Empirical Framework. *AIDS Patient Care STDS*. 2012;26(1):20-28. doi:10.1089/apc.2011.0212
26. Hepler CD, Strand LM. Opportunities and responsibilities in pharmaceutical care. *Am J Hospital Pharm*. 1990;47(3):533-534.
27. Cipolle RJ, Strand LM, Morley PC. *Pharmaceutical Care Practice : The Patient-Centered Approach to Medication Management Services*. McGraw-Hill Medical; 2012.
28. de Oliveira DR, Shoemaker SJ. Achieving patient centeredness in pharmacy practice: openness and the pharmacist's natural attitude. 2006;46(1):56-64. Accessed July 2, 2018. <http://ovidsp.tx.ovid.com.ezp1.lib.umn.edu/sp-3.30.0b/ovidweb.cgi>
29. Cipolle RJ, Strand LM, Morley PC. *Pharmaceutical Care Practice*. 1st ed. McGraw-Hill Professional Publishing; 1998.
30. Naughton C. Patient-Centered Communication. *Pharmacy*. 2018;6(1):18. doi:10.3390/pharmacy6010018
31. Shoemaker SJ, Ramalho de Oliveira D. Understanding the meaning of medications for patients: the medication experience. *Pharm World Sci*. 2008;30(1):86-91. doi:10.1007/s11096-007-9148-5
32. Mead N, Bower P. Patient-centredness: a conceptual framework and review of the empirical literature. *Soc Sci Med*. 2000;51(7):1087-1110. Accessed June 21, 2018. <http://www.ncbi.nlm.nih.gov/pubmed/11005395>
33. Stewart M, Brown JB, Weston WW, McWhinney IR, McWilliam CL, Freeman TR. *Patient-Centered Medicine : Transforming the Clinical Method*. 1st ed. SAGE Publications Inc.; 1995.
34. Little P, Everitt H, Williamson I, et al. Observational study on effect of patient centredness and positive approach on outcomes of general practice consultations. *Br Med J*. 2001;323(7318):908-911. doi:10.1136/bmj.323.7318.908
35. Epstein RM, Franks P, Fiscella K, et al. Measuring patient-centered communication in Patient-Physician consultations: Theoretical and practical issues. *Soc Sci Med*. 2005;61(7):1516-1528. doi:10.1016/j.socscimed.2005.02.001
36. Krupat E, Frankel R, Stein T, Irish J. The Four Habits Coding Scheme: Validation of an instrument to assess clinicians' communication behavior. doi:10.1016/j.pec.2005.04.015
37. Michie S, Miles J, Weinman J. Patient-centredness in chronic illness: what is it and does it matter? *Patient Educ Couns*. 2003;51(3):197-206. Accessed July 3, 2018. <http://www.ncbi.nlm.nih.gov/pubmed/14630376>
38. Epstein R, Street R. Patient-Centered Communication in Cancer Care: Promoting healing and reducing suffering. *Natl Cancer Inst*. 2007;(NIH Publication 07-6225):222. doi:NIH Publication No. 07-6225
39. Howie J, Heaney D, Maxwell M. Quality, core values and the general practice consultation: issues of definition, measurement and delivery. *Fam Pract*. 2004;21(4):458-468. doi:10.1093/fampra/cmh419
40. Epstein RM. The science of patient-centered care. *J Fam Pract*. 2000;49(9):805-807. Accessed July 31, 2019. <http://www.ncbi.nlm.nih.gov/pubmed/11032204>
41. Constand MK, MacDermid JC, Dal Bello-Haas V, Law M. Scoping review of patient-centered care approaches in healthcare. *BMC Health Serv Res*. 2014;14(1):271. doi:10.1186/1472-6963-14-271
42. Konner M. *Becoming a Doctor: A Journey of Initiation in Medical School*. Penguin Books; 1988. Accessed February 3, 2021. <https://www.amazon.com/Becoming-Doctor-Journey-Initiation-Medical/dp/0140111166>

43. Wolters M, van Paassen JG, Minjon L, Hempenius M, Blokzijl M-R, Blom L. Design of a Pharmacy Curriculum on Patient Centered Communication Skills. *Pharmacy*. 2021;9(1):22. doi:10.3390/pharmacy9010022
44. Halfon N, Long P, Chang DI, Hester J, Inkelas M, Rodgers A. Applying A 3.0 Transformation Framework To Guide Large-Scale Health System Reform Framework For Population Health. *Health Aff*. 2014;33(11). doi:10.1377/hlthaff.2014.0485
45. Scholl I, Zill JM, Härter M, et al. An Integrative Model of Patient-Centeredness – A Systematic Review and Concept Analysis. Wu W-CH, ed. *PLoS One*. 2014;9(9):e107828. doi:10.1371/journal.pone.0107828
46. Isetts B, Olson A, Schommer J. Reframing the Medication Experience in Pharmacy Using Seminal Concepts of Patient-Centered Care—Implications for Practice. *Pharmacy*. 2021;9(1):9. doi:10.3390/pharmacy9010009
47. Haidet P, Teal CR. Organizing Chaos: A conceptual framework for assessing hidden curricula in medical education. In: Hafferty FW, O'Donnell JF, eds. *The Hidden Curriculum in Health Professional Education*. Dartmouth College Press; 2014:322.
48. Day L, Benner P. The Hidden Curriculum in Nursing Education. In: Hafferty FW, O'Donnell JF, eds. *The Hidden Curriculum in Health Professional Education*. Dartmouth College Press; 2014:322.
49. McCormack B, McCance T, Klopner H. *Person-Centred Practice in Nursing and Health Care : Theory and Practice*. Accessed April 26, 2020. <https://www.wiley.com/en-us/Person+Centred+Practice+in+Nursing+and+Health+Care%3A+Theory+and+Practice%2C+2nd+Edition-p-9781118990568>
50. Gerteis M, Picker/Commonwealth Program for Patient-Centered Care. *Through the Patient's Eyes : Understanding and Promoting Patient-Centered Care*. Jossey-Bass; 2002.

Table 1. Definitions and Seminal Sources of the Component Concepts found in the “Utrecht Model of Patient-Centred Communication in Pharmacy” (UMPA)²⁴

UMPA Concept (Conceptual Group)	Definition	Source from Medicine
Biopsychosocial Perspective (Patient)	Understanding the patient as a whole person, which includes biological, psychological, and social context aspects.	Stewart et al ³³ ; Mead & Bower ³² ; Howie et al ³⁹ ; Epstein et al ³⁵
Health Promotion (Patient)	Empowering individuals to take charge of and enhance their health.	Stewart et al ³³ ; Little et al ³⁴
Patient as Person (Patient)	Understanding an individual’s unique experience of the illness including its person meaning, expectations, fears, and other elements that extend beyond objective clinical indicators.	Mead & Bower ³² ; Stewart et al ³³ ; Little et al ³⁴ ; Howie et al ³⁹
Building a Relationship (Therapeutic Relationship)	Conscious effort to establish and improve a long-term relationship between the patient and clinician that is effective.	Stewart et al ³³ ; Little et al ³⁴
Therapeutic Alliance (Therapeutic Relationship)	A necessary, although insufficient, component of patient-centeredness encompassing the construction by the patient and clinician of shared therapeutic goals as well as a strengthening of their personal bond.	Mead & Bower ³² ; Epstein & Street ³⁸ ; Howie et al ³⁹
Trust (Therapeutic Relationship)	A reflection of the patient’s rapport with clinician, assurance in their motivations, and confidence in their expertise. This is particularly pertinent when the patient is experiencing uncertainty.	Epstein & Street ³⁸
Context & Time (Therapeutic Relationship)	The patient and clinician being realistic about what can be accomplished given limitations on time, energy, emotional capacity, and other resources.	Stewart et al ³³
Required Skills (Pharmacist)	The competency of the clinician; Wolters et al define this as the pharmacist’s proficiency in pharmacotherapeutics and communication.	Howie ³⁹
Empathy (Pharmacist)	A necessary building block for the development of a therapeutic relationship referring to the clinician’s capability for sharing in the feelings being experienced by the patient.	Krupat ³⁶ ; Epstein & Street ³⁸
Pharmacist as Person (Pharmacist)	The clinician’s consciousness of their personal and subjective attributes that impact their professional practice and care of the patient.	Mead & Bower ³²

Table 2. Concepts, Level of Care, Definitions, and Compositional Congruence with Seminal Patient-

PCPS Concept (Level of Care)	Definition	Compositional Congruence with Seminal Patient-Centeredness Concepts by Professional Group		
		Medicine	Nursing	Health Policy
Patient Contextualization (Micro)	Assessing the specific conditions in that health and illness is experienced by individuals, including socioeconomic /environmental [eg, income, lifestyle, housing, health literacy, etc.] psychological [eg, anxiety, depression, denial of HIV diagnosis, etc.] that govern or eclipse their needs in terms of healthcare.	Patient as a unique person ^{32– 34,39}	Working with the patient’s beliefs & values ⁴⁹	X
Customized Interventions (Micro)	Using the socioeconomic/ environmental, psychological, and medical information from the contextualization process to develop an appropriate, multi-dimensional individualized treatment plan that can improve medication adherence.	Bio-psychosocial perspective ^{32,33,35, 39}	Providing holistic care ⁴⁹	X
Patient Empowerment (Micro)	“a process that recognizes an individual’s ability to meet his or her own needs, solve his or her own problems, and mobilize personal and environmental resources to promote self-efficacy, assert control, and support for his or her own health.” ²⁵	Sharing power & responsibility ³²	Patient’s care involvement ⁴⁹	X
Provider Collaborations (Meso)	Collaboration among clinical (eg, specialists, nurses) and non-clinical (eg, case managers) providers that “facilitates coordination of care [eg, medical information] and ensures that patients have access to the resources they need in a timely manner.” ²⁵	X	Effective staff relationships; Team power sharing; Appropriate skill mix; Healthful culture ⁴⁹	Care coordination & integration ⁵⁰
Sustained Relationships (Micro)	“Patient-provider relationships characterized by a caring attitude, responsiveness, access, and respect [that] fosters patient trust, influences adherence to treatment, and leads to better clinical results and higher patient satisfaction.” ²⁵	Therapeutic alliance ^{32,38,39}	Authentic engagement ⁴⁹	Respect for patient preferences, values, & needs ⁵⁰

X Respective PCPS concept lacks congruence with seminal patient-centeredness concepts originating from the professional health group represented in the column

Figure 1: Search Protocol Flow Diagram informed by Preferred Reporting Items for Systematic

Reviews and Meta-Analyses (PRISMA)

List of 10 "Pharmacy & Seminal" Sources

1. Cipolle RJ, Strand LM, Morley PC. *Pharmaceutical Care Practice : The Patient-Centered Approach to Medication Management Services*. McGraw-Hill Medical; 2012.
2. Dowse R. Reflecting on patient-centred care in pharmacy through an illness narrative. *Int J Clin Pharm*. 2015;37(4):551-554. doi:10.1007/s11096-015-0104-5
3. Kibicho J, Owczarzak J. A Patient-Centered Pharmacy Services Model of HIV Patient Care in Community Pharmacy Settings: A Theoretical and Empirical Framework. *AIDS Patient Care STDS*. 2012;26(1):20-28. doi:10.1089/apc.2011.0212
4. Naughton C. Patient-Centered Communication. *Pharmacy*. 2018;6(1):18. doi:10.3390/pharmacy6010018
5. Sánchez AM. Teaching patient-centered care to pharmacy students. *Int J Clin Pharm*. 2011;33(1):55-57. doi:10.1007/s11096-010-9456-z
6. Wolters M, van Hulten R, Blom L, Bouvy ML. Exploring the concept of patient centred communication for the pharmacy practice. *Int J Clin Pharm*. 2017;39(6):1145-1156. doi:10.1007/s11096-017-0508-5
7. Worley-Louis M.M., Schommer J.C. Pharmacists' therapeutic relationships with older adults: The impact of participative behavior and patient-centeredness on relationship quality and commitment. *J Soc Adm Pharm*. 1983;19(5):180-189.
8. Kassam R, Volume-Smith C, Albon SP. Informed shared decision making: An exploratory study in pharmacy. *Pharm Pract (Granada)*. 2008;6(2):57-67.
9. Kassam R, Albon S, Bainbridge L, Sutton M, Collins J. Learning by Doing: Enhancing Interprofessional Students' Awareness of Informed Shared Decision-Making. *Internet J Allied Heal Sci Pract*. 2003;4(4).
10. Chewing B, Sleath B. Medication decision-making and management: A client-centered model. *Soc Sci Med*. 1996;42(3):389-398. doi:10.1016/0277-9536(95)00156-5

Note: Nine databases searched were CINAHL, Digital Dissertations, Health & Psychosocial Instruments, MEDLINE, PsychInfo, Sociological Abstracts, Academic Search Premier, Cochrane, and EMBASE. Duplicate records were filtered by excluding MEDLINE results from CINAHL & EMBASE.

Figure 2: “Utrecht’s Model for Patient-Centred Communication in the Pharmacy”²⁴

Figure 3: Kibicho & Owczarzak’s “Patient-Centered Pharmacy Services Model”²⁵

Theoretical Framework	Patient Contextualization	Customized Interventions	Patient Empowerment	Provider Collaborations	Sustained Relationships
Specific Pharmacy Services	<ul style="list-style-type: none"> ● Individual patient assessments ● Comprehensive reviews ● Medication reviews & reconciliations 	<ul style="list-style-type: none"> ● Resolve patient barriers ● Medication delivery services ● Multi-level interventions 	<ul style="list-style-type: none"> ● Medication education ● Physical & mental adherence strategies 	<ul style="list-style-type: none"> ● Assess readiness to start therapy ● Monitor therapeutic response ● Resolve socioeconomic barriers 	<ul style="list-style-type: none"> ● Monitor adherence & behavioral changes ● Assess for Depression

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