

COMMENTARY

“Practitioner Wellness, Person Centered Healthcare, Reflective Practice and the Mission of Mindfulness Training. ” Commentary on Garneau, K., Hutchinson, T., Zhan, Q. & Dobkin, P.L. (2013). Cultivating Person-Centered Medicine in Future Physicians. *European Journal of Person Centered Medicine* 1 (2) 468-477

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Introduction

A primary purpose of healthcare is the enhancement of health, wellbeing and in understanding and responding to the illness experience in individual patients [1]. The first step of almost all healthcare delivery takes place when an individual person receives treatment, advice or counseling from a healthcare professional. However, health professions are stressful to those who enter and practice them. Manifestations of stress, including depression and ‘burnout syndrome’, are evidenced in the early years of study and continue through clinical training and beyond [2]. All disciplines and clinical specialties are affected. Regardless of discipline or career stage, with costs of training rising and a practitioner shortage rapidly emerging [3,4], interruption, or even curtailment, of training and practice is expensive to the healthcare system. Understandably, practitioner stress, burnout and, reciprocally, practitioner wellness, is attracting increasing attention [2,5,6]. Given the potential impact of practitioner wellness, burnout and stress on the quality of healthcare delivery, research directly connecting these clinical entities to educational and healthcare outcomes has been surprisingly sparse. Extensive work has been invested in the development and psychometric validation of measurement scales related to wellness, burnout and stress. However, validation efforts have rarely extended to assessment of the ability of the same scales to predict practitioner or clinical outcomes.

Mindfulness training is a well established intervention [7]. It has been utilized for purposes that include

adjunctive therapy for psychobehavioral as well as organic medical conditions [8,9]. It has also been advanced as a remedy for the full spectrum of stress-related impairments of healthcare professionals [7]. Garneau *et al.* report outcomes related to a 4-week elective course of mindfulness training in medical students. Although their outcome assessments were confined to wellness-related measurement scales, the authors represent their study and its results to be relevant to the enhancement of person-centered medicine, a construct that they do not define. How does mindfulness training relate to the issues of person-centered care amidst today’s climate of concern for effectiveness of health services? In the discussion that follows we will comment on the strengths and weaknesses of Garneau’s study in the context of previous research in this area and will also consider these broader issues. Were practitioner and student mindfulness demonstrably related to person-centered care, it would seem to imply a connection between such training, the patient experience of healthcare and perhaps even healthcare outcomes. Indeed, an integration of the experiential dimensions of care and the goals and objectives of scientifically informed clinical practice perhaps constitutes one of the “holy grails” of the healthcare system [10]. It constitutes a stated goal of the evidence-based medicine movement [11]. The appropriateness of such an integration [12,13] has been suggested, but not explicitly developed, in the medical literature on mindfulness. We will briefly explore the relevance of such an aspiration to the research agenda pursued to date by the advocates of mindfulness in medicine [9].

The Garneau Study

Garneau *et al.* adapted an existing program for mindfulness training developed within their family medicine program at McGill University in Montreal, Quebec [7]. They modified an 8-week course framework that has been used both at McGill and at the University of Rochester School of Medicine by Epstein and others [2], shortening it to 4 weeks to accommodate an elective rotation schedule of 58 4th year medical students who attended the course and enrolled in the study. The course involved meditation exercises conducted at home, group study sessions and readings. Assessments included online completion of questionnaires one week before and one week following the completion of the course. The surveys included several previously developed and psychometrically validated scales, including the Maslach Burnout Inventory [14], the Perceived Stress Scale [15], the Beck Depression Inventory II [16] and two scales developed for the purpose of measuring mindful self-awareness [17,18]. Significant differences were observed in most, but not all, of the scales and subscales. In addition to the quantitative scale assessments, qualitative experiential comments and observations were offered by one of the 58 enrolled students and were included in the report.

Critical Commentary

The Garneau study is not without limitations, not all which are acknowledged by the authors. Their outcome assessments were limited to measurement scales, some of which have been validated against outcomes such as burnout-related behavior and clinical depression in practitioners, but not against healthcare outcomes in patients. Furthermore, they were assessed in direct conjunction with the training experience, obviating any assessment of longer term effectiveness. Other studies of effectiveness of such training as a means of avoiding practitioner burnout have reported improvement in longer term outcomes measures [2]. The limitation posed by Garneau *et al.*'s short evaluation interval is potentially compounded by the fact that the training experience was provided during a period of protected time in which the students were disengaged from clinical responsibilities and academic assessments. Hence, the subjects' pre-course assessment reflected attitudes and behaviours measured in the context of normal stresses of undergraduate medical studies, while their post-course assessments were made at the end of a period of freedom from such stresses. The reader must wonder whether the improvement in scores observed by Garneau *et al.* resulted, all or in part, from what amounted to a vacation retreat from the stresses of medical school, rather than from the effects of the specific training they received. This possibility is somewhat mitigated by the fact that studies using longer outcome intervals [2,19] and which did not create overtly artificial contextual circumstances [2,20] observed as or more favourable results, at least with respect to the same burnout scale assessment.

Regarding the excerpts from the selected student's personal notes, Garneau *et al.* do not tell us how this student was selected. Since it is not possible for the reader to assess whether the selected student's responses were representative of those of the larger group, the voice of this one student may be unique and idiosyncratic. It is clear that, for this student, the program provided a month to pause and reflect on the experience of being a medical student. What is less clear is the extent to which the student's reflections should be interpreted as attributable to the training protocol.

Garneau *et al.*'s assertion of relevance of their training program to the achievement of person-centered healthcare is largely based on their interpretation of this student's narrative, the text of which touches on issues of patient-practitioner relationship and the dichotomy between the value placed on empathy and compassion by faculty and the social reality of the wards. Garneau *et al.*'s curriculum and assessment protocols did not otherwise address these matters. Furthermore, their arguments verge on tangential reasoning. For example, in their introduction, they point to a systematic review published in the 1990's [21] as substantiation of relevance of mindfulness training to improved patient outcomes. In fact, neither the studies included in that review, nor the review authors' interpretation of their findings, were directly related to mindfulness training or assessment. We will return to this issue after a brief background consideration of mindfulness training and its relationship to the concept of reflective practice.

Mindfulness training, reflective practice and healthcare - the need for a hypothesis

Garneau *et al.* are not the first to study programs aimed at practitioner wellness and stress reduction in medical undergraduates, nor to use mindfulness training to these ends. Shiralkar *et al.* [22] found 13 randomized trials that met the eligibility criteria for their systematic review on stress reduction for medical students. Interventions included meditation, mindfulness training and altered educational frameworks such as shortened academic year and different grading systems. Importantly, not all trials of mindfulness training aimed at decreasing stress reduction in medical undergraduates have involved training outside of the context of clinical and study activities. Warnecke *et al.* observed favorable effects on stress and depression scale scores as a result of exposure to mindfulness training via audio CD [19]. Krasner *et al.* [2] administered a mindfulness training program to 70 primary care physicians and, as did Garneau *et al.*, they emphasized practitioner burnout, stress and empathy among their targeted assessments. Other studies have explored potential effectiveness of mindfulness training in ameliorating burnout in both physicians and nurses [20,23-25].

The mission of mindfulness training in medicine and healthcare has evolved. Its application to issues of practitioner burnout is relatively new. Mindfulness training was introduced into the medical field by Kabat-Zinn and collaborators in the 1980's as a therapeutic modality for

treating patients with chronic pain and stress related disorders [26]. Subsequently, it emerged as a program for healthcare practitioners. Epstein, writing in the *Journal of the American Medical Association* in 1999 [12], heralded mindfulness training as a means of instilling professionalism in clinical learners. In the same article, he suggested that mindfulness is “a logical extension of reflective practice” [12]. Epstein *et al.*'s emphasis on a relationship between mindful and reflective practice is also echoed elsewhere [13,27]. Although not addressed by Garneau *et al.*, we perceive that such a relationship potentially allows formulation of a useful construct which, if validated, could support their otherwise undifferentiated assertion regarding relevance of their stress reduction program to person-centered healthcare delivery.

Although potentially appealing, Epstein's 1999 formulation regarding mindfulness and reflective practice [12] is, at face value, garbled. As a reflection of Eastern spiritual and philosophical tradition, the concept of mindfulness and mindful meditation is thousands of years old [13]. Buddhism and Eastern philosophy in general, is notably at variance with fundamental precepts of Western philosophy, particularly by virtue of its rejection of mind-body dualism [28]. Compelling attempts to achieve integration of Eastern philosophy and the empirical foundations of Western science [29] have perhaps fueled the perception of the relevance of mindfulness training to the challenges of clinical practice. Champions of mindfulness training in medicine have, citing Francisco Varela [29] and others, emphasized its relevance to the concept of reflective practice [9,12,13,27]. However, the nature of the relationship between these entities needs to be understood appropriately if a viable thesis is to emerge. Reflective practice, much more recent than the mindfulness tradition, was advanced and developed as a concept of professional behavior by Schon *et al.* [30-33]. Arguing against the notion of a profession as involving purely technical expertise and the application of predefined principles to new problems, Schon invoked Polanyi's concept of the role of tacit knowledge [34] to portray the process as an interaction of pre-existing precepts with the need to improvise new principles, solutions and, implicitly, knowledge in the course of approaching complex tasks [32]. It is this interplay of tacit and explicit knowledge in the course of exercising professional skills that Schon defined as ‘reflective practice.’

Keeping in mind the distinct historical roots of mindfulness and reflective practice, we propose that an actual hypothesis is required for Epstein's 1999 thesis to become actionable. We suggest that such an hypothesis is furthermore sorely needed if the glaring conceptual chasm separating mindfulness training of practitioners and achievement of person-centered care, suggested by Garneau *et al.*, is to be crossed. The thesis might go as follows. Mindfulness corresponds to a state of conscious awareness and receptivity uniquely conducive to maximizing the capacity of an individual to tap cognitive resources required to achieve the objectives of relationship-centered care [35]. We reference relationship-centered care, which in some ways may be seen as the progenitor of person-centered care [35], because the

literature on it is uniquely and consistently framed from the perspective of a defined epistemology [36]. Our prototype thesis is completed by the premise that Schon's reflective practice, evidence-based practice as an integrated clinical discipline, the development of professionalism in clinical learners and the capacity for complex problem solving and practitioner wellness are mutually facilitated by the state of mindfulness and potentially enhanced by mindfulness training. That is, mindfulness, by this thesis, constitutes a kind of undifferentiated cognitive substrate that is uniquely suited, if not essential, to the achievement of the specific goals just enumerated by healthcare professionals across disciplines and levels of training. A pivotal issue is whether this cognitive substrate of self-awareness constitutes a sufficient, a necessary, or merely a facilitative condition with respect to realization of those more differentiated goals. Secondary issues involve the effectiveness and practicality of mindfulness training in enabling practitioners to attain the mindful state under the stresses of real world practice and study and whether such effectiveness can be shown to favorably affect healthcare outcomes related to the targeted capabilities.

Summarizing, mindfulness corresponds to a millennia old Eastern spiritual and philosophical tradition characterized by a multiplicity of embedded disciplines and perspectives. Reflective practice is a construct developed to address and define the foundational and definitional premises of a profession and of professional expertise. As such, the principles of reflective practice, which pertain to all professions, appears to be a plausible mediator between mindfulness, which pertains to the entire scope of human experiential being and the practice of the healthcare professions. This formulation is potentially plausible insofar as the epistemologies that pertain to these entities, including to the practice and delivery of healthcare [10], seem aligned and commensurate. It is relevant to explore briefly the reflective practice construct and how it has been developed within the health professions. We then will consider the specific issues raised by Garneau *et al.*'s far reaching vision of mindfulness training and person-centered healthcare.

Reflective practice was introduced as a construct by David Schon in 1983 [31], building on early work on the cognitive processes that are related to professional behavior [30]. Schon and collaborators introduced the notions of different modes of reflection relevant to practice in healthcare. Specifically, they emphasized a concept referred to as “reflection-in-action” [31,32], a concept of cognition which involves both tacit and explicit knowledge and awareness and is akin to the notion of the ‘tacit dimension’ elaborated by Michael Polanyi [34]. Schon contrasted reflection-in-action, a process unfolding in tandem with the performance of a professional's task and dynamically related tacit knowledge, to ‘reflection-on-action’, a reflective deliberation taking place after the fact and exploring greater depths of meaning and interpretation. The latter may invoke techniques borrowed from creative writing, such as brought into the framework of healthcare by narrative medicine as a clinical discipline [37]. Schon's vision of reflective practice was inherently linked to problem solving and the process through which

professional expertise is harnessed and applied to new complex problems.

Reflective practice has particularly been developed within nursing, where it has been expanded to encompass not only individual but team-based reflective processes [38,39]. Such processes are variably structured [38] and the need for a structured approach is a matter of published debate [40]. Most importantly, however, the nursing literature on reflective practice, following Schon, describes the reflective practitioner as one who uses reflection to revisit experience, to learn from it and to shape future actions. That is, reflective practice focuses on the practice of healthcare itself. For example, nurse educators use reflective thinking as part of the learning process through the application of tools, such as journaling, with an overall aim to cultivate knowledge and improve clinical practice [41]. Significantly, the nursing discipline characteristically conceives of reflective practice as a framework that applies not only to individuals but to groups of practitioners within a discipline working in a single healthcare setting [38]. Were the approach extended to all disciplines as well as to administrative and managerial functions within a healthcare organization, reflective practice, through the principle of interplay between tacit and explicit knowledge, would approach the similarly premised concept of organizational knowledge creation of Nonaka [28]. In addition to active development of reflective practice as a socially mediated problem solving approach, nursing has also embraced mindfulness-based stress reduction [23-25]. However, it would not appear that either the nursing or the medical practice literature has attempted to explore the thesis that mindfulness training enhances the effectiveness of reflective practice groups. Furthermore, research connecting efforts in any of these areas, that is, mindfulness or reflective practice, to tangible improvements in healthcare processes or clinical outcomes has been uniformly sparse. Such an effort faces challenges, some of which we address in the next section of this commentary.

Measuring Mindfulness *versus* Mindful Measurement

Garneau *et al.* interpret their observations as supporting the notion that mindfulness training, administered to healthcare professionals and learners, is likely to have a favorable impact on person-centered medicine. As previously noted, Garneau *et al.* do not offer a definition of person-centered medicine, nor do their quantitative outcome measurements address it. If we consider person-centered care to correspond to a model of healthcare delivery and to be aligned with the concept of relationship-centered care [36], then research relevant to validating such a model would need to use scales and assessment tools that had themselves been shown to correlate with relevant healthcare outcomes. An even more direct approach would be to assess such outcomes in conjunction with mindfulness training protocols. The latter approach would require use of a control group and would carry with it the many challenges of research on effectiveness of

healthcare educational initiatives, such as avoidance of crossovers between study participants and achieving prognostic balance between study groups. Development of appropriately validated measurement scales is therefore a more practical approach in the short term. Such work has been undertaken in conjunction with assessment of mindfulness training, but, from this standpoint, is still in an early phase of development.

Garneau *et al.* utilized a total of 6 structured assessment tools in evaluating the effect of their medical students program, of which the Maslach Burnout Inventory constituted a particularly widely used and time tested instrument. The other instruments included previously validated scales for stress and depression, an *ad hoc* survey to assess student satisfaction with the course experience and 2 scales more directly related to the mindfulness state. The latter are of particular interest. Grossman *et al.*, in a systematic review and meta-analysis on effectiveness of mindfulness-based stress reduction [42], commented on the need to operationalize mindfulness as a construct for results of any kind of research to be attributable to it. In other words, changes in some validated measure of mindfulness would have to be shown to predict changes in dependent variables being assessed as outcomes. Grossman *et al.* found the studies on mindfulness as adjunctive treatment for the conditions targeted in the studies included in their review, including fibromyalgia, cancer, other sources of chronic pain and psycho-behavioral conditions such as depression, deficient in this respect, but did note that scales for quantification of mindfulness were under development. One of these, developed by Brown *et al.* [17], was among those used by Garneau *et al.*, who also administered a mindfulness-related scale developed by Neff *et al.* [18]. Comparing scores obtained at the end of the 4-week course to those assessed at the outset, Garneau observed statistically significant improvements in all scales used, including the two mindfulness-related measures. They did not, however, directly correlate changes in the latter two scales to improvements in depression, stress and burnout scales. Krasner *et al.* [2], on the other hand, using a mindfulness scale derived from a different source [43,44], were able to report such correlations. The process of developing mindfulness scales is complex and is beyond the scope of this commentary to explore. The instrument reported by Neff *et al.* [18] and used by Garneau *et al.* was derived from a total of 9 independently developed scales, some of which were themselves composites of independent factors. Baer *et al.*'s instrument [43,44], included by Krasner *et al.* [2], was derived in turn from that of Neff and a total of 9 other scales! All of the scales within this panoply are reported to have undergone rigorous psychometric validations of internal consistency and reliability. What is unclear is the extent to which any or all of them are capable of predicting not only practitioner outcomes, such as measured by depression and burnout scales, but patient important, or "person-centered" healthcare outcomes attributable to the kind of training protocols used by Garneau *et al.* That is, what is the evidence that changes in mindfulness measurements are not only psychometrically, but also clinically, valid? Precedents for such validation exist. Hojat *et al.* [45]

recently reported that high scores on a previously established practitioner empathy scale were associated with better transitional patient outcomes such as hemoglobin A1c and high density lipid values in their patients. Zhang *et al.* [46] demonstrated a connection between scores on the Maslach Burnout Inventory and healthcare practitioner outcomes such as intent to leave their current job. However, no studies have reported a direct chain of association between improved mindfulness ratings and outcomes directly relevant to patients.

We suggest that for the mindfulness training of practitioners to be empirically validated, the reflective practice component would need to be included in the equation. Dawber's recently reported work suggests that this should be possible within organized team settings in connection with reflective practice groups [39]. The qualitative research approaches reported by Dawber should naturally lead to quantitative assessment of process and patient outcomes. Mindfulness training could easily be incorporated as an adjunct to these efforts. As suggested previously, incorporation of reflective practice into a model of mindfulness training and person-centered care has the advantage of adding a potential mechanism, or set of mechanisms, by which enhancement of practitioner mindfulness might materially lead to more effective healthcare.

Harmonizing mind and action in patient care

Garneau *et al.* suggest implicitly that successful mindfulness training should lead to something they refer to as "person-centered medicine". By way of mechanism, they suggest that such training enhances non-specific attributes such as empathy and communication skills. Person-centered care needs an explicit construct definition. Provisionally, we would assume that it entails a requirement that medical care offer the best likelihood of favorable health outcomes aligned with the values, priorities and social context of the individual patient-as-person. If we accept this assumption, Garneau *et al.*'s formulations seem incomplete and unsatisfying. Delivery of healthcare entails acquisition of professional expertise [47-49]. This in turn requires practice. The issue at hand is what has to be practiced to achieve expertise in person-centered medical care. The relevance of Schon's concept of professionalism [31], originally invited by Epstein [12], seems pertinent. Effective delivery of person-centered care entails delineating a problem from the perspective of a patient-as-person and calls upon reflective cognition, previously learned precepts and improvisational skills not reducible to such precepts. This complex integrated skill set requires practice if expertise is to develop [47,49]. It cannot be reduced to a simple state of consciousness.

The narrative testimony of the medical student participant selected by Garneau *et al.* helps to illuminate the need for integrated teaching and learning if the value of medical education is to be maximized. The student describes the stresses of medical school including the experience of a classmate committing suicide. He goes on

to highlight the dichotomy between the nominal prescriptions on the part of faculty for development of empathy, communication skills and sensitivity to patient concerns. He mentions "wellness" retreats, calculated to bolster such prescriptions. He then contrasts the harsh, sometimes even brutal, reality of the ward experience in which the aforesaid values and objectives are frequently violated. He quotes a segment of one of his written evaluations in which a supervisor advises of the need to separate emotional involvement with patient predicaments from the needs of objective decision-making. Interestingly, he appears to interpret the call for an emotionally dissociated state with the attitude expected of an "evidence-based" demeanor towards patients. He describes the mindfulness training experience as a particularly effective wellness retreat, enhanced by specific techniques such as breathing exercises which can be used at times of particular stress in the course of clinical rotations. The student reports more attention to communication skills in dealing with patients and to cultivating a less hurried attitude. He does not appear to have fully reconciled the need for reflection and self-awareness with the pressures to become quick and efficient in evaluating and attending to patients' needs.

The student's reflections are intriguing. They point to the need to reconcile "humanist" and "evidence-based" mindsets in the course of caring for patients. Such a reconciliation is not a new idea. The evidence-based practice movement initially embraced the dispassionate objectivity of the epidemiological world view [50]. Subsequent, relatively superficial attempts by the epidemiological advocates to cede equal credence to experiential, patient-centered and tacit dimensions of clinical knowledge and expertise fell short [10,51], suggesting that solutions need to be sought on a deeper level [10]. Significantly, advocates of mindfulness training in the health professions have suggested that the standoff might be resolved through mindfulness [12,13]. Epstein, in the same 1999 article in which he draws a relationship between mindfulness and reflective practice [12], asserts that "Mindfulness can link evidence-based and relationship-centered care and help to overcome the limitations of both approaches." To support this assertion, Epstein offers tangentially related references and a few very general lines regarding relevance of priority setting and awareness of personal biases to the process of delivering evidence-based care. It would seem that little has been done in the way of active pursuit of unification of constructs between Epstein's 1999 publication and the study by Garneau almost 15 years later.

Conclusion

What would it mean to reconcile the experiential domain of mindful reflection and that of objective science within which evidence-based practice has traditionally sought its home? The conceptual components of such an integration are identifiable and have been so for some time. We perceive that the failure to move forwards on such an effort

has been largely ideological. The evidence-based practice advocates implicitly suggested that, if practitioners mastered the tools of critical evaluation of research literature and the skills required to search electronic databases, they would 'know what to do' when it came to integrating knowledge of research into routine patient care. Conversely, proponents of mindfulness appear to believe that, if a practitioner is properly self-aware and has absorbed special techniques for inducing a reflective state of consciousness amidst the stresses and strains of professional life, they will 'know what to do' when it comes to the technical side of delivering healthcare services. Such an inference is suggested by the formulations of Garneau *et al.* and of previous authors. Both of these assumptions regarding practitioner ability to automatically 'know what to do' given mastery of only one of two essential dimensions of awareness, knowledge and skill, violate Schon's notion of professional expertise and hence our working hypothesis.

It would seem, then, that an active process is required to achieve a truly integrated "person-centered" clinical expertise. Such a process requires the development of appropriate constructs and related tools that traverse the boundaries between reflective cognition on the part of a healthcare practitioner and the concerns, choices, decisions and healthcare outcomes of specific patients for whom they care. One such model with corresponding tools is in the literature [52,53]. Others are possible. Without such efforts, teaching of evidence-based practice characteristically deteriorates to a catechism of dry statistics disconnected from awareness of patient healthcare concerns and experience. Similarly, exercises such as mindfulness training seem likely to provide a vehicle for stress reduction, but fall short of adequately opening the doors to person-centered healthcare. Reflective practice groups constitute a promising vehicle for socializing the process of reflection, analysis and action for improvement. They also address the potentially formidable social and cultural barriers described poignantly by Garneau *et al.*'s student witness. Whether mindfulness training can enhance the effectiveness of such efforts is as yet unknown.

Conflicts of Interest

The authors report no conflicts of interest.

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