CONCEPT ANALYSIS

Mindfulness in nursing: an evolutionary concept analysis

Lacie White

Accepted for publication 15 May 2013


Abstract

Aim. To report an analysis of the concept of mindfulness.

Background. Mindfulness is an emerging concept in health care that has significant implications for a variety of clinical populations. Nursing uses this concept in limited ways, and subsequently requires conceptual clarity to further identify its significance, use and applications in nursing.

Design. Mindfulness was explored using Rodgers evolutionary method of concept analysis.

Data Sources. For this analysis, a sample of 59 English theoretical and research-based articles from the Cumulative Index to Nursing and Allied Health Literature database were obtained. The search was conducted between all-inclusive years of the database, 1981–2012.

Review Methods. Data were analysed with particular focus on the attributes, antecedents, consequences, references and related terms that arose in relation to mindfulness in the nursing literature.

Results. The analysis found five intricately connected attributes: mindfulness is a transformative process where one develops an increasing ability to ‘experience being present’, with ‘acceptance’, ‘attention’ and ‘awareness’. Antecedents, attributes and consequences appeared to inform and strengthen one another over time. Mindfulness is a significant concept for the discipline of nursing with practical applications for nurse well-being, the development and sustainability of therapeutic nursing qualities and holistic health promotion.

Conclusion. It is imperative that nurse well-being and self-care become a more prominent focus in nursing research and education. Further development of the concept of mindfulness could support this focus, particularly through rigorous qualitative methodologies.

Keywords: concept analysis, evolutionary method, holistic, mindfulness, nursing, presence, self-care
Why is this research or review needed?

- Stress, burnout and high attrition rates in nursing are an ongoing concern; the application of mindfulness in nursing requires further exploration as one possible response to addressing these concerns.
- Mindfulness is an emerging concept in health care and research communities demonstrating significant value for holistic health promotion, yet remains relatively undeveloped in nursing.
- The concept of mindfulness has similar theoretical perspectives to those of holistic nursing practices and requires conceptual clarification for further development in the discipline.

What are the three key findings?

- The concept of mindfulness encompasses intricately connected attributes: it is a transformative process, where one develops an increasing ability to experience being present with awareness, acceptance and attention.
- Mindfulness can support improving physical, emotional, psychosocial and spiritual well-being, and can help translate holistic health promotion from theory to practice.
- Integrating mindfulness into education and practice can enhance therapeutic nursing qualities and support a shift from a purely theoretical way of knowing to one that is more embodied and holistic.

How should the findings be used to influence policy/practice/research/education?

- With access to training, nurses can gain personal experience of being and practising mindfulness, subsequently giving them tools to promote holistic health practices across various clinical settings and health populations.
- The mechanisms of mindfulness are poorly understood; qualitative research designs will contribute to the evolving science of mindfulness and would help ground the concept in nursing.

Introduction

Mindfulness is an emerging concept in health care that has gained substantial interest in research communities in the last two decades (Mindfulness Research Guide 2011). Situated in 2,600-year-old Eastern Buddhist philosophy, mindfulness was taught as a means to alleviate human suffering (Matchim et al. 2011b) and cultivate compassion (Ludwig & Kabat-Zinn 2008). The alleviation of suffering is a universal concern, particularly relevant in the field of health care where there is extensive contact with suffering, and additionally healthcare providers themselves struggle to maintain their own health and well-being in the midst of caring. Mindfulness is now being adopted in Western medicine and psychology as a secular perspective with mainstream application (Koerbel & Zucker 2007, Teixeira 2010). Empirical evidence is accumulating that mindfulness programmes and practices can improve physical and psychological health, and promote overall well-being in many different health settings (Roth & Creaser 1997, Proulx 2003, Matchim et al. 2008). In addition, systematic reviews of healthcare providers reveal that practitioners who incorporate mindfulness into their personal and professional lives demonstrate an improved sense of well-being and ability to employ self-care strategies (Irving et al. 2009, Escuriex & Labbé 2011).

Despite growing attention, the concept of mindfulness remains ambiguous and abstract (Tusae & Edds 2009). Proulx (2003) suggests that mindfulness practices promote ‘a holistic self-regulatory approach to health, congruent with nursing values and beliefs’ (p. 201). With similar theoretical perspectives to that of nursing (Cohen-Katz et al. 2004, Smith et al. 2005, Poulin et al. 2008), mindfulness has the potential to inform nursing education, practice and research levels. However, to integrate mindfulness more directly into the discipline of nursing, a clearer understanding of the concept is required.

Background

The integration of mindfulness into Western healthcare settings has been largely credited to Jon Kabat-Zinn who developed the first standardized mindfulness-based programme in 1979 at the University of Massachusetts Medical School (Baer 2010). This mindfulness-based stress reduction (MBSR) programme involves eight 2.5-hour weekly group sessions, a daylong silent retreat, and a commitment to practice mindfulness activities for 45 minutes, 6 days a week. MBSR continues to predominate interventions and outcome research related to mindfulness (Poulin et al. 2008). Evidence suggests that mindfulness is supportive of a variety of clinical populations, including but not limited to, the improvement of chronic and cancer-related pain, sleep disorders, eating disorders, psoriasis and a variety of psychological disorders (Cohen-Katz et al. 2004).

In addition, other variations of MBSR: mindfulness-based cognitive therapy (MBCT; Segal et al. 2002), mindfulness-based relationship enhancement (MBRE; Carson et al. 2004), mindfulness-based wellness education (MBWE; Poulin et al. 2008), mindfulness-based eating...
awareness treatment (MB-EAT; Kristeller & Hallett 1999) and mindfulness-based medical practice (MBMP; Irving et al. 2012) are emerging. Acceptance and commitment therapy (ACT; Hayes et al. 1999) and dialectical behaviour therapy (DBT; Linehan 1993) also have mindfulness processes embedded in them and are demonstrating empirical benefits (Lynch et al. 2007, Ruiz 2010). Although appearing supportive to the growing movement of mindfulness in mainstream health promotion, the variety between and in all of these programmes may be a contributing factor in the challenge to create a working definition of mindfulness.

Abercrombie et al. (2007) suggest, ‘it is essential that holistic nurses conduct and participate in research that is relevant to their clinical practice’ (p. 33). Mindfulness as a holistic intervention has many potential benefits for nurse well-being and for the varied health populations they serve, and subsequently requires nursing-directed research. This cannot be undertaken without a clearly defined concept, as concepts are the necessary foundation in building theory (Rodgers 2000). However, a conceptual analysis of mindfulness is challenging as Sharpiro and Carlson (2009) highlight that ‘attempting to write about mindfulness in an academic and conceptual way is in some ways antithetical to the very nature of mindfulness’ (p. 3), which is grounded in an experiential process. Despite this, conceptual development is important so that mindfulness can be fully integrated into health care.

Rodgers evolutionary method (Rodgers 2000) was used for the purpose of this concept analysis on mindfulness. The philosophical perspective embedded in this method views concepts as context-dependent, dynamic and constantly evolving. The method is inductively focused and is “a means of identifying a consensus or the ‘state of the art’ of the concept” (Rodgers 2000, p. 97). The purpose of this method is not to arrive at a conclusion or definitive definition of the concept, but rather to describe the current use of a concept for further development of nursing knowledge. This iterative process is supported through six primary activities (Table 1).

### Data sources

To gain clarity on how the concept of mindfulness has been integrated into the discipline of nursing, the leading database for nurses, the Cumulative Index to Nursing and Allied Health Literature (CINAHL) was used. This database includes virtually all-nursing and allied health journals (Polit & Beck 2008) and, therefore, offers a perspective on how mindfulness is being integrated specifically into nursing. Mindfulness was not a major subject heading in the database. No other search terms for this concept were included in the final sample to provide a clearer picture of its use separate from other concepts. The dates searched were all-inclusive of the CINAHL database, and fell between 1981 and 2012. Inclusion criteria included English journal articles with theoretical or research-based content. The key search terms and decisions made to arrive at final sample are described in Figure 1. The final sample for this analysis included 59 articles that fell between 1994–2012.

All items in the sample were identified with a number and read through once to support immersion in the concept, and to gain a general tone of the individual and collective works. Code sheets for the organization of data were created individually for attributes, antecedents, consequences, references, related terms and nursing-specific implications for research, education and practice. Methodological and reflexive journals were started at the beginning of this study to ensure rigour and to retrace steps as necessary throughout the analysis.

Formal analysis was delayed until the completion of data collection as Rodgers (2000) cautions: ‘there are few occurrences more detrimental in concept analysis than the researcher getting stuck on a particular idea and, consequently, being unable to allow the characteristics of the concept to emerge from the data’ (p.94). Formal analysis began with individually examining coding sheets to establish themes. In each category, common themes were organized and reorganized until trends were comprehensively and clearly identified and subsequently labelled. This analysis also focused specifically on the use, emerging trends and future development of mindfulness in the context of nursing.

### Table 1 Primary activities in evolutionary method of concept analysis (Rodgers 2000).

- Identify concept of interest and surrogate terms.
- Identify and select: setting and sample.
- Collect data with focus on concept attributes, context of concept use, interdisciplinary, sociocultural and temporal variations.
- Analyse data.
- If available, identify exemplar of the concept.*
- Identify implications of analysis and future development of the concept.

*Mindfulness is a subjective experience that has application across many contexts; therefore, identifying an exemplar would risk limiting understanding of its varied uses, and thus was omitted from this analysis process.
Results

References

References describe the ways a concept has been applied (Rodgers 2000). Table 2 presents a breakdown of the research and theoretical based papers for this sample. The use of mindfulness in this literature was divided into context of use for varied health populations and separately for its use directly with healthcare practitioners. In addition, although the use of mindfulness in the CINAHL database appears to be growing exponentially, the application of mindfulness in nursing remains limited (Figure 2).

Attributes

The defining attributes of mindfulness are subtle (Cacciatore & Flint 2012) and intricately connected to one another. The most frequently cited definition in the literature remains one from Kabat-Zinn (1994) who stated that mindfulness is ‘paying attention in a particular way: on purpose in the present moment, and nonjudgmentally’ (p. 4; Proulx 2003, Poss 2005, Matchim et al. 2008, Stanton & Dunkley 2011). Through the analysis, five defining attributes emerged to clarify the concept. The ‘experience of being present’ is one attribute of mindfulness that is cultivated and sustained through three additional attributes: ‘awareness’, ‘acceptance’ and ‘attention’. Although each of the attributes will be addressed in turn, one cannot be appreciated contextually without the others and so there will be notable overlap in the discussion.

Experience of being present

Mindfulness is difficult to understand outside the realm of experience (Sitzman 2002). Poulin et al. (2008) posit that learning mindfulness can lead to improved health and well-being ‘through greater experiential understanding of the interplay between mind, body and emotions’ (p. 78). Challenging current societal and cultural norms, which place emphasis on completing tasks, remaining busy and ‘doing’ something at all times, this experience is associated with ‘a way of being,’ (Proulx 2003), ‘being in the moment’ (Cohen-Katz et al. 2004) or engaging in ‘being mode’ (Day & Horton-Deutsch 2004a). As an experience of being, mindfulness is highly subjective (York 2007); but, in general, it is the ability to be present moment-to-moment (Day & Horton-Deutsch 2004a, Smith et al. 2005) while sustaining qualities of awareness, acceptance and attention through each moment.

Awareness

The ability to become deeply aware of self (Praissman 2008) in the midst of moment-to-moment experiences is another attribute of mindfulness. Tusaie and Edds (2009) explain that awareness ‘is the background of consciousness, which is constantly monitoring the environment’ (p. 359). Said another way, awareness is ‘being with observations’ (Tusaie & Edds 2009), able to observe ‘the constant stream of thoughts, emo-
Table 2 References to mindfulness in CINAHL nursing literature.

Context of use for varied health populations
Mindfulness meditation-based stress reduction: experience with a bilingual inner-city program (Roth & Creaser 1997)
Cancer survivors (Lengacher et al. 2011, Matchim et al. 2011b)
Diabetic peripheral neuropathy (Teixeira 2010)
Healthy adults (Matchim et al. 2008)
HIV-infected patients (Ampunsiriratana et al. 2005)
Mental health (Day & Horton-Deutsch 2004a,b, Davis et al. 2007, York 2007, Kitsumberan et al. 2009)
Minority children with depression and anxiety (Liehr & Diaz 2010)
Multietnic women with abnormal pap smears (Abercrombie et al. 2007)
Pregnancy and maternal well-being (Beddoe et al. 2009)
Substance use disorder (Carroll et al. 2008)
School aged children (Wall 2005)
Theoretical discussions/literature reviews/practice implications of mindfulness
Cancer: literature reviews (Smith et al. 2005, Matchim & Armer 2007)
Cancer survivors: literature review (Matchim et al. 2011a)
Chronic hepatitis C (Koerbel & Zucker 2007)
Mental health (Bashford 2011, Klainin-Yobas et al. 2012)
Paediatric clinical practice (Ott et al. 2002)
Psychological support for people with stomas (Trunnell 1996)
Substance abuse disorder (Bankston 2008, Miller 2010, Lange 2011)
Varied populations (Proulx 2003, Praissman 2008, Stanton & Dunkley 2011)
Veteran’s (Cuellar 2008)
Context of use for healthcare practitioners
Mindfulness-based intervention research
Human service professionals (Poulin et al. 2008)
Interdisciplinary stress/coping (McCracken & Yang 2008)
Theoretical discussions/literature reviews/practice implications of mindfulness
Certified Nursing Assistant stress in long-term care (Zeller & Lamb 2011)
Interdisciplinary mindfulness bereavement model (Cacciatore & Flint 2012)
Interdisciplinary stress/coping (O’Neal 1997, Klatzker 2006, While 2010)
Nurse healing and transformation (Ott 2004)
Nurse leadership (Pipe 2008)

Table 2 (Continued).

Nurse practitioners (Poss 2005)
Mindfulness/nursing theory (Sitzman 2002)
Palliative care communication model (Wittenberg-Lyles et al. 2010)

...tions and body sensations’ (Roth & Creaser 1997, p. 152). Day and Horton-Deutsch (2004a) described this as one becoming a ‘detached witness.’ With this awareness, it is suggested that individuals have a greater ability to reflect and respond in healthy ways to their experience as it arises (Davis et al. 2007).

Acceptance
Being able to accept what arises in ones awareness without judging (Kvillemo & Bränström 2011), resisting (Cohen-Katz et al. 2004) or avoiding (Cacciatore & Flint 2012) is particularly important and is another defining attribute of mindfulness. Instead of reacting in these ways, one develops the ability to witness his/her experience, accepting moments as they arise, and can learn ‘to respond rather than react to [their] habitual ways of thinking, moving, and doing’ (Day & Horton-Deutsch 2004a, p. 165). In addition, acceptance can foster a more compassionate approach to self and other in the midst of experiences that arise in phenomena (Ott 2004, York 2007), particularly those that may be uncomfortable or challenging. When one can accept what is occurring moment-to-moment without evaluating it as ‘good’ or ‘bad’ (Matchim et al. 2011a), they may, as Pipe (2008) suggests, be able to offer a more balanced presence through ‘nurturing a healthy regard for the emotions of self and others’ (p. 121).

Attention
Awareness requires that one is also able to maintain his/her attention on that which he/she is aware of. Attention, another attribute of mindfulness, is the ability to stay in the moment-to-moment experience (Wittenberg-Lyles et al. 2010, Matchim et al. 2011b). It is a shift in the mind from habitually unconscious automatic functioning, worry and rumination (Zeller & Lamb 2011) of past and future experiences to focus on what is occurring in the present (Day & Horton-Deutsch 2004a). Matchim et al. (2011b) summarize attention as being ‘receptive to the whole field of aware-
ness’ (p. 62) where one can maintain focus on what arises without becoming distracted or lost in thought (York 2007).

Transformative process

The literature refers frequently to mindfulness as a process (O’Neal 1997, Cohen-Katz et al. 2005a, Mackenzie et al. 2006, Cacciatorere Flint 2012). The transformative process of mindfulness as a defining attribute is clearly articulated from different scholars. Ott (2004) discussed mindfulness as a ‘life-affirming process.’ This view is echoed in a statement from Poulin et al. (2008) that ‘being aware of our embodied experiences is a crucial step towards living in a more integrated way’ (p. 73). Kabat-Zinn et al. (1998) stated that through mindfulness ‘we ... gain immediate access to our own powerful inner resources for insight, transformation, and healing’ (as cited in Ott 2004, p. 24). Owing to mindfulness as a process of continual development, the ability to clarify the concept by antecedents, attributes, and consequences becomes difficult as they all become intertwined (Tusaie & Edds 2009, Figure 3).

Antecedents

Antecedents refer to those things which precede the concept (Rodgers 2000). Formal and informal practices support one in cultivating the attributes that encompass mindfulness (Table 3). These practices are varied and used to differing degrees based on individual need and preference (Smith et al. 2005). Practices that focus on the breath are considered foundational as ‘it is always present, always changing, and is the link between the body and the mind’ (Roth & Creaser 1997, p. 152). Formal practices inform and

---

**Figure 2** Rate of growth for term ’mindfulness’ in CINAHL Database relative to application directly within nursing discipline.

**Figure 3** Attributes, antecedents and consequences of mindfulness.
Table 3 Antecedents.

<table>
<thead>
<tr>
<th>Engaging in the practice of mindfulness</th>
<th>Types of practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Requirements of practice</strong></td>
<td><strong>Formal practices</strong>*</td>
</tr>
<tr>
<td>Capacity</td>
<td>Breath</td>
</tr>
<tr>
<td>Desire and commitment to practice</td>
<td>Yoga</td>
</tr>
<tr>
<td>Time to practise</td>
<td>Sitting meditation</td>
</tr>
<tr>
<td>Patience</td>
<td>Walking meditation</td>
</tr>
<tr>
<td>Persistence</td>
<td>Body scan</td>
</tr>
<tr>
<td>Non-striving – Non-goal oriented</td>
<td>Mindful eating</td>
</tr>
<tr>
<td></td>
<td>Informal practices</td>
</tr>
<tr>
<td></td>
<td>Practice of being present in moment-to-moment experience while in daily activities i.e. washing dishes, sitting with patient</td>
</tr>
</tbody>
</table>

*Formal practices of mindfulness are not an exhaustive list; however, they are the most discussed within this analysis of the nursing literature.

strengthen informal ones, as it is easier to practice in calm moments than during more active and stressful times (Pipe 2008). Through the development of being present with attention, awareness and acceptance in formal practices, one is more able to cultivate and sustain qualities of mindfulness informally in their day-to-day activities (Day & Horton-Deutsch 2004a).

Mindfulness practices, although seemingly simple, are quite challenging (Young et al. 2001, Sitzman 2002) and therefore notable characteristics are required for one to be with the practices in an engaged and healthy way. Despite being mentioned relatively infrequently, the capacity to be present to and endure uncomfortable experiences as they arise is acknowledged as a necessary antecedent to participate in mindfulness practices (Davis et al. 2007, Tusaie & Edds 2009). This is particularly significant as there are conflicting discussions regarding ‘who’ can practice mindfulness. Some scholars offer the view that anyone can practise mindfulness (Ott 2004, Cacciatoore & Flint 2012), while others raise caution against introducing mindfulness interventions to those with certain psychological diagnosis (i.e. those experiencing psychosis or who are actively suicidal; Poss 2005, Smith et al. 2005).

It is consistently stated that commitment, dedicated time to practise, patience, and persistence with which one is willing to return to the practices over and over again are needed to successfully develop mindfulness (Roth & Creaser 1997, Young et al. 2001). It is also identified that these practices need to be done without attachment to outcome (Ott 2004, Weitz et al. 2012). Pipe (2008), in a theoretical paper discussing leadership and mindfulness in nursing, suggests that practice is by its nature not goal-oriented, but ‘rather with the objective of continually becoming more conscious of how we approach ourselves and those we lead’ (p. 119).

**Consequences**

Consequences are identified themes that arise from the concept (Rodgers 2000). Consequences of mindfulness are improved physical and mental health as well as changes in personal behaviours (Proulx 2003). Participants in one study identified sleeping better, having more vitality and a reduction in pain levels (Kvillemo & Bränström 2011). Lower levels of stress, anxiety, depression and burnout are also noted outcomes in many mindfulness-based intervention studies with specific health populations, and for the healthcare practitioner themselves (Cohen-Katz et al. 2005b, York 2007, Ando et al. 2009, Kang et al. 2009, Pipe et al. 2009). Also, for some participants in mindfulness programmes, there may be a possible increase in distress and anxiety that can occur as one cultivates the ability see themselves, their thoughts and behaviour patterns more clearly (Davis et al. 2007, Klainin-Yobas et al. 2012). However, there is also indication that as a result of practising and cultivating mindfulness, one of the outcomes, consistent with mindfulness as a process, is that antecedent qualities are strengthened and one has increasing capacity for these experiences (Tusaie & Edds 2009).

Behavioural and trait characteristics noted by participants engaged in the process of mindfulness include feeling a sense of calm (Day & Horton-Deutsch 2004b), peace (Young et al. 2001, Cohen-Katz et al. 2005a, Matchim et al. 2008), equanimity (Horton-Deutsch & Horton 2003) increased levels of empathy and compassion for self and other (Beddoe & Murphy 2004, Cohen-Katz et al. 2005a, Davis et al. 2007, Kvillemo & Bränström 2011), new or increased engagement with spirituality (Young et al. 2001, Weitz et al. 2012) and improved health awareness and self-care practices (Matchim et al. 2008). In addition, a frequently discussed outcome in the literature is that mindfulness practices teach one to self-regulate his/her experience (Wall 2005, Wittenberg-Lyles et al. 2010, Matchim et al. 2011a). Individuals are empowered to move from unconscious and automatic internal and external reactions to a more conscious relationship with them (Koerbel & Zucker 2007, Pipe et al. 2009). Furthermore, as reactions to situations change and transform, personal and professional relationships can also improve (Horton-Deutsch & Horton 2003, Cohen-Katz et al. 2004).
Related concepts

To clarify a concept further, Rodgers (2000) encourages the identification of related concepts which ‘bear some relationship to the concept of interest but do not seem to share the same attributes’ (p. 92). Presence, awareness and attention are all attributes embedded in the concept of mindfulness and can be considered also to be related concepts. In addition, Tusaie and Edds (2009) highlight and discuss some of the other related concepts of mindfulness: metacognition, reflection, reflective practice and meditation. Although all of these appear to be directly synonymous with mindfulness, they do not wholly encompass the concept.

Discussion

One of the most significant contributions that the evolutionary method of concept analysis provides is a heuristic tool for further inquiry, development and research (Rodgers 2000). Theories in the humanistic caring paradigm espoused by Watson, Newman, Parse (Sitzman 2002, Ampunsiriratana et al. 2005, Pipe 2008, Pipe et al. 2009) and Orem (Smith et al. 2005) can be appreciated as a theoretical match between nursing theory and practice, and mindfulness (Mackenzie et al. 2006). Despite this match, the ability to fully operationalize and engage with the concept of mindfulness in the discipline of nursing has remained limited.

Mindfulness as a concept based on experience may remain abstract and ungrounded in practical application if its association remains solely in meta and grand theories (which are themselves abstract in nature; Higgins & Moore 2009). Development of a middle range theory for mindfulness could offer greater ability to integrate its applications and processes in practice, education and research. The implications and potential directions for development of mindfulness in nursing will be discussed in four themes: education for self-care and nurse well-being, development of therapeutic nursing qualities, support at practice levels for varied health populations and research directions.

Development of therapeutic nursing interactions

In addition to supporting nurse well-being, mindfulness has the potential to enhance the development of less tangible aspects of nursing (Sitzman 2002). Tusaie and Edds (2009) posit that mindfulness can support transforming therapeutic nursing interactions ‘from an intellectual activity to an actual experience’ (p. 364). Based on current literature presence, empathy, patience, awareness (of self and other) and compassion have been conceptualized as particularly important to nursing practice and nurse–patient relationships. There are indications through this analysis that mindfulness can serve as a practical approach to cultivating these qualities to develop a more embodied nursing practice. Cohen-Katz et al. (2005a) found that after a mindfulness-based stress reduction programme, nurse participants described being more fully present and empathetic in their relationship with others. Although these findings require further investigation through ongoing research, mindfulness has the
potential to support the cultivation of holistic nursing practices.

To be present with another in the midst of life challenges and suffering is considered fundamental to nursing practice (Ferrell & Coyle 2008). Despite this, multiple studies describe nurses using distancing and avoidance strategies to protect themselves from these experiences (Chang et al. 2006, Blomberg & Sahlberg-Blom 2007, Timmermann et al. 2009). In addition, scholars suggest that the phenomenon of distancing is detrimental to the nurses’ well-being and the therapeutic clinical process (Chang et al. 2006, Blomberg & Sahlberg-Blom 2007, Iglesias et al. 2010). Through this analysis, a possible response and prevention to these avoidance strategies appeared in the form of emerging care models that hold mindfulness as a central component (Wittenberg-Lyles et al. 2010, Cacciatore & Flint 2012). With the emphasis on mindfulness in care practices, nurses are offered a way of cultivating a greater capacity to be in these challenging moments with sustained presence. This may help not only to therapeutically support the client but also to ‘help insulate providers from the long-term effects of others’ suffering’ (Cacciatore & Flint 2012, p. 68).

Support at practice level for varied health populations

The positive implications of mindfulness-based programmes for nurses and their practice are evident. Despite this, mindfulness as a concept has been explored to a greater degree with other varied health populations, but remains minimally integrated into the discipline of nursing. The theoretical discussions and research outcomes offer a promising perspective on the benefits of mindfulness in mainstream health care to promote well-being in various clinical and non-clinical populations. However, there is overwhelming agreement by many scholars in this analysis that for mindfulness to be successfully integrated into a supportive clinical practice, the ‘teacher’ must also have a mindfulness practice of their own (Poss 2005, Klatzker 2006, Davis et al. 2007, Lengacher et al. 2011).

The subtleties and challenges of mindfulness can only be offered in an authentic and realistic way if taught by those who have experience of being in the practice (Roth & Creaser 1997, Stanton & Dunkley 2011). Poulin et al. (2008) posit that for the successful integration of mindfulness into health care, ‘health service professionals are a critical population for mindfulness training because as they begin to embody this learning, and experience benefits in their own lives, they also bring this education to the people they are working with’ (p. 78). Without nurses themselves learning to practise and integrate mindfulness into their own lives, they will be unable, skillfully, to offer it as a holistic practice and perspective to those health populations they serve. Placing attention on how to integrate mindfulness into nursing education and practice would strengthen their ability to offer this knowledge to others.

Directions for research

As an emerging concept in nursing, mindfulness has great potential to support practitioners, and subsequently the health populations they serve. However, rigorous methodological research designs are needed to ground this concept in nursing practice. There are significant gaps and directions that nursing can explore to contribute to the science of mindfulness.

To date, mindfulness research has been explored mainly through quantitative research designs. A frequently cited limitation of quantitative studies on mindfulness is that they have insufficient statistical power (Young et al. 2001, Mackenzie et al. 2006). In addition, many scholars also critique the self-selection method as a limitation in study designs as it leads to biased results (Beddow & Murphy 2004, Pipe et al. 2009). However, as a key determining factor in one’s ability to practise and integrate mindfulness is his/her willingness and capacity to participate, this should be taken into consideration when designing education and research protocols.

Furthermore, appreciations of the contextual subtleties of mindfulness have not been captured through the empirical, quantitatively driven designs that dominate the current research. There are now multiple tools to measure mindfulness and appreciate outcomes of mindfulness-based practices (Baer 2011). Despite these measurements, the mechanisms of mindfulness are not well understood (Kvillemo & Brännström 2011). This may be partly because it is difficult to expand the understanding of how mindfulness truly affects participants outside the predetermined conceptualizations derived from these validated tools. Brown et al. (2007) suggest that a greater appreciation of the mechanisms of mindfulness and the use of a theoretical model to ground research could support the development of sound knowledge about mindfulness.

Given the experiential and subjective nature of mindfulness, qualitative approaches to researching mindfulness would be beneficial (Proulx 2003, York 2007). In this analysis, there were only a handful of qualitative studies; this is consistent with concerns that there is a lack of qualitatively focused research designs in the study of mindfulness (Smith et al. 2005). In this respect, nursing could present a unique contribution to the development of mindfulness in
health care and health promotion as their research practices include a strong grounding in qualitative research methodologies. In particular, knowledge gained from phenomenological and grounded theory research could offer important insight into the concept.

In research designs, attention to variables, such as interventions offered, the amount one practices (dose) and which practices they gravitate towards, is needed, as there are significant variations on these aspects of mindfulness research and subsequent outcomes. Beddoe and Murphy (2004) found that there was a correlation between the amount of mindfulness practice one engaged in and the positive outcomes evident as a result of those practices. Also, some believe that longer programmes are necessary to appreciate the subtleties of the mindfulness process, while other studies show that even small dose interventions offer positive outcomes to participants (Mackenzie et al. 2006). This is particularly relevant in the nursing profession where demands on many nurses in their professional lives are staggering (Cohen-Katz et al. 2004). It is therefore important to research what interventions, over what period of time, and at what dose could offer positive outcomes to nurses who are interested in practising mindfulness. In addition, longitudinal studies are being encouraged (Mackenzie et al. 2006) to gain insights into the practitioner’s experience of integrating mindfulness into their lives overtime.

**Limitations**

Based on inclusion criteria, an anglophone bias is a limitation to this sample selection. Although this analysis served to support the current use of mindfulness in nursing literature, it does not completely capture how the concept has been integrated into the discipline without reviewing educational programmes and nursing texts. Exclusion of multiple conference abstracts regarding mindfulness (e.g. Mindfulness of practice – 35th international mental health conference; Petrie 2009) does reveal that mindfulness is becoming integrated into healthcare practices. In addition, the discussion of mindfulness in nursing texts is also appearing (Spross 2009, Reed & Shearer 2011). The research and development of mindfulness in other disciplines is also in its infancy, but continues to gain momentum, and highlights the need for this concept. A cross-disciplinary analysis could further situate and expand this concept for the discipline of nursing.

**Conclusion**

The development of mindfulness in nursing lags behind other disciplines that have been more engaged with integrating the concept and its significant benefits into their respective practices. This may speak of a larger sociocultural problem that fails to address self-care promotion and support for nurse well-being in the face of their challenging work. To move the concept of mindfulness forward in nursing, there first needs to be a global shift in perspective that identifies the health of nurses as a priority in education and research initiatives. Mindfulness can offer practical tools for health promotion and lends itself to holistic practices and perspectives on nursing care. Furthermore, as nurses experience mindfulness themselves, they will have additional knowledge available to promote it as a holistic health practice in their various clinical settings.

Finally, mindfulness can support an ontological orientation to nursing knowledge development. Specifically, the concept of mindfulness has significant potential to enhance cultivating and sustaining qualities considered imperative to therapeutic nursing practice. The current emphasis on task-oriented approaches to care and evidence-based practices has limited the ability to foster other avenues of knowing in nursing education and practice. Consequently, value must be placed on other forms of knowing, such as personal and embodied knowledge. Integrating mindfulness more intentionally into nursing education, practice and research can assist nurses to develop a particular way of being present for themselves and others, and can create a shift from a purely theoretical way of knowing to one that is more embodied and holistic.

**Acknowledgements**

I offer sincere gratitude to Professor Marilou Gagnon PhD RN ACRN at the University of Ottawa who encouraged the development of this manuscript and provided invaluable guidance throughout the process.

**Funding**

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

**Conflict of interest**

No conflict of interest has been declared by the author.

**Author contributions**

All authors have agreed on the final version and meet at least one of the following criteria [recommended by the ICMJE (http://www.icmje.org/ethical_1author.html)]:

© 2013 John Wiley & Sons Ltd
References


