Factors Influencing International Board Certified Lactation Consultants to Continue Advancing Practice Beyond Certification: A Multinational Study

Karolyn Vaughan, Anne McMurray, Mary Sidebotham, and Jennifer Gamble

BACKGROUND: Certification as a lactation consultant is based on practitioners having achieved a standard of knowledge indicative of their competence to practice by passing a psychometric examination. The underpinning principle of recertification programs is to support clinicians to become lifelong learners by progressively enhancing and advancing their knowledge and skills in line with contemporary evidence. The aim of this study was to investigate the factors that influence International Board Certified Lactation Consultants (IBCLCs) to advance their practice.

METHOD: A mixed-methods study was conducted in two phases. Phase 1 included focus groups, interviews, and participants' demographic data. Phase 2 comprised of an online questionnaire to IBCLCs. This approach was designed to provide a comprehensive qualitative understanding of the IBCLCs' experiences, which was then triangulated with quantitative data from a significantly larger population of IBCLCs in Phase 2.

RESULTS: The findings are described in themes and subthemes. Participants in phase 2 ($n = 3,946$) reported being intrinsically motivated (93.3%, $n = 3,631$) and committed to providing evidence-based guidance and optimal care to support breastfeeding mothers. They identified various sources of continuing education, although attendance at conferences, peer support, and reflective sessions were the most common approaches to enhancing knowledge. They recognized that it was through extension of knowledge that they were able to advance their practice.

CONCLUSION: This article identifies strategies that the managers, educators, and certification bodies can adopt to support the IBCLCs in continuing to advance their practice, which will ultimately improve breastfeeding outcomes for mothers.

KEYWORDS: International Board Certified Lactation Consultant Examiners (IBLCE); breastfeeding knowledge; education continuing; lactation consultant; support

INTRODUCTION

Engagement in continuing professional development (CPD) is a mandatory feature of most health practitioner regulatory bodies to ensure currency and depth of knowledge for practice (Knapp, Anderson, & Wild,

2009). Many professional development opportunities, including those undertaken in preparation for certification or recertification, provide the tools for advancing practice. This reflects an increasing trend internationally for registration and certification bodies to require evidence of CPD activities from clinicians as evidence

of competence before continuation of practice is granted beyond initial registration (Bolton, 2009). Requiring health professionals to demonstrate competence helps ensure safe professional practice, but the best specific strategies to achieve this are unclear (Smith, 2009). The criteria set by the regulatory body may include a combination of evidence such as completion of a minimum number of continuing education hours, current clinical practice, professional portfolios, reflective tasks, and examination(s) (Hittle, 2010; Institute for Credentialing Excellence: Research and Development Committee, 2013; Rops, 2009). Researchers have questioned the methods used to determine the usefulness of these learning strategies, and there is now a shift from defining the requisite educational inputs to demonstrating educational outcomes (Norcini, Lipner, & Grosso, 2013).

International Board Certified Lactation Consultants (IBCLCs), although obtaining a voluntary certification, are required to demonstrate clinical recency and relevance through an ongoing certification process, the primary purpose of which is public safety. Certification is a form of credentialing, which has been linked with advancing practice, clinical competence, and professional development (Knapp et al., 2009). IBCLCs include nurses, midwives, doctors, allied health clinicians, and peer breastfeeding supporters who have met the initial certification requirements set by the International Board of Lactation Consultant Examiners (IBLCE). To achieve initial certification, IBCLCs are required to demonstrate the acquisition of knowledge through completion of educational activities and a psychometric examination, which tests the application of knowledge. One of the factors influencing IBCLCs to advance practice is the requirement for continuing education. To recertify they must undertake a minimum of 75 hr of ongoing education every 5 years and a psychometric examination every 10 years. Recertification figures are imprecise; anecdotal evidence suggests that approximately 30% of IBCLCs choose not to recertify in any given year. While the number of IBCLCs who meet the educational requirements for initial and ongoing credentialing is known, what is unknown is whether there are other factors influencing IBCLCs to continually update their knowledge and skills for practice. This study was designed to identify the factors that enable and motivate IBCLCs to advance their practice. By “advancing practice” (Por, 2008, p. 84) refers to “an ongoing process in practice using expanded knowledge, clinical expertise and research to further the scope of practice.” Advancing practice is distinguished

from “advanced practice,” which is a specialized role for relatively autonomous practitioners who have a greater depth and breadth of knowledge and clinical judgement than beginning-level practitioners (Cummings et al., 2010; Duffield, Gardner, Chang, & Catling-Paull, 2009; Hodges, 2009; Scanlon, Cashin, Watson, & Bryce, 2012). An assumption of the study is that educational preparation for recertification is a core element of advancing practice. The study aims to explore which educational activities are undertaken by IBCLCs and identify other influences on advancing practice. The findings are intended to inform IBCLCs as a professional group as well as managers, educators, and other clinicians, in the expectation that understanding these influences on practice will help strengthen workplace support.

Research shows that IBCLCs have a positive impact on increasing the initiation and maintenance rates of breastfeeding. A cross-sectional study by Castrucci, Hoover, Lim, and Maus (2006) of 11,525 births in the United States found that mothers were 2.28 times more likely to breastfeed at discharge if they received support from an IBCLC while in hospital. This finding was confirmed by Dweck et al. (2008) U.S. health record audit of mothers who received support and education from IBCLCs. Their findings demonstrated an increase in breastfeeding during hospitalization from 55% to 69% and at discharge from 47% to 59% when an IBCLC was on staff. Furthermore, Morris (2013) retrospective medical record review of breastfeeding rates in a pediatric clinic in the United States compared the breastfeeding outcomes for infants whose mothers had access to an IBCLC with those who did not receive lactation support. Mothers who had access to the IBCLC were 1.83 times more likely to breastfeed their infant and breastfeed exclusively for at least 4–6 months than were mothers without access to their support. Mothers with access to the IBCLC were also 2.15 times more likely to be providing some breast milk to their child at 1 year of age.

Another study of 941 American mothers demonstrated that women who received intervention from an IBCLC were up to four times more likely to exclusively breastfeed at 3 months compared with those mothers without any IBCLC intervention (Bonuck et al., 2014). The impact of IBCLCs on breastfeeding may be even more profound for infants in neonatal intensive care units (NICUs). Gonzalez et al. (2003) study in the United States audited 350 randomly selected health records and found an

increase from 31% to 47% of infants receiving their mother's breast milk on discharge from NICU when an IBCLC was employed compared with having no IBCLC. The researchers also noted an improvement in the quality of breastfeeding education provided to NICU staff. In summary, the evidence indicates that IBCLCs improve initiation and maintenance rates of breastfeeding; however, it is unclear if certification alone assists IBCLCs to advance their practice or if there are other identifiable factors that provide the impetus for advancing and maintaining practice competence.

The current study extends on the body of knowledge by investigating IBCLCs' views on the factors that influenced them in undertaking professional development activities to advance their practice including preparation for certification and recertification. The research was conceptualized within Donabedian (1978, 2005) structure-process-outcome model, which categorizes the influencing factors into structures and processes. Structures include the relatively stable service delivery environment, including structural features of the workplace and organization: the physical location where care is provided, the type of resources available, the clients, and clinicians' education and training. Processes are seen as transactional in nature and include interactions between the clinician and the client during clinical interventions and between clinicians and others in the organizational environment. Application of this model to the study is described in Figure 1, which elaborates how IBCLCs advance their

practice to improve health outcomes for mothers and families.

METHOD

The study used an exploratory mixed-methods study design in two sequential phases, a qualitative phase (Phase 1) followed by a quantitative phase (Phase 2). In Phase 1, qualitative data were collected from a convenience sample of English-speaking IBCLCs who volunteered to participate in focus groups following an e-mail invitation. Senior certification staff from three IBLCE regional offices were invited to participate in an individual interview. IBCLCs were invited to participate in one of six international focus groups held in Austria, Hong Kong, Australia, New Zealand, and the United States, between August 2011 and June 2012. An e-mail invitation was sent to staff members to participate in interviews in Austria, Australia, and the United States during 2011–2012. No incentives were given to the participants, and participation was voluntary. Focus groups and interviews were conducted by the first author (KV) for those who volunteered to participate. The interviews were further supplemented with field notes to capture nonverbal cues and nuances in the discussions. All data were collected by this researcher to maintain consistency.

Demographic and practice data were collected on all participants and analyzed using χ^2 to determine whether the sample was typical of the IBCLC population. The demographic and practice characteristics of participants were compared between the different countries. Focus group and interview questions were designed to broadly channel the discussion toward the experiences of becoming an IBCLC and what participants believed were factors influencing them to advance their practice. The focus groups and interviews were 60–90 minutes in duration, with all data transcribed verbatim. Thirty-seven IBCLCs participated in six focus groups, and seven senior certification staff took part in individual interviews. Data analysis followed the constant comparative analysis method of Glaser and Strauss (1967) to identify themes and subthemes, which were then categorized into structures and processes. Transcripts were uploaded into NVivo (ver. 9) to assist in the data management in preparation for interpreting the data using thematic analysis. Descriptive statistics provided baseline data for correlational data. The

FIGURE 1 Donabedian model—Advancing lactation practices.

availability of a permanent record of each focus group and interview made it possible to share the documents with all authors in order to achieve consensus on the themes.

Results from Phase 1 were used to design Phase 2 of the study, in the form of an online questionnaire survey comprised of open-ended and fixed responses (see Appendix). The survey was e-mailed to all IBCLCs who had e-mail addresses registered with IBLCE in 2013. The survey consisted of 13 questions (in English), some of which were forced choice; for example, "Has your workplace contributed towards your certification or recertification?" while others prompted ranked responses on a Likert scale; for example, "To what extent do the following strategies assist you in advancing your clinical practices?" Quantitative data from the demographic, rating scales, and multiple-choice questions were analyzed using nonparametric descriptive statistics. Data from the open-ended questions were analyzed using content analysis. This mixed-method approach was designed to provide a comprehensive qualitative understanding of the IBCLCs' experiences in Phase 1 and verify the interpretive analysis with quantitative data from a significantly larger population of IBCLCs in Phase 2. Results were then integrated in a final level of analysis that combined data from both phases to provide depth and breadth of insights into the IBCLCs' perspectives.

The IBLCE Board endorsed the study in 2010 and ethical approval was granted by the University, Human Research Ethics Committee in 2011.

RESULTS

Thirty-seven IBCLCs participated in focus groups, which ranged from 3 to 13 IBCLCs in each group. Seven staff members were individually interviewed. In Phase 2 the population of IBCLCs comprised 26,173 people from 94 countries (International Board of Lactation Consultant Examiners, 2014; see Table 1). The questionnaire was e-mailed to all IBCLCs certified at the time; English was noted as the primary language for just over 60% of these IBCLCs. Only 25,606 IBCLCs had registered their e-mail addresses with IBLCE, which represented the sample that received e-mails from Constant Contact[®]. Constant Contact was used for the two follow-up reminders to encourage the respondents to participate. Consent was implied if the questionnaire was completed. The response rate was 15% ($n = 3,946$) of the sampling frame.

Phase 1. Qualitative Analysis

Thematic analysis revealed four themes, motivation to advance practice, consolidating formal experiential learning, workplace influences on advancing practice,

TABLE 1 Characteristics of Study Participants and IBCLCs

	FOCUS GROUPS <i>n</i> = 37	QUESTIONNAIRE <i>n</i> = 3,946	IBCLC POPULATION ^a <i>n</i> = 26,173
Average age	53.8 years (<i>r</i> = 32–71 years)	53 years (<i>r</i> = 23–83 years)	49 years (<i>r</i> = 22–83 years)
Number of countries with IBCLCs	10	71	94
Country with most representation of IBCLCs (ranked order)	Australia United States Hong Kong New Zealand Japan United Kingdom Germany Netherlands	United States Australia Canada United Kingdom Netherlands New Zealand France Germany	United States Australia Canada Germany Japan Netherlands United Kingdom New Zealand
Professional background	Nurse and/or midwife	Nurse and/or midwife	Nurse and/or midwife
Male participants	0%	1.1%	>1%
First certified as IBCLC	1985–2011	1985–2012	1985–2012
Most common workplace	Public health, hospital, community setting Private hospital Private medical or community clinic	Public health, hospital, community setting Private hospital Private medical or community clinic	Public health, hospital, community setting Private hospital Private medical or community clinic

^aIBLCE database 2013. *Note.* Characteristics are listed in ranked order, highest to lowest.

TABLE 2 Phase 2. Online Questionnaire Data

QUESTION	RESPONSE PERCENTAGE AND COUNT
Has your workplace contribute towards your certification or recertification?	Yes—56.9% (<i>n</i> = 2,212) No—43.0% (<i>n</i> = 1,672)
Is your work position dependent on remaining certified as an IBCLC?	Yes—39.4% (<i>n</i> = 1,491) No—60.6% (<i>n</i> = 2,293)
Will you recertify when next due?	Yes—85.9% (<i>n</i> = 3,337) No—14.1% (<i>n</i> = 546)
Does recertifying help you in advancing your clinical skills and knowledge?	Yes—73.1% (<i>n</i> = 2,830) No—26.9% (<i>n</i> = 1,044)
To what extent do the following motivate you to advance your clinical practice?	Friends and colleagues—58.3% (<i>n</i> = 2,238) Personally (intrinsically) valued learning—95.8% (<i>n</i> = 3,677) Studying to sit the IBLCE exam—55.8% (<i>n</i> = 2,141) Preparing for recertification by continuing education points—72.5% (<i>n</i> = 2,783) Changes in the workplace—46.0% (<i>n</i> = 1,714) Career advancement and opportunities—49.3% (<i>n</i> = 1,890)
To what extent do the following strategies assist you to advance your clinical practice?	Attending conferences workshops and education sessions—95.2% (<i>n</i> = 3,632) Reading of text books, journal articles and completing online education—94.8% (<i>n</i> = 3,614) Case discussion with peers and colleagues—92.3% (<i>n</i> = 3,518) Observing peers and colleagues in clinical practice—79.6% (<i>n</i> = 3,023) Preparing for the IBLCE exam—66.1% (<i>n</i> = 2,505) Preparing for IBLCE recertification by continuing education points—79.2% (<i>n</i> = 3,007) Reflecting on my clinical practice with an expert or senior IBCLC—76.8% (<i>n</i> = 2,921) Engaging in social media activity such as blogs, chat rooms, Facebook—33% (<i>n</i> = 1,256)

Note. IBCLC = International Board Certified Lactation Consultant; IBLCE = International Board of Lactation Consultant Examiners.

and impetus for certification. These were used to inform the Phase 2 survey.

Phase 2. Quantitative Analysis

The survey results are presented in Table 2.

Table 3 presents the integrated results under each theme. Participants' quotes are referenced to source by abbreviations (e.g., FG—focus group, R—respondent from online survey).

Motivation to Advance Practice

Nearly all participants in Phase 2 (93.3%, *n* = 3,631) commented that a major influence in becoming certified and continuing to advance practice was an intrinsic motivation to promote breastfeeding. This motivation prompted them to seek educational opportunities relevant to their emerging practice needs to respond with optimal,

evidence-based care to the increasing complexity in clinical situations they encountered.

It's just that as midwives, breastfeeding is a huge part of practice and you find that women seem to have more and more problems, so we just needed to have that extra education and experience and knowledge to be able to help those women. (FG.4)

A real passion, which I guess most people have, for breastfeeding and to help women as much as I can and give them as much as I can and have any extra knowledge that I can impart to them. (FG.5)

TABLE 3 Participants' Perspectives on Structures and Processes Influencing Them in Advancing Practice: Themes and Subthemes

THEMES	SUBTHEMES	
STRUCTURES AND PROCESSES	STRUCTURES	PROCESSES
Motivated to advance practice		<ul style="list-style-type: none"> • Intrinsic motivation • Promote evidence-based care • Committed to providing optimal care to make a difference • Value of peer support
Consolidating formal and experiential learning	<ul style="list-style-type: none"> • Sources of knowledge • Forums to translate knowledge into practice 	
Workplace influences on advancing practice	<ul style="list-style-type: none"> • Workplace support 	<ul style="list-style-type: none"> • Marketing of certified staff • Implementing change
Impetus for recertification	<ul style="list-style-type: none"> • Valuing certification 	<ul style="list-style-type: none"> • Authority to implement practice change

The process of attending education motivated 72.5% ($n = 2,783$) to advance their practice. Advancing their own knowledge enabled IBCLCs to recognize and challenge some outdated practices they witnessed to promote evidence-based care.

There are [sic] some really old fashioned advice being given out there . . . , having obtained the knowledge that's facilitated me to change my practice, which then helps with the advice that I'm giving and I know it is based on fact. (FG.6)

Consolidating Formal and Experiential Learning Programs to Increase Knowledge

Focus group participants identified access to appropriate education as essential in enabling them to translate knowledge into practice, which helped them extend their clinical role. The availability of conferences and seminars were highly valued as an opportunity to access the latest research information. Importantly, IBCLCs commented on the value of peer group interactions and the debates that occurred around the education sessions.

Conferences are great, you get so much information to use in practice and getting to talk with friends and colleagues about what they do is also very helpful. (FG5)

Informal peer support was another major influence on their ability to advance practice.

What I get from peers is very valuable. I'll read an article and I'll say "Yeah, yeah, got that, got the information," but sometimes that doesn't translate into clinical practice until somebody tells me "This is how I used it." (FG.6)

The education I attend is important to gaining knowledge, but the networking and "how to do" that we discuss at lunchtime with my peers is most important. (R-79)

However, the opportunity to attend individual or group reflection forums was frequently on an ad hoc basis, and some experienced difficulties in keeping their knowledge up-to-date and implementing new knowledge in practice. They saw a need for a mentor or clinical supervisor to help develop the confidence to seek further information and incorporate new clinical knowledge into practice.

I felt I had learned so much from colleagues and mothers that I took on more [and] as I felt confident with that, I would learn a little more, I would never have taken on the lead role of the [hospital name] baby friendly committee if I wasn't confident. (FG.5)

Most participants (92.3%, $n = 3,518$) underlined the importance of peer- or expert clinician-guided reflection time and having the opportunity to observe peers and colleagues in clinical practice as an essential structure to advance practice. Working in partnership with other IBCLCs, particularly when from different professional disciplines, was seen as providing greater insight and different perspectives into clinical situations. In some countries, IBCLCs in private practice did not engage in sharing education or clinical practices, as they were more focused on maintaining a market edge to promote their business. This process inhibited the open sharing of reflective activities as described by other participants.

Despite their commitment to ongoing development of knowledge and skills, some structural conditions in the practice setting ran counter to achieving their educational goals, as many participants were unable to attend local events due to cost, inability to travel, workload, and time pressures.

If you get caught in a work setting where you're just overstressed or overworked, like mine you never get time off to attend education. (FG. 4)

These and other workplace conditions constituted another influence on advancing practice.

Workplace Influences on Advancing Practice

The majority of participants were employed within public or private health-care facilities where supportive structures and processes in the workplace had a major impact on their ability to advance their practice. Support from peers, colleagues, and managers gave participants a sense of being valued, which enabled them in advancing practice. While over half of the IBCLCs 56.9% ($n = 2,212$) viewed support as financial assistance, 46.4% ($n = 1,803$) of survey participants reported some form of financial support from their employer. Of these, most (90.4%) had conference registration or travel and accommodation expenses partially or fully paid, while nearly 60% received partial or full payment for their recertification fees. Around 12% were given incentives for continuing education such as financial bonuses or access to education-specific funding.

A small group of participants who did not receive financial support believed that the workplace

contributed to their education and certification in other supportive and encouraging ways. One stated:

We don't get any money towards attending education, but our manager is always encouraging us to expand our knowledge and share with our colleagues, [and] we feel appreciated. When we are not busy, we can access some online journals. (R-1769)

Others reported that their skill and knowledge was often acknowledged by being included on education or policy and procedure development committees. This recognition was a source of pride and confidence as their involvement in governance contributed to institutional change and promotion of evidence-based breastfeeding practices.

It has to be the evidence we provided, real good evidence, I think that's the only way we've gotten our staff and doctors to buy into the changes. (FG.3)

Conversely, IBCLCs who described their workplace as an authoritarian organization were instructed to follow policy and restricted in introducing new interventions or skills. In some cases, they reported having a supervisor whose practice they believed to be outdated, which constrained their ability to advance practice at an individual or institutional level. Other IBCLCs pondered whether the lack of workplace support from peers, colleagues, and managers was due to not understanding the importance of human milk or the potential an IBCLC can have in changing practices and providing optimal care. In some cases it was reported to be a territorial issue of clinical expertise between professions.

It is very patch protective, and I think midwives think that we're going to point the finger at them and criticise them about their skills, but we need to work together for the best for the mother. (FG.4)

A number of participants voiced their frustration that their workplace did not value or recognize their certification but advertised their qualifications as a selling point and market advantage. This led to a sense of being undervalued, which potentially could impact on their desire to advance practice. However, these IBCLCs also reported that the introduction of evidence-based practices into the workplace was often accomplished with fewer challenges and in a timely manner when compared to IBCLCs who worked for larger institutions. This frequently provided these IBCLCs with the impetus to recertify.

Impetus for Recertification

Participants were proud of their IBCLC certification and recognized recertification as a formal ongoing professional development structure to promote peer reflection and sharing of best practice.

If there were no CERPs [continuing education requirements for recertification], I and my colleagues wouldn't meet. It is also a very important way to get to see each other and to meet, and to exchange ideas besides from the conference. It encourages, it's confidence building, it's motivating, networking, and informative. (FG.2)

Certification was also a way of demonstrating to peers and colleagues that they have met the set standard and their knowledge and skills should be valued. Certification also provided the authority to implement practice changes.

I needed, like, the authority that the certification brought . . . it was to have that more professional clout with the medical profession. (FG.3)

I am proud to be an IBCLC, I have worked hard and I am accountable. (R-566)

LIMITATIONS

Limitations of this study included geographical challenges for focus group participants to attend as well as linguistic

restrictions, as the focus groups were held in English. Phase 2 invitations and questionnaires were also provided in English only, as at the time, over 60% of the IBCLCs identified English as their primary language.

DISCUSSION

It was clear that a number of structures and processes combined to influence participant IBCLCs in advancing their practice, most of which had overlapping features. For example, consolidating learning required exposure to learning structures such as conferences and forums as well as various strategies (peer learning) and opportunities (workplace support for continuing education). Motivation to support breastfeeding women and infants was a key factor influencing IBCLCs to advance their practice. The importance of motivation in relation to advancing practice has been described in previous studies (Black & Deci, 2000; Buetow, 2007; Kusurkar et al., 2011; Ng et al., 2012). For the majority of IBCLCs in this study, being motivated to gain new knowledge contributed to a growth in clinical confidence and competence in guiding and supporting women. They actively sought new knowledge as well as confirmation of their existing practices. Actively seeking knowledge provides a sense of autonomy, as it is self-confirming and rewarding and is more likely to sustain continuing development over time (Griggs, 2010; Ng et al., 2012). These outcomes are congruent with the constructs of motivational theory, particularly in relation to clinical learning and self-regulation (Kusurkar et al., 2011; Ng et al., 2012). Self-regulation is integral to advancing practice because self-regulating clinicians tend to make deliberate choices about adopting certain behaviours, including seeking knowledge (Coon & Mitterer, 2010; Kusurkar et al., 2011; Ten Cate, Kusurkar, & Williams, 2011).

The opportunity to engage in self-reflection and peer reflection on practice emerged as the preferred learning style for most IBCLCs. Many reported that they were better able to integrate new knowledge into their practice when they had an opportunity to reflect, talk, and think through the process with peers, colleagues, and expert clinicians, which is known to optimize knowledge transfer (Church et al., 2010), leading to clinical knowledge acquisition and competence (Church et al., 2010; Lowe, Rappolt, Jaglal, & Macdonald, 2007). The opportunity to engage in self-reflection and peer reflection enables clinicians to examine and share their assumptions, beliefs, values, and past experiences, and use the knowledge that they have gained through their personal and professional career to develop new insights and understanding of

various situations (Church et al., 2010). This is a feature of collegial work practice and a vital step in integrating evidence into clinical practice (Church et al., 2010; Haywood, Pain, Ryan, & Adams, 2012; Morris & Maynard, 2007).

For some IBCLCs working in the private sector, certification also became a marketing tool to promote their health service. Many IBCLCs gaining the certification had not received any professional or career advancement and, at times, not gained recognition from other staff. However, they recognized that the certification and recertification processes provided a structure by which they gained knowledge and developed relationships with other IBCLCs, which contributed to advancing their practices. Clearly, advancing practice requires organizational support to use their knowledge and skills in the workplace. It is therefore important that the workplace provide a supportive framework for IBCLCs to advance their own practice and ensure workplace clinical policies and practices are in line with contemporary knowledge.

This research confirms that for many IBCLCs, obtaining certification was a personal and professional achievement and provided them with the knowledge and impetus to advance their breastfeeding knowledge and practice. Being certified provided many IBCLCs with evidence that their knowledge had met the worldwide standard, giving them the confidence and authority to advance practice. Irrespective of their nationality, culture, age, gender, or professional discipline, it was clear that when IBCLCs had access to education and there were structures in place for translation of knowledge into clinical practice, there was a greater likelihood of participants advancing practice. The findings therefore make a unique and important contribution to the evolving body of knowledge for practice. They are also instructive for managers and those providing educational support for IBCLCs internationally, as indicated in the following recommendations.

Recommendations for Practice, Education, and Regulation

To maintain their motivation and commitment to advancing practice, the role of the IBCLCs needs to be acknowledged, supported, and valued by peers, managers, and management. The contribution of the IBCLCs should be sought in the production of clinical guidelines, policy documents, and educational activities, and IBCLCs should be encouraged to

share their knowledge and support the work of others as they advance their practice. This would include the promotion of mentorship within IBCLC groups enabling the development of a symbiotic relationship with other clinicians. Mentorship provides a newly qualified IBCLC with opportunities for supported learning from an experienced clinician and the experienced mentor can engage in scholarly discussion and debate with the newly qualified IBCLC who is likely to be cognizant of the current research. Therefore, the benefits from an organizational, governance, and clinical aspect of having an IBCLC in the workplace need to be actively promoted to management and staff.

Clinicians need workplace support to maintain their certification. The most frequently used recertification criterion is attendance at education. Education programs should be offered in multiple modalities, languages, and locations. In addition, IBCLCs require guidance to explore strategies that best support their learning style and enable them to translate knowledge into practice. This would include activities such as access to clinical supervision, clinical case review, self-reflection and peer reflection, and discussion. These strategies that promote translation of knowledge into practice should be recognized by certification bodies as valuable learning experiences, which advance practice and be incorporated into criteria for the renewal of certification.

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Correspondence regarding this article should be directed to Karolyn Vaughan, RN, RM, C&FHN, IBCLC, PhD, . E-mail: karolynvaughan@gmail.com

Karolyn Vaughan, RN, RM, C&FHN, IBCLC, PhD, Menzies Health Institute Queensland, School of Nursing & Midwifery, Griffith University.

Anne McMurray, RN, PhD, Emeritus Professor of Nursing, Menzies Health Institute Queensland, Griffith University, Gold Coast Hospital and Health Services.

Mary Sidebotham, RM, PhD, Associate Professor of Midwifery, Menzies Health Institute Queensland, School of Nursing & Midwifery Griffith University.

Jennifer Gamble, RM, PhD, Professor of Midwifery, Menzies Health Institute Queensland, School of Nursing & Midwifery Griffith University.

APPENDIX

Online Survey Questions

- 1) What year were you born?
- 2) What is your gender?
- 3) What country do you work or volunteer in?
- 4) Where are the majority of your working hours undertaken?
- 5) What year did you first certify?
- 6) Please identify the importance of each option for why you became an IBCLC
- 7) Has your workplace contribute towards your certification or recertification?
- 8) Is your work position dependent on remaining certified as an IBCLC?
- 9) Will you recertify when next due?
 - a) If Yes, what is the MAIN reason for you continuing with your certification?
 - b) If No, what is the MAIN reason for not recertifying?
- 10) Does recertifying help you in advancing your clinical skills and knowledge?
 - a) If Yes, what OTHER strategies would assists you to advance your practice?
 - b) If No, what DOES assist you in advancing your practices?
- 11) To what extent do the following MOTIVATE you to advance your clinical practice? (Fivepoint Likert scale ranging from not motivated to highly motivated) Responses included:
 - friends and colleagues
 - personally (intrinsically) value learning
 - studying to sit the IBLCE exam
 - preparing for recertification by continuing education points
 - changes in the workplace, career advancement opportunities
- 12) To what extent do the following strategies ASSIST you in advancing your clinical practices? (Five-point Likert scale ranging from not at all to assists greatly) Responses included:
 - attending conferences, workshops and educational sessions
 - reading of textbooks, journal articles and completing online education
 - case discussion with peers and colleagues
 - observing peers and colleagues in clinical practice
 - preparing for the IBLCE exam
 - preparing for IBLCE recertification by continuing education points
 - reflecting on my own clinical practices with an expert or more senior IBCLC
 - engaging in social media activities such as blogs chat rooms and Facebook etc.
- 13) Do you have any further comments on certification or recertification in advancing your practice?