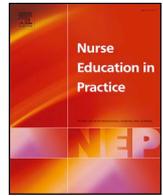




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Competencies and skill development in maternity care services in Victoria - A qualitative study



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ABSTRACT

In healthcare, continuing professional development is provided to ensure professional standards are maintained and for clinicians to remain fit to practice. The purpose of the study was to identify potential gaps or issues with continuing professional development in maternity services through consultations with key stakeholders and, in addition, to generate possible solutions or recommendations towards the development of a state wide continuing professional development program. The data was collected through semi-structured interviews of a purposive sample between June and August 2018. A thematic analysis was undertaken. Participants included a practicing midwife, allied health practitioner (physiotherapist), manager, healthcare educator, and an outlier service worker (maternal and child health nurse). Following the thematic analysis, four main themes (education, practitioner standards, programme monitoring and resources) were identified along with nine sub-themes. The results suggest organisations need to offer explicit support for staff to access to continuing professional development. In addition, the qualifications of facilitators of continuing professional development and/or consumer education are recommended to go beyond education levels required for registration. In this respect, some organisations credentialed their educators locally in a ‘train the trainer’ manner however, most participants supported professional preparation for the role of educator.

1. Background

Education and training in health are linked to healthy work environments and quality patient care (Price and Reichert, 2017). In healthcare, continuing professional development (CPD) is provided to ensure professional standards are maintained and continued and clinicians remain up to date and fit to practice (Sherman and Chappell, 2018). CPD in healthcare can be both mandatory (as part of professional standards or organisational requirement), and voluntary. Sriharan et al. (2009) attempted to provide an overview of continuing medical education globally and concluded that for each continent/region, professional accreditation was either mandatory or voluntary, and in some cases there were only partial professional accreditation systems in place for clinicians. In Australia, Geffen (2014) explains that the Health Practitioner Law Act 2009 made CPD mandatory for ongoing

registration of all health professionals, however the required hours of CPD per year is determined by discipline professional boards.

In maternity services, CPD is also influenced by the level of care provided to service users. Levels of care in maternity services are commonly described as; primary (entry point that ensures appropriate access and coordination of services), secondary (where short term interventions/hospitalisation may occur) and tertiary care (management of more uncommon and more complex conditions) which is usually delivered in specialist or research hospitals (Giles, 2010; Quaye, 2007; White, 2010). The levels of care frequently correlate to the physical location of the service, with high acuity of care services (tertiary care) often available only in major metropolitan areas with primary and secondary levels of maternity care available across most locations including rural and remote areas (Kornelson and McCartney, 2015).

Different disciplines working in maternity services also approach

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CPD for their members in varied ways. For example, following requests from midwives, their associations, governments and UN agencies, the International Confederation of Midwives (ICM) developed the *ICM Global Standards for Midwifery Regulation (International Confederation of Midwives, 2011)*. One of the standards details the requirements expected for 'Continuing competence', providing a professional framework to be used by midwifery associations, regulators, educators and governments to raise the standard of practice in their jurisdiction. However, the requirements of individual jurisdictions are inconsistent about the timelines of completion of CPD, where there is a three-year period for UK midwives' revalidation with the Nursing and Midwifery Council (Myatt, 2015) and yet Australian midwives are required to present for re-registration annually (Katsikitis et al., 2013). In contrast, the International Federation of Gynaecology and Obstetrics (FIGO) has not published a position statement with regard to CPD for continuing competence, but similar to midwifery, there are inconsistencies across jurisdictions. The Royal College of Obstetricians & Gynaecologists (UK) have a five year cycle for CPD and revalidation (RCOG, 2018), while the Royal Australian and New Zealand College of Obstetricians & Gynaecologists have a three year cycle (RANZCOG, 2018). Creatas and Mastorakos (2010) argue that within the discipline of obstetrics and gynaecology, there is a need for the *uniform development of CPD* both within European countries and beyond.

At the core of research about CPD in healthcare, there have been endeavours to identify and understand the specific learning needs and attitudes of practitioners and/or organisations (Fahey and Monaghan, 2005; Hauck et al., 2015; Heslehurst et al., 2013; Hundley et al., 2007; Legere et al., 2017; Maharaj and Spronken-Smith, 2009; Munro, 2008; Regan et al., 2018; Riley and Schmidt, 2016; Wenghofer et al., 2006). Examples of attempts to identify specific learning needs of maternity services CPD across the disciplines include descriptions of Canadian family medicine maternity care programs (Biringier et al., 2018), exploration of rural midwives' experiences and perceptions of CPD in Australia (Fahey and Monaghan, 2005), gaining insights into UK midwives' perceptions of training and education requirements regarding maternal obesity (Heslehurst et al., 2013), and understanding the learning experiences of postgraduate students in obstetrics and gynaecology in New Zealand (Maharaj and Spronken-Smith, 2009).

The current study was a review of maternity services in Victoria, Australia, and was undertaken to provide an overview of CPD offered by maternity services in that state in Australia where its capital (Melbourne) is home to over 4.8 million people accounting for 19% of the national population (ABS and Statistics, 2018). The purpose of the study was to identify potential gaps or issues in the provision of CPD in maternity services through discussions with key stakeholders and to generate possible solutions or recommendations towards the development of a State wide program. A review that considers all disciplines including key stakeholders in outlying regions has not been undertaken before for maternity services in Victoria and therefore further exploration was warranted.

1.1. Theoretical framework

Savin-Bader and Major (2013) describe a qualitative approach that is 'pragmatic' whereby an understanding of the person's descriptions and interpretations are reached without being committed to either a phenomenological, ethnographic or grounded theory approach. A descriptive exploratory approach employing thematic analysis was considered the most appropriate to report the content of the interviews for this study. The steps as described by Braun and Clarke (2006) were followed and these are - (1) familiarise yourself with the data to become familiar with the breadth and depth of what it contains, (2) generate the initial codes from a list of ideas that arise as you were becoming familiar with the data, (3) analyse the codes to refine them to generate overarching themes that combines linked codes, (4) refine the themes, establishing that the collated extracts have a coherence. At this point

themes may be adjusted, excluded or sub-themes created, (5) the refinement of the themes continues as they are named and defined and the analysis of each is written, and (6) produce a report that highlights the key themes elicited.

1.2. Method

A semi-structured interview protocol was developed for the study. The questions were directed at the staff involved in the training, credentialing and assessment of staff (*How is competency assessment, staff credentialing, and ongoing practice requirements managed?*); to the internal organisational level relating to the procedures for monitoring programmes their effectiveness, and the resources required or available (*How is the effectiveness of the internal sessions your organisation provides for staff assessed?*); and to the general organisational level relating to general issues (*Does your organisation have models or training aids for education using demonstration and practice?*).

1.3. Participants

A purposive sample was sought of six key informants with specific roles in maternity services in any part of Victoria. A midwife, allied health practitioner (physiotherapist), manager, healthcare educator, a health professional external to the hospital system (maternal and child health care), and a doctor were approached from the participating sites and invited to participate in a telephone interview lasting between 30 and 60 min.

1.4. Data collection

Data were collected through telephone interviews with key informants using a purposive, sampling technique. A snowballing technique was employed to recruit possible participants leveraging from existing professional networks. While two successive doctors were identified and agreed to be interviewed, they later withdrew, leaving five participants who volunteered to complete the phone interview lasting between 30 and 60 min. After initial contact was made with each participant, a participant information was provided. Once verbal consent was provided, a mutually convenient time was arranged for the interview to be conducted and digitally recorded. The participant was assigned a pseudonym for use during the interview and later for analysis to enhance anonymity.

1.5. Data analysis

Each transcript was separately analysed by two members of the research team utilising NVivo software (QRS Software, 2018). This strategy ensured the systematic evaluation of data which enhanced the credibility of the results. The research analysis was an iterative process. Data generated identified key factors that may account for variation in structures, processes, impact and outcomes as described by key-stakeholders. During the transcription phase, it was ensured that the verbal account remained true to its original nature (enhancing credibility of the data), and general themes were noted. With the transcripts imported to NVivo software for analysis, initial codes were generated before these were arranged into overarching themes. The themes were reviewed by two researchers and a series of distinct sub-themes were also developed to more clearly describe the data. The themes and sub-themes were then named and defined, identifying the essence of each theme.

1.6. Qualitative rigour

To assess the rigour of qualitative research Lincoln and Guba (1985) propose a framework that includes credibility, transferability, dependability and confirmability to establish the truth value of an inquiry. To

achieve credibility, a purposive sample of key stakeholders, representing multiple disciplines currently providing maternity services were located. In addition, two researchers explicated the themes through the analysis process ensuring the findings were an accurate reflection of the participant's responses. Transferability indicates the findings can be applied to real world situations and the dependability and confirmability of the qualitative data is concerned with the stability of the data. This is the ability of another to follow the audit trail and judge the decisions made and understand the completed interpretations to reach similar conclusions. This was achieved by triangulating the qualitative results with the results from a quantitative arm of the study and maintaining an audit trail using the NVivo software.

1.7. Ethical statement

Ethical approval was obtained from the Swinburne University of Technology Human Research Ethics Committee (#SHR Project, 2018/117). Data were collected between June and August 2018. Participants selected a pseudonym to be used and were asked to provide verbal consent for the telephone interview to be recorded. Following consent, participants were informed that recording would begin and the interview proceeded using the selected pseudonym.

2. Findings

Following a thematic analysis (n = 5), four main themes were identified along with nine sub-themes. The themes and their sub-themes are displayed with a definition (see Table 1). Participants were a midwife, allied health worker (physiotherapist), manager, healthcare educator, and an outlier service worker (maternal and child health nurse).

2.1. Theme 1 - education

The theme of education emerged from the narrative data and related to the education provided to staff and to consumers and their partners.

Sub-theme 'Consumers': There is some uncertainty regarding the training of staff who provided group education to consumers with one view being ... *(they) would have (had) some formal education to be able to provide that education (Wendy, Manager)*, while another was that this may not be the case and commented ... *I have been looking at the XX hospital coming and giving some extra education (Lucy, Educator)*. Participant's identified external education providers in relation to providing consumer education, *there is also the 'well women's course' conducted under physiotherapy (Emma, Allied Health)*.

Sub-theme 'Staff': Education for staff was described as either

mandatory or non-mandatory by participants. The mandatory CPD education was described as being interdisciplinary and is reflected in the following statements by Lucy, Wendy and Emma ... *The education offered is open to all staff disciplines (Lucy, Educator) ... is not exclusive to staff members here and the 'home-birth' [education] was open to all disciplines – doctors, anaesthetists, midwives, and AV (Wendy, Manager) ... and that I know are definitely available to allied health staff as well (Emma, Allied Health)*.

While the mandatory training for all staff was required to be completed, the array of non-mandatory CPD available to staff was defined as being extensive and delivered in a variety of formats. This is captured in the following comments by participants Sam, Wendy, Anne and Emma ... *study days on things like breastfeeding, suturing for example (Sam, Midwife), ...case load midwives, sessions for no-lift, ALS and NLS can be organised as a group (Wendy, Manager), ...that can be webinars, it can be different formats, it might be reading things, it might be doing an on-line course (Anne, Outlier Health Service), ... we can attend anything of interest, ...they are very much open and available ... topics like breastfeeding, settling the newborn ... (Emma, Allied Health)*.

Sub-theme 'CPD attendance management': Attendance to mandatory CPD is closely monitored via the particular system used by the organisation or board. Hospitals generally have electronic systems that provide email reminder prompts to staff and the impact of these systems for monitoring attendance is articulated as follows ... *and then if you haven't done it the emails come thick and fast (Sam, Midwife), ...the emails from the organisation come every day and they won't stop until you complete what it is you have to do (Emma, Allied Health)*. While for others accessing the information was for the purpose of performance appraisals as Anne describes ... *have to take along a print out of what we have done (Anne, Outlier Health Service)*.

Sub-theme 'Drivers of CPD – management influence': A key factor in determining management choices regarding CPD programmes to be provided is the mitigation or elimination of risk. From a management perspective an educational strategy is often used to rectify an identified clinical risk. The sentiment is captured by Wendy ... *[education] included a component that contained managing a post-partum haemorrhage (PPH) ... (Wendy, Manager)*.

Sub-theme 'Drivers of CPD – staff influence': Commonly, staff influence in CPD education development and delivery comes from staff identifying a gap in their knowledge or expertise, Anne describes ... *there is always space for us to say 'I don't know very much about this topic' and they will get someone to come in and cover that topic (Anne, Outlier Health Service)*. Others might express to managers the need for particular educational programs or groups to be engaged for staff CPD ... *'we would like [a specific education group] to come ...' (Lucy, Educator)*, or ... *a few staff members may have mentioned they were interested in an area ... one where they had voiced that they were really interested in it, or they felt*

Table 1
Themes with sub-themes of interviews.

Theme	Sub-theme	Definition
Education	<i>Consumers</i>	The nature of the education provided to consumers
	<i>Staff</i>	The nature/content and context of education provided to staff
	<i>CPD attendance management</i>	Monitoring of attendance of staff at programmes including any role played by human resources
	<i>Drivers of CPD – management influence</i>	The role of management in determining what CPD is provided/attended
Practitioner standards	<i>Drivers of CPD – staff influence</i>	How 'coal-face' staff influence or determine what CPD is provided/attended
	<i>Enablers</i>	Insight into the nature of support provided to attend CPD and the level of support offered
	<i>Educational preparation of CPD facilitators</i>	Institutional requirements and measures to maintain standards of care and competence
Programme monitoring for quality	<i>Record keeping</i>	Details the requirements or competencies deemed necessary to continue practicing and provide education to staff or clients
		A description of the records kept in relation to practitioner standards and credentialing. Includes, how records are kept, by whom and how systems for mandatory CPD are used.
Resources		Methods for monitoring when non mandatory CPD completed, quality feedback from staff and associated improvements to the CPD
	<i>Resource barriers</i>	Outline of available resources, their accessibility and any maintenance arrangements
		Limitation of resources in terms of staffing or training aids

they hadn't managed it very well (Emma, Allied Health).

Sub-theme 'Enablers': Enablers of CPD for staff included study leave, funding, and having access to CPD opportunities. The nursing award in Victoria provides five days per annum as study leave, which as mentioned by Sam ... *you just have to apply for, providing a submission as to why it will be advantageous to you or where you work (Sam, Midwife)*. Enablers can come from both organisational processes and/or through management decisions ... *our manager gives us a day to sit and do our professional development day to ensure we are all up to date ... (Lucy, Educator)* and from those responsible for delivering the CPD and creating a safe place for staff to undertake mandatory CPD if they were not initially successful in completing it ... *sometimes it is anxiety driven ... didn't do well in the last one and I don't feel comfortable, so we do really try to personally follow it up ... (Lucy, Educator)*.

A significant identified enabler was funding to support staff in attending CPD as mentioned by Anne and Lucy ... *There are also a couple of regular seminars that are paid for by the department ... (Anne, Outlier Health Service)* and ... *We do fund them for staff – they pay and we reimburse the cost because it is compulsory, and with the new funding we are looking into funding the other compulsory components as well (Lucy, Educator)*. A counterpoint to these enablers is that they are not available to all staff as described by Anne ... *one of the main criteria for eligibility to be supported is to be a permanent staff member (Emma, Allied Health) and there is no reimbursement of any conference registration costs if you are a reliever (Anne, MCHN)*.

2.2. Theme 2 – practitioner standards

The maintenance of practitioner standards was a key reason for CPD education. In addition, the mandatory components were described as being strictly monitored in terms of attaining the requisite professional standard. As Wendy states ... *if they haven't achieved a satisfactory practitioner level in their fetal surveillance programme they will be taken from the birthing environment until they have reached the desired level (Wendy, Manager)*. Successful completion of CPD also needed to be timely ... *NeoResus, Smart Lift, Hand Hygiene, Infection Control, are all compulsory and if they are not up to date and you haven't done them each year, you actually won't be employed. And for bank staff, they won't get any shifts (Sam, Midwife)*.

Sub-theme 'Educational preparation of CPD facilitators': All healthcare professionals have specific guidelines outlining the competencies that have to be achieved for their registration to continue. Participants reflected about the need for staff who provided CPD to be trained to be enabled to facilitate good quality CPD education. As Lucy states ... *To provide continuing professional education within a hospital there is an expectation of specific training. Most of us in the education department have the Cert IV in education and training, or some of us are working towards it (Lucy, Educator)*.

However, the education and training preparation of CPD facilitators was not always provided by an approved training organisation ... *Not uncommonly they may commence their journey as a clinical support midwife; ... have done a preceptor course; ... done all the 'train the trainer' education (Wendy, Manager)*. In outlying areas and some allied health services in-house CPD is often provided by existing staff who are credentialed by the organisation ... *the people from the organisations are credentialed by that organisation (Anne, Outlier Health Service)*.

Sub-theme 'Record keeping': CPD education is used for many purposes such as performance appraisals, or as mandated by National Boards for registration and/or for internal organisational risk management purposes. Therefore a record of attendance to CPD is commonly gathered and kept by the education departments, the organisation and/or by the individual.

At the individual level, staff described keeping records for the purpose of registration audits that could occur at any time throughout a year. In addition records were individually kept for the purpose of keeping on top of the organisational competencies, as mentioned by

Sam ... *when we are coming up to completion of annual competencies we get an email to say it is due (Sam, Midwife)*. Another aspect of record keeping was as an element of performance appraisals where individual staff provide record of attendance to support their stated annual goals and objectives and for planning in the year ahead, as described by Anne ... *[I] have to take along a print out of what I have done; ... it is identified where my gaps are or what is deemed necessary (Anne, Outlier Service)*; or as a record of possible resources such as ... *if they have a special skill or a special course that they have done that is of benefit to the unit of course we do keep a bit of a record ... (Lucy, Educator)*. At the organisational level (meso and macro levels) managers meet KPIs with regards to mandatory CPD and reports of these for internal and external purposes ... *[for] mandatory training, a record is kept on an electronic system (Wendy, Manager)*. *This electronic record is available right up the line to the top of the organisation, but as a manager I can see each staff who reports to me (Wendy, Manager)*.

2.3. Theme 3 – programme monitoring for quality

An important component of CPD education in services that provide maternity care is to ensure that programmes are of a high quality, are contemporary and provide the information as intended and in a format that engages staff. Organisationally, staff feedback is generally used to monitor the quality of CPD as mentioned by participants ... *we do evaluation sheets after sessions (Lucy, Educator) ... evaluation forms have to be completed at the end of each session (Wendy, Manager)*, and ... *a handout is provided at the end of each session that is an evaluation form (Emma, Allied Health)*.

2.4. Theme 4 – resources

The availability of resources was reported as being variable across organisations with some (not all) having access to high fidelity simulation facilities across the range of CPD training ... *the manual handling training occurs in a specific manual handling lab that has all the models of the beds that the hospital has (Emma, Allied Health) ... there is a sim centre and undergraduates, graduates and all relevant staff do use the sim centre (Wendy, Manager)*.

In contrast some organisations have limited access to equipment and share resources ... *we require equipment, so if we are doing 'neonatal resus' we require a resuscitaire, we obviously need access to that which is just one used on the ward of course (Lucy, Educator)*. Some resources mentioned also related specifically to human resources and education being coordinated by dedicated education teams, as mentioned by Sam ... *we have our own education department and we have clinical facilitators on the wards who have roles with either the staff, new graduates, night duty, for birth suite ... (Sam, Midwife)*. However, dedicated education teams were not the norm among our participant descriptions.

Sub-theme 'Resource barriers': Frequently staffing levels were an influence when attending CPD ... *they have to be shared evenly and you have to also manage the levels to make sure you have enough staff around (Sam, Midwife)* and difficulties can be encountered when supervised practice is required ... *they have to perform their day to day duties and then find someone to supervise them to perform perineal repair (Wendy, Manager)*. There are also instances where access to current information was limited ... *some of the online material is not easy to access, such as drug compendiums (when you are not in a hospital) (Anne, MCHN)*.

A solution to some of the resource issues included sharing resources and having multidisciplinary sessions ... *They are all open to everyone and we open it up to the region (Lucy, Educator) ... we can attend anything of interest to us (Emma, Allied Health) and ... we do a lot of GP sessions, we are able to go to sessions at places like the Children's (Anne, MCHN)*.

3. Discussion

Staff education or CPD was presented in the context of being

mandatory or non-mandatory. From the perspective of mandatory CPD the governance was very clear for participants. Such CPD was considered a structured learning activity over which the appropriate discipline board has oversight of what is completed and of attendance. It is the responsibility of the practitioners/clinicians to maintain and submit a record of CPD completed to that board for their re-registration, a practice common to several jurisdictions (Casey et al., 2016; Gray et al., 2014; Myatt, 2015). The interdisciplinary nature of education provided as CPD was viewed favourably by participants. There is literature that supports learning for staff where CPD is provided in an interdisciplinary space as very effective since it allows for active engagement of practitioners and peer exchange (Peleman et al., 2018) and highlights the need to teach teamwork, communication and leadership skills when managing obstetric emergencies (Kumar et al., 2018). However, more needs to be examined about interprofessional CPD and the benefits of engaging clinicians in collaborative problem-solving (O'Brien et al., 2017). There appears to be a gap in the evidence related to interprofessional CPD specifically in services that provide maternity care (Davies et al., 2016).

CPD drivers included risk management and risk aversion, meeting professional standard requirements and staff and/or consumer (patient) feedback. Indeed, the quality of the CPD provided was monitored using staff or consumer feedback. While these drivers of CPD education are relevant and necessary to meet professional standards, translation of best evidence into CPD education and using effective learning strategies must also be incorporated into CPD for practitioners and education for consumers (Davis and McMahon, 2018). For non-mandatory CPD programmes offered however, participants described attendance at such sessions being based on individual interest and opportunity. These CPD sessions were also recorded and included in individual portfolios to fulfil re-registration requirements.

Resources for providing CPD were limited in some regions, but overcome by a pooling of resources since these were often limited (such as equipment and/or CPD facilitators). In other sites resources were described as contemporary and satisfactory and equipment was often high fidelity. In some cases dedicated education teams coordinated the organisations CPD requirements. While limited resources were seen as a barrier to CPD for some participants, enablers were identified such as having access to good quality CPD through resource sharing. Also, being supported by the organisation to attend CPD education in terms of time to attend and funds to pay or subsidise any associated costs were described as enablers. An opportunity exists for services with limited resources to use technology in order to maximise the potential for sharing CPD education and/or consumer education where these were limited. Undeniably healthcare technology is already expanding in enhancing patient care and choice, and further expansion using technology and linking to universities can offer contemporary and evidence based CPD is a very feasible option (Glasper, 2016).

3.1. Limitations

Qualitative research is not generalizable but it does offer valuable insights into the topic under investigation. The key stakeholders for this study represented the main disciplines working in maternity services and associated services that support these services, however a medical clinician was not part of the sample. Several agreed initially but withdrew due to time pressures.

4. Conclusions

From the consultation process four main themes related to Education, Practitioner standards, Programme monitoring and quality, and Resources were identified. The drivers for CPD included risk management, professional standard requirements and staff feedback. While limited resources were seen as a barrier to CPD for some participants, enablers were identified such as having access to good quality

CPD and being supported by the organisation to attend. The qualifications of the facilitators of consumer education and/or staff CPD were not clear for participants. Some indicated that there may have been some in-house training similar to a 'train-the-trainer' approach to prepare CPD facilitators. Though many CPD and education facilitators are professionally prepared for the role of health educator through their registration, to maintain the highest level of competence in health education roles and responsibilities academic preparation or board credentialing/endorsement for the role is recommended.

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Conflicts of interest

None.

Ethical approval

Ethical approval was obtained from the Swinburne University of Technology Human Research Ethics Committee (#SHR Project, 2018/117).

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.nepr.2019.08.001>.

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