

# Community pharmacy as a setting for public health nutrition action: Australian nutritionists' perspectives

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Submitted 20 October 2013: Final revision received 11 July 2014: Accepted 5 September 2014: First published online 8 October 2014

## Abstract

**Objective:** To explore public health nutritionists' perceptions of nutrition and its place in community pharmacy (CP) presently and into the future; and to explore perceived opportunities, feasibility and scope of public health nutrition (PHN) interventions in CP, with a focus on maternal and infant nutrition.

**Design:** Qualitative data were gathered through semi-structured interviews and drew on hermeneutics as the theoretical framework for analysis and interpretation.

**Setting:** Queensland, Australia.

**Subjects:** Public health nutritionists, identified through purposive, criterion sampling, were chosen due to (i) their role as potential stakeholders, (ii) their knowledge and emphasis on nutrition and (iii) their practice experience.

**Results:** Opportunities for PHN action focused primarily on actions relating to early nutrient supplementation in pregnancy and breast-feeding protection and promotion. Opportunities in CP were constrained by practitioners' perception of (i) conflict between health care and commercial interests in CP, (ii) problematic practices in CP and (iii) values and motivations of practitioners and other stakeholders in the CP sector. Strategies were suggested to improve practices and enhance the setting from a PHN perspective. Participants suggested both collaborative and regulatory approaches to achieve settings-based changes, identifying the need for these to coexist for effective outcomes.

**Conclusions:** Public health nutritionists suggest that opportunities for PHN action are constrained by perceived conflicted interests and that consumers need to be adequately protected from the influence of commercial interests. PHN action in this setting needs adequate reflection on evidence as well as ethics ensuring that practices are 'for the good' of mothers and infants.

## Keywords

Community pharmacy  
Maternal and child nutrition  
Public health nutrition  
Practitioner  
Settings

In Australia, the National Preventative Health Strategy defines potential initiatives to address the growing issue of overweight and obesity in both adults and children<sup>(1)</sup>. With a focus on prevention, the strategy highlights the need to embed a healthy lifestyle in everyday life, promote effective preventive messages, as well as strengthen, skill and support the primary health-care and the public health workforce to support community members to adopt healthy choices<sup>(1)</sup>. There is also a focus on maternal and child health within this strategy, recognizing this life stage as a priority action area.

Community pharmacies (CP), referring to those pharmacies located in the community not attached to a hospital, are conveniently located in most communities and are an almost ubiquitous community setting and health-service presence in Australia<sup>(2)</sup>. The role for CP and its workforce in public health and health promotion initiatives

has been explored, but with a predominant focus on secondary and tertiary prevention strategies<sup>(3)</sup>. Primary prevention initiatives, although limited, have included settings-based social marketing and implementation of programmes to develop personal skills<sup>(4,5)</sup>.

Mothers appear to be relatively high users of CP, accessing this setting for a variety of reasons including health advice<sup>(6)</sup>. At present little intervention research has been undertaken to explore CP setting-specific maternal and infant nutrition primary prevention opportunities, despite being widely accessed by this population<sup>(6–8)</sup>. As such it is important to explore the potential of CP as a setting for public health nutrition (PHN) action.

It is recognized that settings are complex contexts which engage a variety of actors with often diverse perspectives and interests<sup>(9)</sup>. These can influence the implementation of health-promoting actions<sup>(10)</sup>. Poland and

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colleagues propose a framework for understanding settings, based on learning from undertaking settings-based research<sup>(11)</sup>. Key components of this framework include recognition of within- and between-setting diversity, received knowledge (assumptions about the setting), stakeholders and interests and, finally, power, influence and social change<sup>(11)</sup>. This framework reinforces the social nature of settings and the importance of having a broad understanding of this, including the interests and perspectives of stakeholders. This can be used to inform a nuanced approach to planning and implementing public health and health-promoting strategies.

Previous work has investigated the perspectives of stakeholders including mothers<sup>(6)</sup>, the pharmacy workforce<sup>(12,13)</sup> and also those working in the area of CP practice-based research<sup>(14)</sup>. Perspectives demonstrate the similar and diverse ways in which these stakeholders perceive CP and also the opportunities for nutrition-related action. For example, mothers are aware of the physical infrastructure defining the CP setting such as location, product availability, space and privacy<sup>(6)</sup>. Their perceptions of opportunities for nutrition promotion have focused primarily on the need for advice and support during this life stage. While pharmacists believe they should be more involved in health promotion activities including those focused on nutrition, they recognize opportunities are not well explored and there are a number of barriers preventing their further involvement<sup>(12,15)</sup>.

Although not yet canvassed, PHN practitioners are key stakeholders in the development, implementation and evaluation of potential strategies for working in and with CP. They value nutrition as a priority, have expertise in population-based primary prevention strategies and practice, and are able to provide insight into how practitioners, as social agents, get things done in practice<sup>(16,17)</sup>. In addition, theories of behaviour change and intention suggest that perceptions are key determinants of action<sup>(18)</sup>. Understanding practitioners' perceptions is important to inform future mobilization of this workforce to engage in this area in the future.

The aims of the present study were to: (i) to explore public health nutritionists' perceptions of nutrition and its place in CP, presently and into the future; and (ii) explore perceived opportunities, feasibility and scope of PHN interventions in CP, with a focus on maternal and infant nutrition.

## Methods

### *Perspective*

A qualitative approach, based on theoretical assumptions of hermeneutics, was used to develop an understanding of and interpret PHN practitioners' perceptions. Qualitative inquiry is implicitly underpinned by hermeneutic thought regarding the conditions required for human understanding. Hermeneutic inquiry enables development of understanding and is recognized as an interpretive activity<sup>(19)</sup>. In the context

of the present study, theoretical assumptions of gadamerian hermeneutics underpinned the process of understanding (through analysis and interpretation).

Hermeneutics at its basis requires one to recognize: (i) the need for openness to the development of new understanding through engagement with the 'other' (participants); and (ii) that the inquirer (or researcher) needs to engage reflexively both with the participants and the broader context to develop understanding, meaning and knowledge<sup>(19,20)</sup>. We used semi-structured interviews in the present study as a means to engage with participants and took an interpretive approach, as we were particularly interested in the meaning relayed through the interview and its relationship to the context within which it was produced.

The study was conducted according to the guidelines laid down in the Declaration of Helsinki and all procedures involving human subjects were approved by the University of the Sunshine Coast Human Research Ethics Committee. Verbal informed consent was obtained from all participants. Verbal consent was witnessed and formally recorded. All interview data were de-identified and are reported here as a collection of responses. No monetary compensation was provided to participants.

### *Selection of participants*

The sampling techniques we used were based on a combination of purposive, snowball and criterion sampling<sup>(21)</sup>. A purposive sample of state-employed (Queensland, Australia) public health nutritionists was recruited. The role of public health nutritionists at the time of data collection included the planning, implementation and evaluation of nutrition-related strategies with a focus on primary prevention applied at community, district and state levels. At the time of interview, state-employed public health nutritionists were strategic in setting the agenda for strategy development and implementation and were therefore considered potential change agents across the discipline. The sampling strategy aimed to include participants who had had some level of contact with CP in a professional capacity as well as those who had not, to explore the area of interest from these perspectives. Attention was also paid to recruiting participants from differing geographical locations. Location was considered important because regional and remote environments can differ significantly from more urbanized areas and may influence the role of the CP, particularly in regard to health promotion practices<sup>(22)</sup>. Additional data collection was deemed redundant once the above criteria were achieved and saturation of concepts was found through analysis<sup>(23)</sup>.

### *Data collection*

Given the geographical location of participants, telephone interviewing was used. Effort to build rapport prior to the interview through email and telephone contact aimed to prevent negative influence on interview quality.

**Table 1** Inquiry logic

Areas for inquiry	Rationale
Work history ± current work with CP	Situate participant within work-related history and professional identity
Understanding of/perceptions of the CP setting (multidimensional) including staff roles (pharmacist/CP staff)	Fore-grounding participants' subsequent responses
Discuss opportunities, feasibility, scope in CP to address PHN issues (maternal and infant focus)	Exploration of participant position in relation to research inquiry

CP, community pharmacy; PHN, public health nutrition.

**Table 2** Process of analysis and interpretation

Phase	Process of interpretation	Theme development
Phase 1	Data immersion	
Phase 2	Concept mapping of each interview (group 1)	Key concepts discussed relating to each participant's context
	Inductive thematic analysis of group 1 data	Theming of concepts across participants
	Abductive reasoning; researcher reflexivity* to guide analysis	Identification of relationships between concepts and context
	Deductive reasoning; returning to the data to confirm/disconfirm interpretations	Themes in light of the two key objectives
	Return to RQ (to provide boundaries for interpretation)	
Phase 3	Data immersion	
	Concept mapping of each interview (group 2)	Key concepts discussed relating to each participant's context
Phase 4	Repeat of process undertaken during phase 2 but for group 2 data	As per phase 2
Phase 5	Comparative analysis of group 1 and 2 data and themes	Comparison of themes
Phase 6	Total data set analysis (where similarity of responses and concepts was apparent)	Themes described in relation to the two key objectives
	Inductive and abductive analysis	
	Critical reflection and peer debriefing	
	Deductive reasoning; returning to the data to confirm/disconfirm interpretations	
	Return to RQ to guide analysis	

RQ, research questions.

\*The primary researcher is dietetically trained in Australia, experienced in community and public health nutrition, now an academic. She has previous experience in working with community pharmacies. Her experience in this setting led her to recognize the need to understand a range of stakeholder perceptions including those of her own colleagues as a means to engage in dialogue around the opportunities. The reflexive process involved clearly articulating personal positions prior to data collection and analysis. Given this background, any interpretive thought required critical questioning, returning to the data and consciously asking what other ways the text (participant interview) could be understood to ensure she was adequately engaging with the meaning intended by the participant. The primary researcher recognizes she has been changed, broadened, in this process. This is consistent with a key theoretical premise of hermeneutics: the fusion of horizons<sup>(19)</sup>.

The interview covered identified topic areas (Table 1), collecting comparative data<sup>(23)</sup>. This method also allowed flexibility to explore specific issues of interest and to probe participants for depth of response or clarify possible ambiguities. Email correspondence following the interview was used, with consent from participants, where additional clarification was required.

Personal details of interest including age, work experience and education were collected at the conclusion of the interview if not stated prior to or in the course of the interview. Interviews were audio taped to ensure accuracy of responses and allowed the interviewer to be more attentive to the interviewee<sup>(21)</sup>. Responses were transcribed word for word and attention given to written means of emphasis placed on words or phrases by the participants.

### Analysis

Based in hermeneutics, the process of analysis focused on interpretation recognizing the importance of the (personal, socio-political) context within which the interview dialogue was produced. It is described here as the steps taken

in which to translate 'what was said' by participants into 'what they were talking about'<sup>(20)</sup>. Transcripts and audio were read/listened to simultaneously multiple times, to become familiar with the data and their complexity<sup>(24)</sup>. Table 2 demonstrates the phases in the process of interpreting the collected data.

The process summarized in Table 2 was undertaken within an iterative, cyclical framework, moving between the data, what the data were saying and the research questions<sup>(25)</sup>. The research questions provided boundaries and direction for the analytical process. The reasoning process undertaken during analysis followed an inductive–abductive–deductive sequence, as described by Carter and colleagues<sup>(26)</sup>. A concept map was developed for each interview/interviewee which enabled the researcher to build a picture of the conversation and the connections to participant context. This process has been shown previously to adequately represent the richness of the text and allows focus to shift from what the participants have said to what they were talking about and the connection between key concepts and ideas discussed<sup>(27)</sup>.

Initial themes emerged from the data using this concept-mapping process (inductive)<sup>(26)</sup>. Inferences were developed through reliance on abductive processes, described by Carter *et al.* as ‘moments of inspiration in which a hunch, clue, metaphor, explanation or pattern is imagined or recalled from existing theory to make sense of the data [that] enable inference development’<sup>(26)</sup> (p. 109). Concepts, meaning and interpretations were confirmed, refined and further explored by returning to the data<sup>(26)</sup>. Throughout the process of interpreting qualitative interview data researcher reflexivity was required, stepping outside the data during the process to make more sense of the data, including reference to sociological, discipline-specific and broader scientific literature. In addition, peer debriefing was used to enhance the credibility of the data analysis and interpretation<sup>(28)</sup>.

The research findings are presented as key themes defined in relation to the research objectives. Findings relate to how participants situated themselves and PHN potential opportunities within the context of CP and how they made reference to their own practice experience and wisdom. The quotations are included to invite the reader into the interpretive space and show the reader what was ‘seen’ or ‘heard’ in the text (from the participant)<sup>(24)</sup>.

## Results

### Participants

Eight women were interviewed and ranged in age from 30 to 44 years, with six identifying themselves as having children. All of the participants who had previously worked in some capacity with CP were mothers (participants 1–4). All participants had at least a bachelor degree with four having undertaken postgraduate study; seven were originally dietetically trained. All of these women were considered highly educated and had been exposed to at least some level of professional socialization, having between 8 and 19 years of experience within nutrition-related practices. All participants were working either part-time (*n* 6) or full-time (*n* 2) in the population health arena for the state government health department at the time of interview.

Participants drew on these aspects of their personhood and experiences in the process of exploring opportunities, feasibility and scope of potential PHN actions in the CP setting. It was not possible, however, to determine or expect to determine the professional perspective separate from that of their personal experiences. It was apparent, though, that perceptions were strongly influenced by both the social and professional roles they held.

Participants were practising in PHN among geographically defined populations, with a focus on at least one nutrition priority area. All participants, except one, were either working in the priority area of early years (maternal and infant/child nutrition) at the time of interview or had

previously worked in this area. Participants had experience in working across geographically diverse locations. All except one had experience of working outside major cities (inner/outer regional and remote areas) and only one had worked in an area classified as very remote (using the Australian standard geographical remoteness classifications<sup>(29)</sup>).

Those who had initiated work with CP had done so largely through identifying CP as a conveniently located health-service provider accessed by families. Work occurring at the time of interview was limited, with little exploration of opportunities for PHN action in practice. Two participants had been in contact with CP as part of a needs assessment process with a focus on ‘early years’ nutrition (predominantly breast-feeding). The other two participants were involved in disseminating ‘breastfeeding welcome here’ stickers in their communities; interactions with CP took place in this context.

### **Putting opportunities for public health nutrition action in context**

The CP setting was described by participants in relation to practices they had observed. They interpreted these practices in terms of their own key values and interests developed in relation to their professional and non-work related experiences. Potential opportunities and challenges for maternal and infant nutrition-focused intervention in this setting were influenced by this lens. The following quote captures some of the tensions present in the CP setting as perceived by participants, which relate directly to perceived opportunities and potential issues:

‘They [pharmacy] can be a hub for health information and possibly for some nutrition information around vitamins and supplements and infant nutrition, the formula and things like that. ... I guess the most relevant thing for me around community pharmacies has been the role they might play in either promoting or perhaps hindering breast-feeding promotion... did they have qualified staff at the pharmacy that can guide people in the right direction in regards to infant nutrition? ... So I suppose some of the concerns that I’ve had in the past working in early life has been how much economically they’re linked with the products that they sell in those regards, so whether it be infant formula or associated bottles and teats and all of that paraphernalia that goes with it, and then on the flip side are the breast-feeding support products like pumps and everything else.’ (Participant 6)

### **Possible opportunities: vitamin and mineral supplementation**

Pharmacy was identified as a setting where exposure to pregnant women early in their first trimester may occur, providing an opportunity for early diet/nutrient intervention.

Although the sale of vitamin and mineral supplements could help to meet nutrient supplementation needs in pregnancy, participants were concerned about what type of advice would be given in conjunction with these sales. Participants felt that food as the basis for healthy eating should be emphasized in the context of selling nutrient supplements. This sales encounter was identified as a possible time for opportunistic healthy eating advice. Participants suggested the workforce would need additional knowledge and skills to support these practices:

'I guess from a pharmacy setting because they are going to be providing those sorts of supplementations if they've got additional knowledge to be able to say "Oh and if you eat it with this" or "If you do this as well that's going to make it better" or "To avoid constipation you should also be doing these sorts of things with food" as opposed to "taking an iron tablet and then taking a laxative". I would hope they're not going to do that though.' [laughs] (Participant 7)

### **Possible opportunities: breast-feeding and infant feeding**

Pharmacy's position in relation to breast-feeding was unclear to participants given that they observed CP selling both paraphernalia that could support breast-feeding continuation (e.g. breast pumps) as well as selling and often aggressively marketing infant formula and related goods. Marketing practices associated with the promotion and advertising of artificial infant formula were perceived as significantly more obvious than breast-feeding promotion, contravening good practices outlined in the WHO code (International Code of Marketing of Breast-Milk Substitutes) for marketing of infant formula:

'I think it's a really challenging space in that, again, I guess my perceptions of pharmacies as they currently stand with their sales of infant formulas and their promotions of those sorts of things against the WHO code there's almost a conflict of interest or I see the possibility of challenges.' (Participant 7)

The sale and hire of breast pumps was seen positively – offering potential support for continuation of breast-feeding for mothers returning to work. However, questions were raised regarding their availability, cost implications and whether good assistance would be available to support use. Participants identified the need for education, knowledge and skill in the area of infant feeding. They expressed concern regarding the risk of potentially harmful and unhelpful advice being given to mothers, who may be particularly vulnerable when 'tired, exhausted and overwhelmed'.

### **Practice drivers: health care, retail, competition**

Participants described observed and potential opportunities for PHN action in CP. These opportunities, however, were not considered in isolation from the CP context.

A range of practice drivers was discussed by participants, as they recognized the importance of these in influencing the practice environment and ultimately the scope and feasibility of potential actions. CP was represented by participants as a setting that has both a medical, treatment focus as well as being a retail environment, identifying interests both in health care and in sales and profit generation.

Pharmacist' roles were seen to align more closely with the health-care interests in pharmacy, with a primary focus on medicine-related services including safe and correct dispensing and advice. However, participants anticipated tensions where pharmacists held dual roles of health professional and shop owner. Non-pharmacist staff members (e.g. pharmacy assistants) were perceived differently to pharmacists given the differences in their educational background and perceived roles and responsibilities within the pharmacy setting. Their practices, as observed by participants, represented pharmacy's commercial interests in sales, retail service and profit, described as being like checkout operators, having skills in processing sales, and good product knowledge. The layout of the physical space was described as being 'like a supermarket' with the advertising, promotion and sale of products also representing the commercial interest to participants.

While the sales imperative was seen as an immediate driver of practice, it was identified that repeat custom and customer loyalty were also likely to be as, if not more, important. It was identified that here the commercial interests of CP could be coherent with the health-care interest. Professional services, including the provision of information and support, were seen as a means through which customer loyalty and trust might develop, opening up a place of 'common ground' where the core objectives and interests of PHN could align:

'I think the fact that there are lots of young families that utilize pharmacies and that they're the main customer for them. So if you are able to provide a good service and the woman feels like she is being supported, then I guess there's the potential there that she's going to be a return customer further down the track. So if they haven't sold something this time, that they've got trust there.' (Participant 3)

Participants recognized the influence of organizational structures in CP and organizational expectations on the practices of the workforce. Underlying values, interests and motivations of pharmacy as an organization and of its workforce, in particular the pharmacist, were questioned. Organization-driven marketing practices relating to both formula and diet products were seen to be driven by profit and self-centred values, and viewed as potentially misleading the consumer. Pharmacist endorsement of diet shake products and other weight-loss programmes marketed as scientifically proven or 'medically advised' was questioned by participants. These practices were interpreted as self-interested and a perversion of 'evidence-

based' practices, undermining the credibility of pharmacists as evidence-based practitioners and the ethical position of CP. Participants also suggested that these practices may reflect unintended poor practice by the workforce resulting from a lack of knowing better or knowledge of 'best' practice. At the same time, values of individual staff members working in CP were recognized as being diverse and not necessarily the same as those of the organization.

Competition, presumed to be at the heart of CP practice, appeared to be a key value in direct tension with PHN practitioner values which were more collective-centred, i.e. what is good for society. The implications of competition as an underlying principle in CP practice were perceived to reach beyond the practices of the individual pharmacies to CP as a sector where pharmacies are in effect competing against each other, contributing to a reduction in goodwill between pharmacies. This between-pharmacy competition could add a layer of complexity for developing sector-wide PHN action.

Even though the discourse on drivers and interests appeared to be predominantly sceptical in nature, some identified that this conflict is not unlike that seen in other health professions and should not be the reason why work in this setting is not progressed:

'I know that it's a very demanding role [pharmacist's role] and that really it's I guess like a lot of health-related fields, there's reps in it and it's very commercially dominated.... It's trickier because it's a commercial environment but I think if you don't tap into that potential, then it's a waste of a good resource isn't it?' (Participant 1)

### ***Suggested strategies and approaches***

Drawing on their knowledge of the complexities and challenges of working at community and organizational levels, participants suggested the following strategies to drive change in CP. These focused primarily on addressing problematic workforce and organizational practices: (i) development of strategies through collaboration; (ii) contextualized education for/of staff; (iii) regulation to enforce practice requirements (marketing, training, scope of practice); and (iv) advocacy for broader structural changes, e.g. adoption of the International Code of Marketing of Breast-Milk Substitutes in Australian pharmacies.

Collaborative approaches were seen to have merit particularly at a local or community level; however, attempting to achieve sector-wide change was identified as needing a stronger approach that included the use of regulation. In some circumstances, participants saw that collaborative approaches with pharmacy as well as regulation could or needed to coexist to achieve desired change. Reasons for suggesting a regulatory approach related primarily to the difficulties inherent in self-regulation, the perceived need for consistency of information-giving for strategies to be effective, to ensure the scope of

practice (safety) and/or to limit the impacts of human reasoning and 'non-compliant' behaviours on outcomes and effectiveness.

### **Discussion**

Exploring public health nutritionists' perceptions of CP as a potential health-promoting setting with a focus on maternal and infant nutrition, as well as their practice experience, has helped identify and clarify potential opportunities, risks and problems. The present study highlights, as others have, that practitioners are familiar with the complexities and challenges of settings-based PHN actions<sup>(30)</sup>. The PHN perspective was assumed to prioritize best-practice maternal and infant nutrition and was explored to provide a 'PHN' perspective of the CP setting. Investigating CP through the eyes of practitioners gives insight into the values and interests important to public health nutritionists as well as how the interests and values of CP are perceived. These insights, building on practical judgements developed through experience, help provide contextualized knowledge useful for guiding practice-based research. The type of knowledge produced in the present study is particular to the Australian context but provides theoretically relevant concepts that may be relevant to other contexts.

It is recognized that a key limitation of the study is the small sample. As such it is not possible to determine the theoretical generalizability of the findings. In addition, the views are limited to a female population who may perceive themselves and their professional role differently to males. Also, having been primarily dietetically trained is likely to have had a significant influence on the lens through which the participants viewed the area being explored; however, it is noted that in Australia the majority of people working in the PHN space have a dietetic background<sup>(17)</sup>. In addition, while there was limited direct experience in working with CP, this was not unexpected given this area is new and emerging. Little or no work specific to this topic has been published. It is recognized that developing understanding of a setting is an important first step. Poland and colleagues have identified the need to understand stakeholder perception of the setting and interests, as part of this process<sup>(11)</sup>. The current study provides some insight into these from a PHN stakeholder perspective, which is important for determining future capacity for work in this area. Despite the study's limitations, a range of key themes emerging from it provide a productive area for thought and reflection.

Opportunities discussed by participants reflect their perception of maternal and infant nutrition-related needs and their perception of CP as a potential setting for PHN action. Two key areas for discussion centred around nutrient needs in pregnancy and infant feeding with a focus on protecting and promoting breast-feeding. These issues are

coherent with national and international maternal and child nutrition priorities<sup>(1,31)</sup>. Findings suggest that progressing PHN-related action in these areas in CP should include strategies that address change to pharmacy structures, policies and organizational expectations. In addition, workforce-focused approaches, encouraging the workforce to engage in desired practices, would maximize the effect and benefit of PHN-focused action.

Although the literature discusses a shift in focus from individual-level intervention approaches to more structural approaches to address the influences on health<sup>(32)</sup>, the approaches suggested by participants encompass both of these. Anthony Giddens, social theorist, suggests that there is tension between individual and structural approaches and that human activity is produced by personal agency but is also responsive to and influenced by structural elements of the social world<sup>(33,34)</sup>. This suggests that a 'both-and' approach should be the basis for action in this setting, i.e. both structural (e.g. policy) and individual-level (e.g. workforce specific) approaches are needed to produce change.

### **Values and conflicts of interest**

The role of interests and values in the CP setting appears to be a salient feature from the practitioner perspective. Negative perceptions of pharmacists (seen as shopkeepers and self-interested) have been found among doctors<sup>(35)</sup>, suggesting this may be a common perception among health professionals. Although potential opportunities for PHN action in the CP setting were identified, these appeared contingent on the clarification of values, interests and motivators underpinning pharmacy organizational structures and the orientation and skill of the pharmacy workforce, as well as their coherence with public health values. Phronetic research recognizes that practice occurs in the context of an evolving reality, dependent on values, interests and power relations, and that these need clarifying as the basis for 'good' practice<sup>(36)</sup>.

In the present study, health-care and retail interests within CP were seen as conflicted. Practices appeared, to practitioners, as being based on self-interested values as opposed to collective-centred values underpinning public health practice. Kouzakova *et al.* state that 'value conflicts emerge when parties disagree about normative convictions and arguments about what is appropriate, reasonable, or just in a particular situation'<sup>(37)</sup> (p. 798). Conflict literature suggests that perception of common ground between two parties will influence the likelihood of developing a mutually suitable way forward<sup>(37)</sup>. Where there is less perceived common ground, the inclination of one party to force its way on the other is more likely<sup>(37)</sup>. In the context of the present study, collaborative approaches and regulatory approaches were suggested. Finding common ground, through which to achieve mutually suitable resolutions where differences exist, would be required for collaborative approaches to work.

There appears to be limited discussion within CP literature regarding conflicts of interest and subsequent implications of this<sup>(8,38)</sup>. This might reflect a predominant emphasis in CP literature on the role of the pharmacist and pharmaceutical care processes relating to medications, rather than attending to practices that occur in the retail space of CP. However, practices of non-pharmacist staff are likely to be important in informing the public's and other professionals' perspectives and opinions given that they are predominantly whom people engage with when accessing a pharmacy<sup>(8)</sup>.

Although pharmacists have traditionally been seen as trustworthy professionals<sup>(39)</sup>, recent research investigating consumer views of CP weight-management programmes indicated participants perceived pharmacists to be primarily motivated by profit from selling a weight-management product. This research identified that consumers perceived apparent conflicts of interest and were questioning the underlying drivers for pharmacists engaging in these types of programme<sup>(39)</sup>. The authors' response to these findings noted that all professionals have to navigate a duality of interests – that of patient care as well as business viability – although note that the issue might be more pronounced for pharmacists as they sell products<sup>(39)</sup>. While that study looked at patients' perceptions of pharmacists, in practice in Australia it is non-pharmacist CP staff who are providing many of these services.

### **Public health nutrition practice and judgement**

The present study makes explicit some of the tensions of working towards 'the good' at a population level. Even though programme planning frameworks give direction as to 'what' to do, little is provided regarding the deliberation process and recognition of the judgement required in practice. Participants considered both evidence-based and ethical values in identifying potential opportunities, scope and feasibility of PHN action in CP. Carter *et al.* discussed the need for a framework for health promotion practice which incorporates an iterative approach to decision making that incorporates a 'both-and' process – valuing both evidence as well as also considering adequately ethics and values at the same time<sup>(30,40)</sup>. A purely evidence-based decision-making approach largely neglects the political and social context within which decisions are made. Further discussion and clarification of the ethical frameworks and values for PHN may be needed, to make these explicit both for researchers and practitioners.

Opportunities are apparent to practitioners given the CP setting is located across geographic locations, engages the population of interest (mothers) and is already engaging in activities which relate to and potentially influence maternal and infant nutritional health. Opportunities for positive social action are, however, constrained by perceived conflicted interests. Development of an understanding of common ground between CP and PHN will be required for the progression of meaningful collaboration.

Regulatory options suggested to enhance the setting and its use for PHN reflect distrust of organizations and individuals to do the 'good' thing, as well as an efficiency focus – getting the best coverage for the strategies implemented. Progressing work in CP, on the condition that consumers are adequately protected from the commercial interests in CP, should include engagement of both regulatory and collaborative (person-centred) approaches that reflect on how these construct and modify each other. PHN action in this setting needs adequate reflection on evidence, as well as ethics ensuring that practices are 'for the good' of mothers and infants.

### Acknowledgements

*Acknowledgements:* The authors thank the practitioners who took part in this study. *Financial support:* This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors. The authors received no financial support for the research, authorship and/or publication of this article. *Conflict of interest:* None. *Authorship:* J.H.M. conceptualized the study, collected and analysed the data, and wrote the first and final drafts of the manuscript. J.L. assisted in the analysis of data and critically reviewed all drafts. R.H. assisted in the design of the project and critically reviewed all drafts. All authors critically reviewed the manuscript and approved the final manuscript. *Ethics of human subject participation:* The study was approved by the University of the Sunshine Coast Human Research Ethics Committee.

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