

Introduction

Health literacy, the ability to access, understand and act on health information, is an important component of healthcare decision-making.¹ High use of complementary medicine products (CMPs) during pregnancy and lactation has been noted.²⁻⁵ Not much is known regarding pregnant or breastfeeding mothers' health literacy levels, or their CMPs information sources, and how these may influence their decision-making to use CMPs.

Objectives

- To explore the decision-making processes of women choosing to use CMPs in pregnancy and lactation.
- To investigate how their health literacy influences decisions.

Methods

Inclusion criteria: currently pregnant and/or breastfeeding; 18 years and over; have used a CMP in the last 12 months; residing in Northern Rivers NSW, metropolitan Sydney or South-East Queensland; English-speaking.

In-depth interviews (n=16) and focus group discussions (n=3) with 25 pregnant and /or breastfeeding women.

Demographic details and functional health literacy levels surveyed using Newest Vital Sign⁶ and single-item screening question.⁷

Semi-structured in-depth interviews and focus groups:

- choices to use CMPs
- sources of information on CMPs
- CMP information wanted and needed
- how easy CMP information is to understand
- Decision-making processes

Thematic analysis.

Results

Demographics

Age range	23-40 (mean = 33 years)	
Pregnant / breastfeeding	Pregnant	n=7
	Breastfeeding	n=17
	Pregnant & breastfeeding	n=1
Education	TAFE / University	n=22
	Year 12 equivalent	n=2
	Year 10 equivalent	n=1
Functional health literacy levels (Newest Vital Sign) ⁶	Adequate	n=23
	Inadequate	n=1
	Not completed	n=1
Risk of limited health literacy (single-item screening question) ⁷	Adequate health literacy	n=22
	At risk of inadequate health literacy	n=2
	Not completed	n=1
CMPs taken	1-10 CMPs taken each	
Most popular CMPs (prescribed, and self-prescribed)	Pregnancy & breastfeeding multivitamins	
	Iron supplements	
	Probiotics	
	EPA/DHA supplements Herbal teas	

Thematic analysis

Participants' complex decision-making processes included seeking information from three main sources, followed by a collation and assessment of the information. Final decisions about CMP use in pregnancy or lactation were also dependent on establishing the safety of the CMP, and trustworthiness of the information sources accessed (Figure 1).

Decision-making processes to use CMPs in pregnancy and lactation

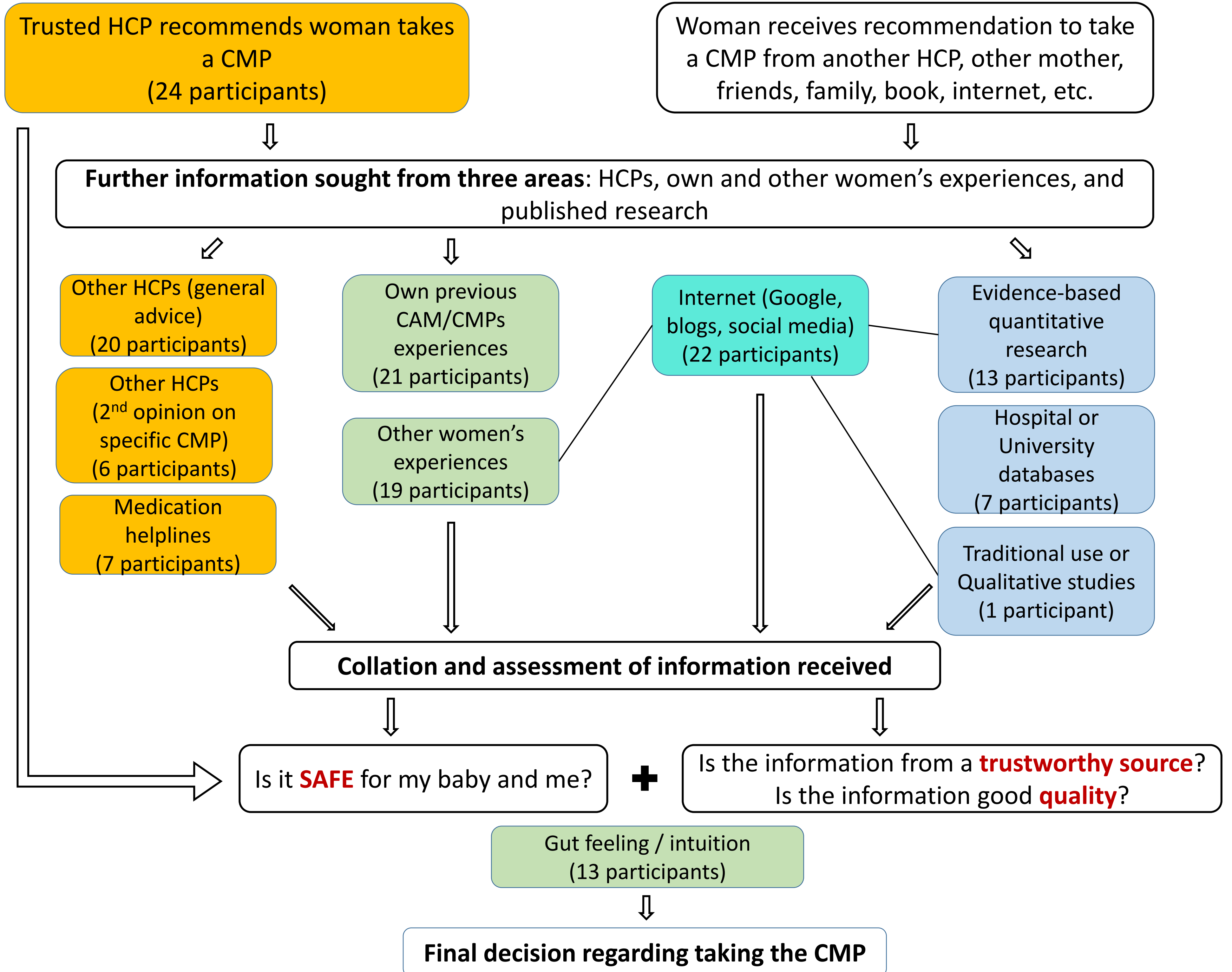


Figure 1. The complex decision-making processes participants engaged in when deciding to take a CMP in pregnancy or breastfeeding. (Figure adapted from Barnes et al.⁸, in press)

CMP = complementary medicine product; HCP = health care practitioner.

The influence of health literacy on participants' decision-making to use CMPs when pregnant or breastfeeding

During their CMPs decision-making, participants demonstrated high levels of health literacy across all three domains of health literacy⁹ - functional, communicative and critical health literacy (Figure 2). These health literacy skills drove them to seek and appraise information and facilitated their complex decision-making.

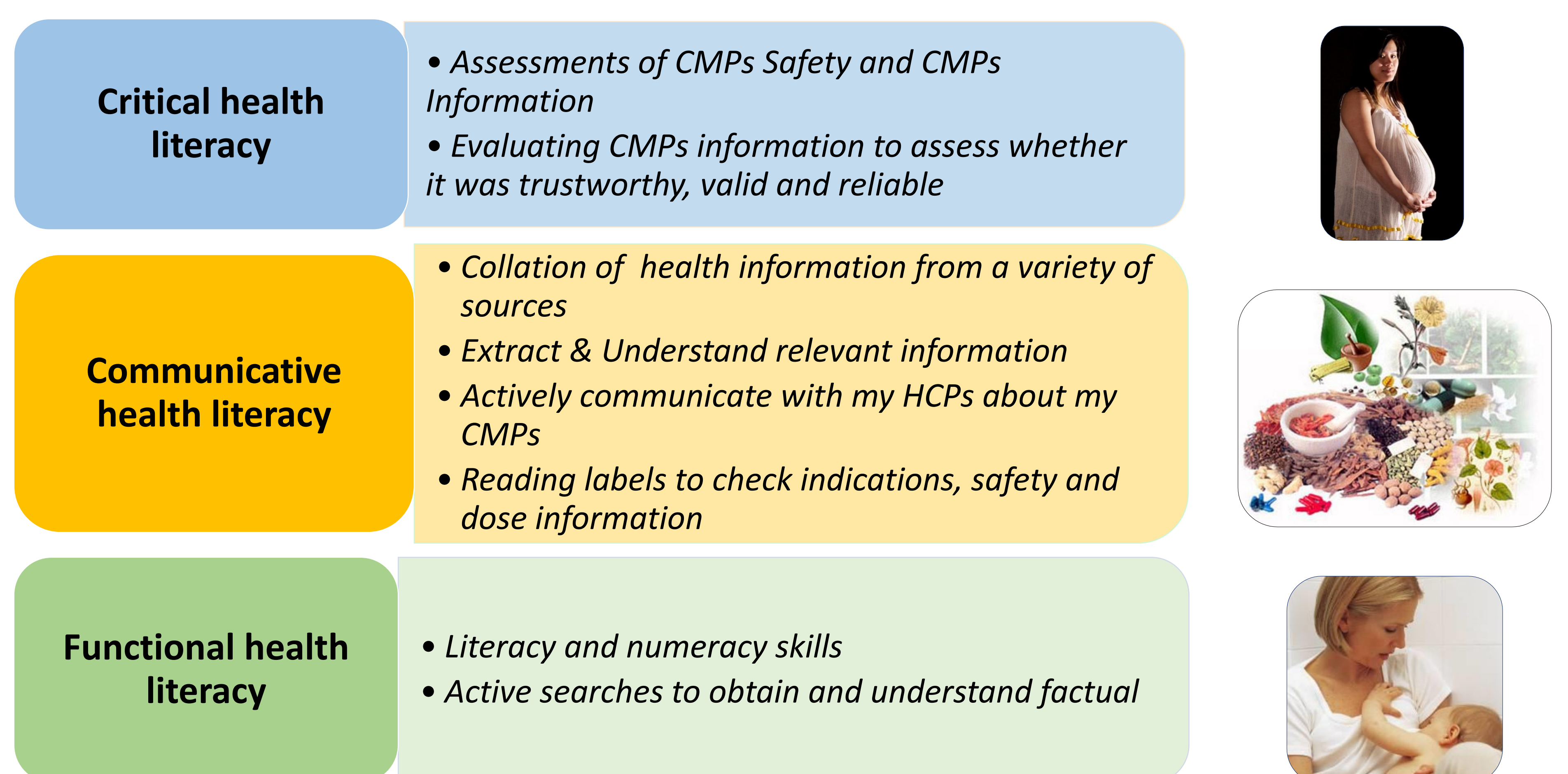


Figure 2. High functional, communicative and critical health literacy as demonstrated by the participants. (Figure adapted from Barnes et al.⁸, in press)

Key conclusions

- Women's complex decision-making reflected their high health literacy levels.
- The sample demonstrated high levels of communicative and critical health literacy through their active searches for, collation and assessment of CMP information from three main sources: healthcare practitioners, published research and other mothers.

References

- Australian Commission on Safety and Quality in Health Care [ACSQHC]. Health literacy: Taking action to improve safety and quality. Sydney: ACSQHC; 2014.
- Frawley J, Adams J, Steel A, Broom A, Gallois C, Sibbritt D. Women's Use and Self-Prescription of Herbal Medicine during Pregnancy: An Examination of 1,835 Pregnant Women. *Women's Health Issues*. 2015;25(4):396-402.
- Kennedy D, A., Lupattelli A, Koren G, Nordeng H. Herbal medicine use in pregnancy: results of a multinational study. *BMC Complement Altern Med*. 2013;13:355.
- Sim TF, Sherriff J, Hattingh HL, Parsons R, Tee LB. The use of herbal medicines during breastfeeding: a population-based survey in Western Australia. *BMC Complementary and Alternative Medicine*. 2013;13(1):1-10.
- Shand AW, Walls M, Chatterjee R, Nassar N, Khambalia AZ. Dietary vitamin, mineral and herbal supplement use: a cross-sectional survey of before and during pregnancy use in Sydney, Australia. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. 2016;56(2):154-161.
- Weiss BD, Mays MZ, Martz W, et al. Quick assessment of literacy in primary care: the newest vital sign. *Annals of family medicine*. 2005;3(6):514-522.
- Chew LD, Bradley KA, Boyko EJ. Brief questions to identify patients with inadequate health literacy. *Family Medicine*. 2004;36(8):588-594.
- Barnes LAJ, Barclay L, McCaffery KJ, Aslani P. Women's health literacy and the complex decision-making process to use complementary medicine products in pregnancy and lactation. *Health Expectations*. 2019. <https://doi.org/10.1111/hex.12910>
- Nutbeam D. Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health promotion international*. 2000;15(3):259-267.

Funding

Philanthropic funding from Blackmores Ltd funded Larisa Barnes' PhD scholarship. Blackmores have no input into the design, execution or the dissemination of her research.

The authors declare no conflicts of interest

Contact

larisa.barnes@sydney.edu.au
+61 2 6620 2145 or +61 432 730 407