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BMJ Open Healthcare provider's experiences of supporting breastfeeding: protocol for a systematic review of qualitative evidence

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ABSTRACT

Introduction Breastfeeding provides various health benefits to both mothers and infants. Despite the efforts that have been made, breastfeeding rates remain lower than recommended worldwide. Healthcare providers often fail to provide the support women need due to various reasons such as lack of time and competency, discontinuity of care and so on. Synthesis of the primary qualitative studies exploring healthcare providers' experience with supporting breastfeeding can provide greater insights into their perceived barriers and facilitators and further provide evidence for the implementation of interventions to improve breastfeeding services.

Methods and analysis Qualitative studies exploring healthcare providers' experiences with breastfeeding services will be searched in the following databases: PubMed, Embase, CINAHL, Scopus, ProQuest, PsycINFO, the Cochrane Library, Web of Science, China Biology Medicine disc, China National Knowledge Infrastructure, VIP Database for Chinese Technical Periodicals, Chinese Wanfang Data, ProQuest Dissertations and Theses, Open Grey collection. Studies reported in English or Chinese and conducted between January 1990 to July 2021 will be included. The Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Qualitative Research will be used to assess the methodological quality of included studies. The JBI standardised data extraction tools will be used to extract data. The JBI meta-aggregation method will be used to synthesise the data. The synthesised findings will be graded finally according to the ConQual approach to establish confidence. Two authors will independently screen and select the search output, extract data, assess methodological quality and cluster findings. Any disagreements that arise between the two reviewers will be adjudicated by a third reviewer to reach a consensus. Ethics and dissemination This review will use published

data, so it will not require ethical approval. The findings of this systematic review will be disseminated via an international peer-reviewed journal publication and several scientific conference presentations.

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INTRODUCTION

It has been widely acknowledged that breastfeeding provides health benefits to both

Strengths and limitations of this study

- ► This review is the first qualitative systematic review focusing on healthcare provider's experiences of supporting breastfeeding.
- This review will use the Joanna Briggs Institute qualitative systematic review method to minimise the bias of analysis and to ensure the confidence of the synthesis output.
- Focusing on the healthcare providers' experiences of providing breastfeeding support, this review will provide us with a more comprehensive perspective of breastfeeding support by supplementing the previous qualitative syntheses on women's perceptions of breastfeeding support.
- As a qualitative systematic review, the findings will be limited by the context and quality of the primary studies.
- Only studies written in English and Chinese will be included in this review because the researchers can only read English and Chinese.

mothers and infants. Children who are breastfed for longer periods have lower infectious morbidity and mortality, fewer dental malocclusions and higher intelligence than those who are breastfed for shorter periods or not breastfed. Breastfeeding might also protect children against overweight and diabetes later in life. ^{1 2} For mothers, breastfeeding can prevent breast cancer, improve birth spacing and might reduce the risk of diabetes and ovarian cancer. A series of initiatives protecting and promoting breastfeeding globally have been implemented by the WHO and the United Nations International Children's Fund (UNICEF) jointly.³⁻⁵ Despite the efforts that have been made, breastfeeding initiation and duration rates differ between countries and remain low on an international level. Sixty-three per cent of the children aged 6 months in low-income and middle-income countries were not exclusively breastfed. The





corresponding percentages were 53% in low-income countries, 61% in lower middle-income countries and 63% in upper middle-income countries. Thirty-seven per cent of the children aged 6-23 months in low-income and middle-income countries were not receiving any breastmilk, with corresponding rates of 18% in low-income, 34% in lower middle-income and 55% in upper middleincome countries. Professional support is important to the success of breastfeeding. Healthcare providers are supposed to provide breastfeeding services for mothers from the pregnancy to the postpartum continuum.⁶ However, there is some evidence that suggests that breastfeeding services provided by healthcare providers were insufficient and could not meet the needs of mothers.⁸⁹ Moreover, poor services delivered by healthcare providers were reported to be detrimental to mother's selfefficiency and practices of breastfeeding. 10 Healthcare providers' experiences, barriers and facilitators they perceive when supporting breastfeeding are critical factors that managers and policymakers should consider. To understand the breastfeeding support experiences from healthcare providers' perspective, primary qualitative studies have been conducted by researchers over the past few decades. A variety of barriers to providing breastfeeding support have been identified, including health stakeholders (healthcare providers, managers, patients), health system or contextual factors. 10-15

A systematic synthesis of primary qualitative studies of healthcare providers' experiences with breastfeeding services can reveal common themes, lead to more generalisable theories or hypotheses that may not be revealed by a single study. An initial search in the Cochrane Database of Systematic Reviews and the Joanna Briggs Institute (JBI) Database of Systematic Reviews showed no relevant systematic review. Our qualitative review may obtain a more comprehensive understanding of the diverse breastfeeding support experiences of healthcare providers, provide greater insights into the barriers and facilitators healthcare providers perceive and further provide strong, reliable and significant evidence for the implementation of interventions to improve breastfeeding services.

Objectives

This systematic review aims to synthesise existing evidence exploring healthcare providers' experiences of supporting breastfeeding mothers and illuminate barriers and facilitators they perceive when providing breastfeeding support. The robust evidence generated from primary qualitative studies can further provide references for managers and policymakers to make well-informed decisions while improving the quality of breastfeeding services.

The research questions are as follows:

What are healthcare providers' experiences of providing breastfeeding support to women?

What are healthcare providers' perceptions of facilitators and barriers to providing support for breastfeeding women?

METHODS AND ANALYSIS

Inclusion criteria

Participants

Participants of this systematic review will include various kinds of healthcare providers (including nurses, midwives, lactation consultants, obstetricians, paediatricians, etc) who provide professional healthcare for mothers and infants. Studies that focused on peer supporters' experiences of breastfeeding support will be excluded.

Phenomena of interest

This review will include studies exploring healthcare providers' experiences, facilitators and barriers they perceive of providing breastfeeding support. Studies that focused on participants' views and experiences on breast milk donations and breast milk banks will be excluded.

Context

This review will consider studies exploring healthcare providers' views or experiences of supporting breast-feeding under any circumstance (regardless of geographical setting, healthcare providers' position and workplace, the timing of breastfeeding service delivery, etc).

Types of studies

This review will consider qualitative studies including, but not limited to, designs such as phenomenology, grounded theory, ethnography, action research and feminist research. Qualitative data of mixed methods studies will also be considered. Moreover, this review will consider studies published in English or Chinese.

Search strategy

The search strategy we propose to use aims to find both published and grey literature. A three-step search strategy will be employed in this review. First, an initial limited search of PubMed will be conducted followed by the analysis of the keywords and text words contained in the title and abstract as well as the medical subject headings and entry terms used to describe the article. Second, according to all the identified subject headings, keywords and synonyms, a tailored search strategy will then be undertaken across all included databases. The databases to be searched will be PubMed, Embase, CINAHL, Scopus, ProQuest, PsycINFO, the Cochrane Library, Web of Science, China Biology Medicine disc, China National Knowledge Infrastructure, VIP Database for Chinese Technical Periodicals, Chinese Wanfang Data. The search for grey literature will include ProQuest Dissertations and Theses and Open Grey collection. A full search strategy for PubMed is shown in online supplemental file 1. Third, the reference list of all the studies selected for critical appraisal will be searched for additional studies. Studies published from January 1990 to July 2021 will be included in this review. The year 1990 is chosen as a cut-off date because 1990 was the year the Innocenti Declaration On the Protection, Promotion and Support of Breastfeeding was first



created and adopted,³ laying the foundation for the current Global Strategy for Infant and Young Child Feeding.⁵

Study records

EndNote X V.9 software will be used for document management. The documents screened and selected in each step will be managed and recorded through subsequent EndNote databases.

Study selection

All studies identified in the searches will be uploaded into EndNote X V.9, and the duplicated studies will be checked and removed. The lead author and a second reviewer will screen the title and abstract of the studies according to the inclusion criteria independently. The full text of the potentially eligible studies will be retrieved. The two independent reviewers will then evaluate the full text of the selected study in detail based on the inclusion criteria. Studies that do not meet the inclusion criteria will be excluded (the reasons for excluding each study will be reported in the final systematic review). Studies that meet the inclusion criteria will undergo a process of critical appraisal. Any differences between the two independent reviewers will be discussed regularly to reach an agreement, and disagreements will be adjudicated by a third reviewer.

Assessment of methodological quality

Prior to inclusion, the JBI Critical Appraisal Checklist for Qualitative Research (online supplemental file 2) will be used to appraise the methodology of the selected studies by two independent reviewers. The checklist contains 10 items that assess different domains, including philosophical foundation, research methodology, data collection, data analysis and representation, interpretation of the results, beliefs and values of the researcher, influences between the researcher and the research, representation of the participants, ethical approval and the interpretation of the data. ¹⁶ All items will be evaluated by 'yes', 'no', 'unclear' and 'not applicable'. According to the standard requirements, the result of the appraisal can be rated into three levels, a weak rating for score below or equal to 6, a medium rating for 7–8 and a strong rating for 9–10.¹⁷ When assessing the article, reviewers will be blinded to each other, and assessments will only be compared once the initial appraisal of an article is completed. Discussion will occur if there is a lack of consensus. If the two reviewers cannot reach an agreement, then a third reviewer will be involved. The rating of the articles which undergo critical appraisal will be reported. Only studies rated as moderate or above will be eventually included for data synthesis. In addition to the JBI Critical Appraisal Checklist for Qualitative Research, the source of funding will also be considered as a quality assessment criteria. Studies funded by infant formula milk companies will be excluded in our study.

Data extraction

The lead author and a second reviewer will independently extract qualitative data from the included studies using the JBI QARI Data Extraction Tool for Qualitative Research (online supplemental file 3). The following information will be extracted from included studies: methodology, study methods, phenomena of interest, setting, geographical location, cultural information, participants, data analysis, context, findings and their illustrations. The findings and their illustrations will be assigned a level of credibility. The detailed characteristics of the included studies will be presented using a table in the final systematic review.

Data synthesis

The JBI approach to the synthesis of qualitative evidence (meta-aggregation) will be used to synthesise the data. 1618 There are three steps for meta-aggregation to integrate the findings of the original studies. First, the lead author and a second reviewer will independently read the full text of the original studies repeatedly. Findings of the original studies such as themes, metaphors or analytic data that might have been an author's observation will be appraised and rated by three levels: unequivocal (evidence beyond reasonable doubt); credible (contains illustrations that may be challenged) or unsupported (when findings are not supported). Furthermore, unequivocal and credible findings will be categorised on the basis of similarity in meaning to create a set of categories. Not supported findings will also be presented in the final systematic review. Third, these categories will then be subjected to synthesis to produce a single comprehensive set of synthesised findings. The two reviewers will independently cluster findings, compare the emerged categories and resolve disagreements until reaching agreement. The comprehensive synthesised findings will be produced by the two reviewers together. Moreover, if any differences of perceived facilitators and barriers are identified among different kinds of healthcare providers during analysis, we will show and discuss these differences in the final systematic review.

Assessing the certainty of findings

The JBI ConQual approach will be used to establish the confidence (including dependability and credibility) of each synthesised finding, which will be presented in the ConQual summary of findings table. ¹⁹ The table will illustrate the major elements of this systematic review, including title, population, phenomena of interest, context, synthesised findings as well as details on the level of confidence of each synthesised finding (online supplemental file 4).

Reporting of protocol

The qualitative systematic review will be carried out from June to December 2021 and reported in accordance with the Enhancing Transparency in Reporting the Synthesis of Qualitative Research statement.²⁰ This qualitative systematic review protocol is reported following the Preferred



Reporting Items for Systematic Reviews and Meta-analyses Protocols statement.²¹

Patient and public involvement

Patients and the public are not involved in the preparation of this protocol and will not be directly involved in the final systematic review.

ETHICS AND DISSEMINATION

We have registered this protocol in the International Prospective Register of Systematic Reviews (PROSPERO). This review will retrieve published data, so it will not require ethical approval. The findings of this systematic review will be disseminated via an international peerreviewed journal publication and several scientific conference presentations.

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Contributors JW and YW conceived and designed this systematic review. JW and YC developed the search strategy. JW and XW drafted this protocol. LYFC edited the grammar of the protocol to ensure the correctness of the language. All the authors have read, provided feedback and consented to the content of the protocol. JW, XW, RJ and YC will be involved in literature search, data extraction and appraisal, data synthesis and interpretation of the final systematic review. YW, RJ and QZ will arbitrate in cases of disagreement.

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Competing interests None declared.

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REFERENCES

- 1 Victora CG, Bahl R, Barros AJD, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet 2016:387:475–90
- 2 Yan J, Liu L, Zhu Y, et al. The association between breastfeeding and childhood obesity: a meta-analysis. BMC Public Health 2014;14:1267.
- 3 UNICEF. 1990 2005 Celebrating the innocenti declaration on the protection, promotion and support of breastfeeding. Florence: UNICEF Innocenti Research Centre, 2005.
- 4 WHO, UNICEF. International Code of marketing of Breastmilk substitutes. Geneva: WHO, 1981.
- 5 WHO, UNICEF. Global strategy for infant and young child feeding. Geneva: WHO. 2003.
- 6 Rollins NC, Bhandari N, Hajeebhoy N, et al. Why invest, and what it will take to improve breastfeeding practices? Lancet 2016;387:491–504.
- 7 Hannula L, Kaunonen M, Tarkka M-T. A systematic review of professional support interventions for breastfeeding. *J Clin Nurs* 2008;17:1132–43.
- 8 Sriraman NK, Kellams A. Breastfeeding: what are the barriers? why women struggle to achieve their goals. *J Womens Health* 2016:25:714–22
- 9 McLelland G, Hall H, Gilmour C, et al. Support needs of breast-feeding women: views of Australian midwives and health nurses. Midwifery 2015;31:e1–6.
- 10 Whelan B, Kearney JM. Breast-feeding support in Ireland: a qualitative study of health-care professionals' and women's views. Public Health Nutr 2015;18:2274–82.
- 11 Garner CD, Ratcliff SL, Thornburg LL, et al. Discontinuity of Breastfeeding Care: "There's No Captain of the Ship". Breastfeed Med 2016;11:32–9.
- 12 Anstey EH, Coulter M, Jevitt CM, et al. Lactation consultants' perceived barriers to providing professional breastfeeding support. J Hum Lact 2018;34:51–67.
- 13 Flood JL. Breastfeeding supports and services in rural Hawaii: perspectives of community healthcare workers. Nurs Res Pract 2017;2017:6041462
- 14 McKellar L, Fleet J, Dove S. It's more than just luck: a qualitative exploration of breastfeeding in rural Australia. Women Birth 2018;31:177–83.
- 15 Alianmoghaddam N, Phibbs S, Benn C. Resistance to breastfeeding: a Foucauldian analysis of breastfeeding support from health professionals. Women Birth 2017;30:e281–91.
- Aromataris E, Munn Z. Joanna Briggs Institute reviewer's manual. The Joanna Briggs Institute, 2020.
- 17 He J, Wang Y, Liu Y, et al. Experiences of pregnant women with gestational diabetes mellitus: a systematic review of qualitative evidence protocol. BMJ Open 2020;10:e034126.
- 18 Lockwood C, Munn Z, Porritt K. Qualitative research synthesis: methodological guidance for systematic reviewers utilizing metaaggregation. *Int J Evid Based Healthc* 2015;13:179–87.
- 19 Munn Z, Porritt K, Lockwood C, et al. Establishing confidence in the output of qualitative research synthesis: the ConQual approach. BMC Med Res Methodol 2014;14:108.
- 20 Tong A, Flemming K, McInnes E, et al. Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. BMC Med Res Methodol 2012;12:181.
- 21 Moher D, Shamseer L, Clarke M, et al. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. Syst Rev 2015;4:1.