

Professional support during the postpartum period: Primiparous mothers' views on professional services, their expectations, and barriers to mobilizing professional help

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Abstract

Background: Primiparous mothers who lack experience and knowledge of child caring, are usually overwhelmed with multifarious stressors and challenges. Although support from professionals is needed for new mothers, there is indeed a gap between the necessary high-quality service and the currently provided poor services. This study aimed to explore Chinese primiparous mothers' views on professional services, identify barriers to mobilizing professional support, and further understand mothers' expectations of and preferences for the delivery of professional services.

Method: A descriptive phenomenological study design was utilized in this study, and semi-structured interviews were conducted with 28 primiparous mothers selected from two community health centres in Xi' an city, Shannxi province, northwest part of China and who had given birth within one year before the interview. Each conversation lasted between 20-86 minutes. Colaizzi' s seven-step phenomenological approach was used for data analysis.

Results: Three major themes were identified: (a) dissatisfying with current professional services for postpartum mothers, (b) likelihood of health care professional help- seeking behaviour, (c) highlighting demands for new health care services. Seven related subthemes including disappointment with hospital services, distrusting services provided by community health centres, private institutes and online platforms; seeking help from professional was not the first choice, hesitating to express their inner discourse to professionals, and considering practical factors prohibited mothers from seeking professional help; urgent needs for new baby-care-related services, and importance of mothers' self-needs. The necessity of professional support in the first month of confinement was highly emphasized by participants. Online professional guidance and support were perceived to be the best way to receive services in this study.

Conclusion: The results of this descriptive phenomenological study suggested that the current maternal and child health care services were insufficient and could not meet the needs of primiparous mothers. The identified barriers should be analysed and highlighted by enhancing education and eliminating stigma. The results also indicated that providing service focused on mothers' needs may be an effective strategy to enhance primiparous mothers' well-being, and also suggested that feasibility, convenience, and the cultural adaptability of health care service should be considered during the delivery of postpartum interventions.

Background

Childbirth and the postpartum experience often generate many physiological and emotional changes for mothers, who have confirmed that they are usually overwhelmed with a multitude of stressors, such as routine baby care, heavy household duties, a lack of sleep, and breastfeeding difficulties [1- 3]. This makes the post-partum period after childbirth a very challenging time for mothers, especially for primiparous mothers who lack knowledge and experience [4]. And can even result in mental health issues,

including posttraumatic stress disorder, anxiety, and depression [3, 5, 6]. Postpartum depression (PPD) is the most common psychiatric malady following childbirth, is mostly present at the anytime during the first year after delivery and poses a major global public health challenge [7- 9].

Furthermore, it seems difficult for primiparous mothers to adjust to the new role and shoulder the responsibility of caring for babies [10,11]. They often feel frustrated and unsure due to, for example, being unable to identify any specific reason for their babies' frequent crying [12]. In this situation, a number of postpartum mothers have shown their substantial need for guidance and support from professionals to help them with their infants and self-care-related problems [13].

Strong evidence suggests that social support benefits new mothers greatly [14,15]. For example, empirical studies have consistently shown that adequate support can reduce stress and the risk of developing depression and can increase parental sensitivity and feelings of self-worth [16,17]. Professional support is one of the main sources of social support that can be provided by many professionals in different areas, including midwives, doctors, nurses and others [4]. The services they provide take different forms and have been indicated to be efficient, for example, postnatal care interventions such as home visits by midwives or public health nurses, phone-based support programmes, and online consultation have been shown to help improve maternal confidence, increase successful breastfeeding, and decrease postpartum fatigue and depression [18- 21]. Mothers particularly valued professionals who focused on their needs and the trusting relationships they developed, including the opportunity to develop new skills in problem solving [22- 24].

Although support from professionals is urgently needed for new mothers and has been proven to be quite effective, there is indeed a gap between the necessary high-quality services and the currently provided poor services, especially in China.

When discussing current views on postnatal care, new mothers expressed great disappointment with the reality of the quality of postnatal care, including health care professionals insufficient time to answer their questions, information provided with little patience and few explanations, and insufficient care [25,26]. Unsatisfied mothers also emphasized that hospital staff were unconcerned and unsympathetic towards their and their infants' needs. They reported that caregivers were unfriendly, disrespectful, and impersonal [27]. In addition, early discharge from the hospital made them feel insecure and worried, and the absence of home visits also magnified these feelings [14]. Negative comments also related to the fact that the services provided did not correspond to their requirements [28,29]. Professionals usually only focused on the physical aspects of baby care but neglected the emotional needs of mothers [30,31]. This situation may be due to a shortage in the quantity of health care professionals and restrained resources [32,33]. However, one of the greatest barriers in providing appropriate care and support is the low level of identification of mothers' needs [34]. Therefore, it is crucial to explore new mothers' views and expectations of professional support.

Even through several qualitative studies regarding postpartum mothers' needs had been conducted in western countries, the evidence gotten from those studies may not be appropriate for Chinese mothers

[35]. Numerous studies had identified the cultural difference in risk factors and manifestation of PPD symptoms between the Western and Asian countries [36–38]. For example, Chan, Williamson noted that in contrast with Australian counterparts who attributed their depression to feelings of incompetence with the mother image and guilt, Chinese mothers expressed much anger with their mothers-in-law and husbands and attributed their PPD to the low quality of their relationships with them [39]. Several distinct cultural factors connected with childbirth have been identified in China, for instance, discrimination of the sex of babies (son preference), sitting the month (zuo yue zi, Chinese common practice of confinement during the first month postpartum and strict observance of certain specific dietary rules and behavioral taboos), and the custom of caring for newborns by the mother-in-law [35,40,41]. As a result, given that impact on mothers' perspectives towards professional supports, it is necessary to consider cultural factors when providing supports to postpartum mothers.

Available literature on the perception of postpartum mothers in the professional support views, barriers and need is scarce in China, in addition, the majority previous local studies focused on the depressed or at-risk mothers but neglected the experience of healthy group.

Therefore, considering the mentioned literature gaps, this study focused on the postpartum period and aimed to explore primiparous mothers' views on professional services, identify barriers to mobilizing professional support, and further understand their expectations of and preferences for the delivery of professional services.

Methods

Design

A descriptive phenomenological approach was utilized in this study to explore primiparous mothers' views on professional services, their expectations, and perceived barriers to obtaining professional help. Such an approach was chosen to provide an accurate description of the phenomena [42]. Descriptive phenomenology originated from Husserl's (1960) work, which is commonly used in nursing and midwifery research [43]. Husserl contended that the object of scientific study is the phenomena perceived by the individual's consciousness. Thus, no assumptions or philosophical or scientific theory, logic procedures, other empirical science or psychological speculations should inform phenomenological inquiry [44]. In Husserl's descriptive approach, researchers are required to focus on participants' experiences of a phenomenon and identify the essences of the phenomenon while suspending their own beliefs, attitudes, previous experiences and assumptions [45]. Thus, with the guidance of the methodology above, the researchers aimed to maintain openness, question their pre-understandings and adopt reflective attitudes during the whole study process, including data collection, data analysis and reporting.

Study site and participants

The study was conducted at two locations in Xi'an City, Shaanxi Province. The areas of Dong Guan and Bai Shu Lin were selected as study sites. In each area, there was a community health centre directed by an experienced doctor who assisted the researchers in delivering the invitation letters to the potential participants. The sample size was based on the information saturation principle. A purposive sample of 28 participants who were at least 18 years old, had given birth to their first baby in the first postpartum year, and who expressed interest in participating in the study were recruited. 100 mothers who met the criteria received invitation letters, and there were 68 mothers consented to the study. A strategy to maximize the variation in the sample was employed when selecting the participants. Characteristics of different age groups, education level, economic status and postpartum period were sought to increase variation. 40 potential participants were selected, and 28 participants among them finished the interview eventually because of the saturation of the information. Participants who met the criteria, and who had characteristics above were taken into consideration when doing purposive sampling.

Ethical considerations

Ethics approval was obtained from the Ethics Board of Health Centre of Xi'an Jiaotong University. The written informed consent forms were obtained from all the participants. The two researchers explained the entire study before interviews in the community health centres (YP, N & JJ, Z), which included a brief introduction of the purpose, methodology, procedures, benefits and potential risks of the study. The participants were informed that they could withdraw anytime during the interview and that the audio recordings and transcripts would be stored in encrypted databases at the School of Nursing to guarantee the confidentiality of the information.

Data collection

The two researchers (YP, N & JJ, Z) conducted a private individual face-to-face interview to all the participants in the health education room of the two community health care centres. During the whole process, the first researcher did the interview, and the second researcher recorded the interviews, took notes, made summaries, and supplemented the data as necessary.

The interview questions were obtained and finalized through the literature review and the study team members discussion, which were further modified by consulting a gynaecologist, a sociologist and a psychologist. Prior to the data collection, a pilot interview of three participants was conducted for further revision to guarantee the suitability and acceptability of the questions. Finally, a eight open-ended questions were developed as the guidance for the interview. The questions are outlined in Table 1.

Table 1 Guidance for the interview of the Participants

Further questions were asked flexibly based on the responses of the participants. The prompt questions for each theme were developed to be nonprescriptive and open-ended.

1. What do you think about the current medical institutions, such as hospitals, community health centres, private clinics or other institutions in your resident areas?

2. Could you please tell us about your experiences of seeking help from health care professionals in the above health care institutions?

3. Do you like to seek help from health care professionals when you are in trouble? Why?

4. Are there any difficulties or barriers when you need health care professional support? Please give us examples.

5. Based on your experience, in what kind situations or difficulties you will require assistance from health care professionals? In what kind of situations or difficulties you will not need any professionals' help? Why? Please provide some examples.

6. Please describe which health care professionals you need most after childbirth and please specify the services that you mostly need. Why?

7. Do you have any recommendations for current health care professionals? What are your expectations for new health care services? Why?

8. Please identify which postpartum health care service delivery manner that you prefer from health care professionals?

After the interview, the participants were required to complete a demographic questionnaire. All of the transcripts were sent back to the participants, and follow-up phone calls were also made with them to check the accuracy of the information.

Data analysis

Colaizzi's seven-step phenomenological approach was applied to analyse the data [46]. The interviews were transcribed verbatim in Chinese within 24-hours after the interviews by the two bilingual researchers who collected the data. All transcripts were then cross-checked against the original records by the two researchers above. The whole process of the data analysis was conducted in Chinese. The two researchers used the seven steps for this study, including: 1. Each transcript was read carefully (YP, N & JJ, Z) and combined the field-notes taken in the interviews to obtain a more accurate understanding of the descriptions. 2. They extracted meaningful statements related to the participants' views, the barriers

in accessing them and expectations for professional services. 3. They coded significant statements and labelled them with the participants' keywords and phrases, and cross-checked and discussed all codes together. 4. They repeated and checked the first three steps, and each code was read, compared repeatedly and deliberately, and then clustered together into multidimensional categories. 5. Seven sub-themes were identified, and exhaustive descriptions were also developed. 6. Every final theme was determined based on continuous discussion, comparison, reintegration, and inspection of the sub-themes among all team members. 7. All transcripts were returned to the participants to check their accuracy in capturing the participants' intended meaning.

To maintain openness, confirmability in the data analysis, the interviewees' accounts were given priority to help the authors understand their experiences and stories in their own words. The sub-themes and themes were generated from the data and were not informed by a preidentified framework. In addition, all discrepancies during the process of data analysis had been discussed and clarified within two researchers above and with the third researcher until consensus was achieved.

The emerging themes were discussed as a team to determine whether to retain them and to ensure the consistency and balance of the main theme.

Results

Totally 28 mothers completed the study who were primiparas aged from 24 to 40 years (30.08). Seventeen mothers had a bachelor's degree or higher. The average age of the babies was approximately five months (5.56) Further characteristics of the participants are presented in Table 2. The duration of the interviews ranged from 20 to 86 minutes (mean=32 minutes). Data analysis resulted in three themes and seven sub-themes emerged, which is illustrated in Table 3.

Table 2 Characteristics of the Mothers Interviewed (n = 28)

Characteristics	n (%) /
Age	
(year)	30.08
BMI	
<25 kg/m ²	23 (82.1%)
≥25 kg/m ²	5 (17.9%)
Residence	
Urban	24 (85.7%)
Rural	4 (14.3%)
Education level	
High school or below	4 (14.3%)
Junior college	7 (25.0%)
Bachelor degree or above	17 (60.7%)
Employment status	
Full-time job	14 (50.0%)
Unemployed	14 (50.0%)
The way of delivery	
Vaginal delivery	12 (42.9%)
Cesarean delivery	16 (57.1%)
Age of baby at interview	
(month)	5.56
Gender of their baby	
Boy	15 (53.6%)
Girl	13 (46.4%)
Infant illness within 4 weeks after childbirth	
Yes	2 (7.1%)
No	26 (92.9%)
History of depression	
Yes	8 (28.6%)

No	20 (71.4%)
Family per capita income	
<4000 yuan	12 (43.9%)
≥4000 yuan	16 (57.1%)

Table 3 Themes and Sub-themes Identified in the Interviews

Themes and sub-themes
<p>1. Dissatisfying with current professional services for postpartum mothers</p> <p>Disappointment with hospital maternal and child health care service.</p> <p>Distrusting services provided by community health centres, private institutes and online platforms.</p>
<p>2. Likelihood of health care professional help- seeking behaviour</p> <p>Seeking help from health care professionals was not the first choice.</p> <p>Hesitating to express their inner discourse to health care professionals.</p> <p>Considering practical factors prohibited mothers from seeking professional help</p>
<p>3. Highlighting demands for new health care services</p> <p>Urgent needs for new baby-care-related health care services.</p> <p>Importance of mothers' self- needs.</p>

Dissatisfying with current professional services for postpartum mothers

The vast majority of mothers in this study indicated a low level of acceptance and satisfaction with local maternal and child health care. Their comments regarding health care institutions for maternal and child health care can be categorized into two themes: (a) disappointment with hospital maternal and child health care service and (b) distrusting services provided by community health centres, private institutes and online platforms.

Disappointment with hospital maternal and child health care service

Many mothers mentioned that the services provided in hospital maternity settings during the postpartum period was quite insufficient; they also claimed that health care professionals usually only focused on their current physical health issues, such as prolonged lochia and others. They rarely considered the mothers' long-term psychological, emotional and informational needs after discharge. Mother 28 emphasized her dissatisfaction with hospital service.

“The service provided in hospitals is totally insufficient. I think the postpartum period is very important ... We should have received some related education about postpartum problems before we gave birth, but we didn't ... Most of the time, the provided service was just superficial; they don't take it seriously ... what they did for us is not enough.”
(Participant 28)

Furthermore, the participants complained that the postpartum hospitalization time was very short and that follow-up checks after discharge were either absent or very simple. If having, health care professionals often made a simple phone call without any home visit. Many mothers felt neglected and uncared for by health care professionals since they felt that they did not receive enough formal support from the hospitals. Both mothers 5 and 27 stressed the importance of follow-up visits by health care professionals. As mother 27 recounted,

“I had not received any service after discharge from the hospital, but I believe that follow-up visits are very important. For example, my brother's wife had an episiotomy. Afterwards, the stiches were not taken out completely. But who knew that? The wound was infected with pus eventually. Then, she went to see the doctor by herself. There was no one who reminded her of such things that may occur after surgery.” (Participant 27)

Several mothers mentioned that paediatric department in their local big hospitals were very busy. Doctors and nurses in those hospitals were time-constrained who were often impatient. Some mothers indicated that the health care professionals in big hospitals did not even fully listen to their complaints and did not want to talk to them since those health care professionals did not have enough times. The mothers felt that they did not get enough

respect when recalled their hospital experiences. One mother felt upset when she took her baby to go to see the paediatrician:

“After all, there are so many patients in big hospitals. When I have a little problem about my child, I really need to consult a family doctor or PG ... but there was none, so I had to wait in a long line in the big hospital for a long long time...when I eventually saw the doctor, the length of the conversation was no more than five minutes ... I wish that health care professionals could be more patient and spend more time on every baby’s examination.” (Participant 13)

Some mothers also reported that they also felt that they were treated with low levels of humanistic caring and it seemed that in big hospitals efficiency and profit were regarded as the priority rather than patients’ needs.

“My daughter has a red spot on her face, I am very worried ... I couldn’t figure out what happened. During the process of her examination, my baby cried fiercely ... I was very nervous, but the doctor didn’t care about our emotions at all, he gave no comfort to us, and didn’t explained my daughter’s condition in detail either.” (Participant 23)

Distrusting services provided by community health centres, private institutes and online platforms.

Even though many participants were dissatisfied with health care services in big hospitals, most of them indicated that they still trust the government tertiary hospitals rather than other institutes, because of the high professional skills and well-equipped facilities in those big hospitals. Some mothers expressed their hesitation on seeking helps from health care professionals in community health centres, since they felt that doctors and nurses in those community health centres had lower qualifications, professional titles and level of skills compared with those in the big tertiary hospitals. Furthermore, some mothers also mentioned that the poor-equipped community health care centre couldn’t guarantee the reliability of the examination results. Mother 2 expressed her feelings about the community health centres:

“I think the community health centres are not so good ... it’s function is not specific enough. Only when my child need to be vaccinated, I would go there ... I am not confident in such settings, because I think health workers there can’t be as professional as in the big hospitals... and the examination equipment there was less reassuring ... I felt that community health centres should play a role in consulting and being the primary treatment provider. But in fact, I get little help from there.” (Participant 2)

Two mothers mentioned that private institutes did not have enough qualified health care professionals and were profit-driven. For examples, some private clinics have lactation masseuses who help the mother with lactation by Chinese massage. The mothers indicated that they were skeptical about those professionals’ educational background and professional certificates. In addition, the costs of the services were often too expensive to afford. Mother 28 recalled her experience finding help with her difficulty breastfeeding:

“Low milk supply is a big problem for me; it troubled me a lot. I really needed a professional who could help me at that time. But it’s difficult to find a qualified lactation masseuse in a formal way; those in the private clinics are inexperienced and not well-trained most of time” (Participant 28)

Many participants had mentioned that online services indeed brought much convenience to their life and have advantages over traditional ways. However, some of them suspect the accuracy and reliability of the information provided on lots of profit-driven online platforms, some mothers reported that a plenty of ample educational information tied to goods sales, which may confuse or mislead them. Furthermore, some mothers shown their dislikes towards advertisements and promotions on such platforms. Meanwhile, they also expressed concerns with the qualifications of so-called professionals who provided online services. Therefore, expectations on new online platforms were expressed by many participants that they could easily access to the non-profit and official online platforms operated by government or big tertial hospitals.

“I often consulted doctors online on baby health issues. To be honest, I didn’t trust them (doctors) so much ... but I had no choice, so I often combined their advice with

information from other sources.” (Participant 21)

Likelihood of health care professional help-seeking behaviors

Some mothers expressed that their willingness of seeking professional help is not so strong, unless when faced with their own or babies’ acute or critical conditions. Their behaviour of seeking professional help were summarized into three sub-themes: (a) seeking help from health care professionals was not the first choice and (b) hesitating to express their inner discourse to health care professionals and (c) considering practical factors prohibited mothers from seeking professional help.

Seeking help from health care professional was not the first choice

Several participants indicated that they were used to solving common problems by themselves instead of mobilizing support from health care professionals. Some mothers who stressed independent values and thought that it was a sign of independence to deal with most of problems by themselves. One mother mentioned that they felt embarrassed to discuss their private issues, especially emotional and mental issues with any others including health care professionals, because she neither wanted to be a burden to others and nor wanted to show any signs of vulnerability.

“I thought ... It was irresponsible to expose my negative feelings to others ... which may bring a negative influence on their lives. It's just like throwing my own garbage to someone else ... neither I nor anyone else will feel well on that.” (Participant 23)

In addition, most of the participants emphasized that problems occurred constantly in daily life were almost minor ones, so they usually gave priority to the most convenient and economic ways to solve such problems. Most of them had mentioned that they had benefited from online platforms, which were perceived as the most convenient way to obtain informational helps. The accepted forms of such services included apps, videos, online forums, and online counselling. Apps were the most appreciated form of the majority of

participants, who preferred and trusted apps and spoke highly of them because of their convenience, many functions, and without any time and space constraints, which allowed mothers to access information anywhere or anytime. Most of the time, they believed that the almost of their problems could be solved in that way.

“For our office staffs, face-to-face services are out of date; the internet platform are faster... I could take advantage of the short time of a bathroom break or other break to read messages and communicate with somebody through apps.” (Participant 13)

Compared to asking for health care professional helps, many mothers in this study were more likely to discussing current issues with reliable people around them, such as their own parents, significant others or peers. Mother's parents, especially their mothers, were mentioned as a trustworthy source for emotional support; the participants noted that their mothers made great efforts for their daughters' families and often showed understanding and sympathy for their daughters' suffering and distress. Some of the participants believed that sharing with peers was also powerful and that peers could be trusted; sharing with peers was described as vivid and providing cognitive empathy about the roles of mothers. Mother 5 showed her appreciation for support from peers:

“I benefited from peer groups a lot, because everyone could obtain limited information, but by exchanging messages and sharing experiences, and I could view one issue from various perspectives ... If I was lucky enough, I could find the information that just matched my requirements.” (Participant 5)

Hesitating to express their inner discourse to health care professionals

With the influence of face-saving culture in China (face-saving, refers to the social confidence in individuals' moral character in society, and people cannot properly function in society if the integrity of this character is broken [i]), mothers mentioned that seeking help from mental health professionals for inconsequential matters in daily life was making a fuss. They were worried about others' prejudices or stigma towards them if they turned to professionals, which would cause them to lose their or even entire families' face, even from

their entire families. One participant even preferred to discuss matters with a stranger rather than a health care professional:

“When I was upset, I hadn’t considered turning to health care professionals yet ... I think it would make more sense and be safer to discuss my story with a stranger.”

(Participant 23)

Family conflicts were sensitive topics for almost all mothers in the study, and the conflicts between them and their mothers-in-law were mentioned as the main reason for their distress. However, most mothers believed in the old Chinese adage that domestic shame should not be made public no matter what happens, it should be solved within the family. If others knew about the conflicts in their families, it would have made the mothers feel ashamed and would also have demonstrated their incompetence in becoming good mothers. Thus, most of the time when the mothers experienced difficulties, turning to health care professionals was not their first choice. As Mother 4 said,

“Actually, I just let bad emotions blow over, and I would feel better... after all, the fact that we are families ... and no matter how many conflicts happen, they can be settled down eventually ... It is not necessary to seriously take them into consideration.”

(Participant 4)

Additionally, although some mothers suffered substantially from family conflicts, they supposed such conflicts were universal phenomena and followed social norms with little resistance. Mother 23 related her point of view:

“There is an old saying in China, “Judge not upright household chores”. I think maybe that (mother-in-law) is just as well; after all, we are family... I believe conflicts happen in every family... I think I could endure that.” *(Participant 23)*

Some mothers decided to hide their own feeling from others because of their unsuccessful experience of help-seeking. They felt disappointed that even their closest family members could not fully understand them, not to mention others. They also felt frustrated with ineffective communication by the people around them, including health care

professionals. They tended to believe that people who had no similar experiences would not understand and had no show sympathy for them, let alone professionals who were not familiar with them at all.

“Unlike other young mothers, I was very old when I gave birth ... I suffered a lot from the birth and felt very uncomfortable after that ... But when I shared my feelings to peers, they just told me it was a kind of neurosis ... the doctors didn’t treat my complaints seriously either, and thought my body was alright ... they couldn’t understand me at all. It was useless to discuss my feelings with them.” (Participant 5)

Considering practical factors hindered mothers’ professional help-seeking behaviors

Many mothers expressed that they often tried to mobilize support from health care professionals, but almost all of them were not willing to spend money and time on it. In addition, some mothers expressed that they had been overloaded by baby care, they were too tired to go outside most of time. They also felt there was no time to consider their own feelings at all. If they experienced negative emotions, they would put them aside to do household chores or to play with their babies. Mother 6 recounted,

“My life was filled with various household chores... I was too tired to think too much about my distress... I hung out with my baby in the morning, had a nap at noon, and played with my baby in the afternoon. When the day finished, I had forgotten my distress, especially when faced with my baby’s smile.” (Participant 6)

In addition, because of the weakened physical condition, many family chores, and baby care during the postpartum period, especially during the first month of confinement “yue zi” (which is a postpartum tradition among Chinese mothers in which new mothers are required to strictly comply with specific regulations within 30 or 40 days postpartum 12), it was inconvenient for mothers to leave the house. As Mother 27 said:

“He (the baby) is too small to go to crowded places, especially hospitals, due to fears that he will get sick... It was also inconvenient for me to go outside with him. I still

in the confinement that time (in “yue zi”), I was not allowed to go outside” (Participant 27)

Highlighting demands for new health care services

Twenty-one mothers clearly stated that professional support was urgently needed and had high expectations for new health care services. Their demands could be classified into two aspects: (a) urgent needs for new baby-care-related health care services, (b) importance of mothers’ self- needs.

Urgent needs for new baby-care-related health care services

Baby-care-related professionals, such as professionals in lactation masseuses, nutritionists, paediatricians, and nurses, were mentioned repeatedly for by many mothers to help them with breastfeeding, complementary food supplements, preliminary diagnosis of their babies’ diseases, and trained them in skills for baby care.

“When I added complementary food for my boy, I really didn’t know which kind of food was suitable for him and whether the nutrition was right or reasonable. I always worried, not only about if he had indigestion but also about malnutrition. I really needed some professional advice.” (Participant 26)

Considering their reliance on the big tertiary hospitals, several mothers indicated their desire for hospital hotlines that would provide round-the-clock counselling in case of their babies’ illness. Besides, some mothers wanted to have regular appointments with experienced doctors or nurses about their babies’ existing problems at a convenient place nearby home. Mother 15 had the following expectations for health care professionals:

“In fact, it is too troublesome to take children to the hospital all the time. The community health centre is much convenient but not reliable, the most important things are the health care professionals who provide service. Rich clinical experience and

knowledge, proficient caring skills are the key points for professionals.” (Participant 15)

The majority of mothers also mentioned their requirements for baby-care-related knowledge and information because they believed that acquiring more knowledge in advance would help them have a better understanding of the babies’ needs and be good for the health of their babies. This would also allow greater anticipation of possible risks and the establishment adequate arrangements for that. The needs for knowledge could be divided into several aspects: instructions regarding the growth, development and care of babies; methods to promote babies’ growth and development; and possible events that may occur during babies’ growth.

“I’m really confused on her (my daughter’s) mental development. I have little knowledge on the psychological development of children, but I know there must be some meaning in her emotions and actions. I just try to understand her by relying on my intuition. I need professional guidance.” (Participant 22)

The identification of early symptoms of diseases and the management of minor ailments were also highly emphasized by many mothers. Finally, four mothers emphasized the importance of targeted guidance through the provision of information and knowledge according to the baby’s growth stage. They wished that they could receive reminders and cautionary messages for several key periods during their babies’ growth. As Mother 20 said,

“I wish there were some tips from health care professionals to regularly remind me of important things, for example, vaccination and examination. What’s more, I would like to receive basic information about growth and development standards that is matched with my baby’s growth stage. For example, at what age can the baby crawl or sit?” (Participant 20)

Importance of mothers’ self- needs

Several mothers reported their personal needs for physical and mental recovery during the postpartum period, including guidance for getting in shape, having a healthy diet, and regulating their emotions. Therefore, related professionals, such as weight managers, nutritionists, and psychologists, were mentioned as necessary to meet mothers' requirements. However, some mothers stressed the shortage of the professionals in those area. One mother demonstrated her strong expectations for professional help:

"I just want to say that it doesn't matter if professionals couldn't offer perfect services; it is also acceptable if there is someone who just provides the information about how to get access to the professionals above. Most of time when I needed help, my mind went blank; I didn't know who I should turn to, who could be trusted."
(Participant 28)

The provision of professional support during "yue zi" was stressed by many mothers. Due to the widely accepted social custom, mothers were constrained from leaving the house after giving birth. Therefore, mothers expressed their urgent needs for obstetricians and nurses to help them identify abnormal postpartum symptoms, specifically about lochia and wounds, and teach them interventions to prevent infection and reduce wound pain.

"I had a vaginal incision while giving birth; there were doctors and nurses who checked and nursed my incision and lochia on time when I was in hospital, but when I left to come home, there was nobody who could help me with that anymore. For example, I was not sure whether the incision was infected or not when I felt unwell, but I couldn't check it by myself." (Participant 28)

In addition, some mothers stressed the necessity of receiving health education. They hoped to have access to scientific and reliable knowledge to help them achieve a better recovery. The delivery of tips via various methods was also needed to remind them of examinations after delivery.

"I was in a confinement (yue zi) service centre for a month; I indeed received much service in my own recovery, but when I left there, there was no one to guide me

anymore. I didn't know how to go on recovering and needed relevant knowledge at least." (Participant 10)

Although psychological consultants were mentioned by some individuals, it seemed that most mothers were sensitive regarding that topic. Some participants explained that what they needed was just to find somebody to talk to or to receive mental health guidance from professionals rather than psychologists. Mother 13 felt it was not necessary to go to see a psychologist:

"I think chatting with health professionals like nurse is enough; I feel much better after I talked with you in so much detail. In fact, those things were unworthy to mention to psychologists; that's too exaggerated." (Participant 13)

Finally, support from professionals to improve family relationships was mentioned by three mothers.

Discussion

This descriptive phenomenological study aimed at exploring primiparous mothers' views on professional services, their perceived barriers to mobilizing the professional support, and their expectations of professional support. The findings of this study showed primiparous mothers' negative attitudes towards current maternal and child services and professionals. Their disappointment and dissatisfaction were revealed in many areas, including early discharge from the hospital, subsequent follow-up was simple or absent, and long-term and potential problems were little considered. Participants also believed they were treated with the uncaring manners by time-constrained hospital health care professionals who were not patient enough and seemed unconcerned about mothers' feelings and needs. These results were highly consistent with the findings in other countries [12,27]. It may be explained by the fact that there are not enough qualified health care professionals and enough beds in big government hospitals. It implies that increasing the numbers of health care professionals and investments in medical resources is a precondition for improving the quality of services and the service satisfaction of mothers [47].

Participants also mentioned that other health care institutions such as community health centres and private institutes were not trustworthy because of poor equipment, less experienced and less qualified professionals, and high costs. This finding suggested that standardized professional training and financial input should be offered to primary medical facilities to promote service quality and further complement hospital health care services [48- 50].

Under the circumstance of the current Chinese health care system above, the likelihood of mother's professional help-seeking behaviour was partially influenced. Many participants in this study had expressed that they seeking helps from their parents, peers, online platforms or to handle the problem by themselves, rather than seeking professional helps. That may be partially due to their poor knowledge about the problems they faced and the negative influences and consequences of them [51]. Previous studies showed that stigma was also an important factor restricting mothers' utilization of professional support [52]. This indicated that interventions to improve knowledge levels and eliminate stigma among mothers may trigger further changes to their attitudes and behaviours regarding professional services [53,54].

Additionally, cultural differences largely influence preferred types of supports. Unlike individualistic Western cultural, Asian culture is more collectivistic, and indirect support from others by giving companionship and attentiveness is preferred [55]. Therefore, cultural differences may account for that mothers more preferred to seek helps from family members and peers in this study. It had been reported in other studies that peer support could help with generating sense of belongs, parenting confidence, self-esteem, and with preventing PPD [55, 56]. This illustrated that Chinese cultural context should be considered when providing supports to mothers, and types of peer supports may be effective in solving mothers' problem.

In regard to the other acceptable type of support, online platforms were considered the most popular and convenient support method by a majority of mothers. Due to the development of technology and network processes, the use of technology in postnatal care has been proven to be efficient and acceptable in many studies [57]. Participants in this study perceived apps to be good ways of receiving help and support because of their multi-function and greater convenience. Previous studies have seen successful results with app-based interventions [26,58]. However, the defects of current apps and other online methods were obvious, as reported in other studies, including overly complicated content, a lack of order, too much irrelevant information, and information with little scientific background [57]. Thus, it is important to overcome the disadvantages above and develop more professional, well-organized, integrative, useful and clear apps or other software [59]. Therefore, this result suggested that technology-based supportive interventions may be more appropriate to the new mothers.

Some mothers hesitated to speak out their family conflicts and showed less willing to seek-help from professionals on the subsequent emotional problems. Culture of Face-saving may explain that. Face-saving is also a typical cultural phenomenon throughout the country [60]. Due to its profound influence, Chinese people may consider family conflicts and related mental health problems to be shameful and assume that they would lead to gossip and the communicate a negative impression of their entire family to others. This cultural context could be obvious in the other studies that Asian's higher value on family and social relationships, the mothers was regarded as a weaker sex and has more tendency to rely on others, especially on their family members and partner [55]. The results indicated that cultural factors, such as face -saving, should also be considered when conducting interventions in China.

Stigma towards mental health problems may have some influence on mothers' herd mentality in this study. Stigma towards mental health problems exists all over the world. Eliminating stigma is still a major challenge that deserves further exploration [61- 63].

Practical factors were also mentioned by the majority of mothers. factors included many home chores, baby care, and limitations of weakened physical condition. The first month of confinement was emphasized by many mothers. Due to the influence of this socio-cultural factor in China, almost all of the mothers needed to undergo the one-month "yue zi" after childbirth. Mothers had to remain at home and went through the most crucial part of the postpartum period with little professional help [12]. In addition, in this circumstance, home visits and related examinations and care were usually absent and has no access, which is a common phenomenon that has also been observed in other countries, such as America, where mothers receive little professional guidance within 6 weeks after delivering a baby [64]. Even if services were provided, mothers' mental problems were usually neglected. These results are highly consistent with those of other studies that showed that enhancing the training of professionals, especially in mental health areas, is imperative [65]. In addition, more multiple professional services should be provided within the first months postpartum [12,66].

By identifying the mothers' help-seeking behaviours and barriers under the cultural context in China, researchers and policy makers should have better understandings of the underlying reasons why postpartum mothers have poor attitudes towards and acceptance of current services. The evidence in this study can help them propose more popular and efficient interventions and policies.

Mothers also clearly expressed their wishes for new health professional services. Most of their needs were the same as mothers' needs mentioned in other studies. For example, mothers indicated their urgent needs for knowledge delivery, skills training, access to more kinds of professionals, and more comprehensive service systems [27]. Mothers in this study highly emphasized the time point of service delivery. They hoped to receive enough guidance before giving birth, and they wished that services could be provided at several critical times corresponding to their and their infants' requirements. To counteract the current confusion caused by large amounts of disorganized information, they also wanted to be provided with tips to remind them of important points for their own and their babies' health.

Some mothers indicated that the importance of face-to-face professional services cannot be denied. The mothers described such services as irreplaceable for providing medical services and many mothers expressed their needs for home visits and consultations given by experienced and qualified doctors during the first month of confinement. However, considering the current health care workforce and cost, it is impossible to meet all the above needs [67]. Therefore, Considering the preferred online services mentioned in this study and mother's health care need, combination of the online and face-to-face methods may be the most practical ways to provide services during the postpartum period, which needs to be further verified in future studies. Nicole E. Pugh had successfully found that a therapist-assisted internet-delivered intervention was effective and had greater advantages in reducing attrition and improving adherence [68].

Limitations:

This study has a few limitations. First, most participants came from cities, with few participants from the countryside; consequently, the results may be subject to selection bias. Further exploration with mothers of different ethnicities and from different districts would be beneficial to expand the findings of this study. Second, participants were selected within first postpartum year who were asked to share their experiences retrospectively and this may have led to recall bias.

Conclusion

Despite the limitations of the study design, this research provided insights into primiparous mothers' views on current health care professional support, expectations for new services and the barriers to mobilizing health care professional support. The results of this study implied that the current maternal and child health care services were insufficient and could not meet the needs of primiparous mothers. The identified barriers should be analysed and highlighted by enhancing education and eliminating stigma. The results also indicated that providing service focused on mothers' needs may be an effective strategy to enhance primiparous mothers' well-being, and also suggested that feasibility, convenience, and the cultural adaptability of health care service should be considered during the delivery of postpartum interventions.

Declarations

Ethics approval and consent to participate

The study was approved by the Ethics Committee of Health Science Center at Xi'an Jiaotong University. The written informed consents have been obtained from the participants.

Consent for publication

Not applicable.

Availability of data and materials

All data generated or analyzed during this study are included in this manuscript.

Competing interests

The authors declare no competing interests.

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Authors' contributions:

YN and XL designed the study. YN wrote the first draft. DW, AR, XL critically review the article and gave their input. YN and JZ participated in the study design, data collection and analysis. AN, LH, LY, JY, YG coordinated and helped in the data analysis. All authors read and approved the final manuscript.

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